Loudness, Rhythm and Environment: Analytical Issues in Extreme Metal Music

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by

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© Olivia Lucas 2016 All Rights Reserved. Extreme metal music, with its consummate loudness and distortion, and intransigent culture of transgressiveness, resists analysis. This dissertation embraces extreme metal's liveliness and channels it toward a broad cultural and musical analysis, exploring avenues of loudness, rhythm and ecocriticism. The study of extreme metal opens a window on liminal auralities, allowing the listener to encounter the thresholds of listening and the sheer physicality of sound. These aspects of the extreme metal listening experience open up a broader range of issues: the effects of loudness on the body and mind, the convergent mental and physical experiences of rhythmic complexity, and the sounding out of the often troubled relationship between humans and the natural world.

Built as a series of case studies grounded in moments of sonic experience, the dissertation unearths issues essential to the analysis of extreme metal music and relevant to sonic practice more generally. The introductory chapter situates extreme metal in its current context, examining both the genre's increasing institutionalization and the turbulent aspects of its history. Chapter 1 contemplates the embodied experience of extremely loud, low frequencies via an auto-ethnographic reading of a performance by the band Sunn O))). The second case study discusses the rhythmic practices of the band Meshuggah, discovering how unexpected beginnings, rotated riffs, and shifting metrical frameworks animate multiple sites of listening pleasure. Via the divergent work of the bands Botanist and Panopticon, the final chapter studies the range of possibilities for

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musical environmentalism, demonstrating how extreme metal can engage both apocalyptic and nostalgic modes of ecocriticism.

Extreme metal challenges music theory to grapple with what is lost in the act of analysis and to find better ways of tackling the liveliness of musical experience – an issue by no means exclusive to extreme metal. The demands of approaching such an insistently loud, distorted musical practice press the theorist to develop language that expands analytical practice toward greater inclusion of embodied experiences, and to detect how multiple sites of listening pleasure converge and intertwine.

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For my sisters, Ani and Geni

"The pieces I am, she gather them and give them back to me in all the right order." (Toni Morrison)

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Introduction

Extreme Metal and Musical Analysis

Prologue

January 6, 2006

I attended my first extreme metal concert as a college sophomore. The band was Finntroll, and that January night was the first stop of their first North American tour, at the now-defunct Jaxx Nightclub in Springfield, Virginia. Finntroll was one of the many Finnish metal bands I followed closely at the time, known for their idiosyncratic style of humppa-inspired metal and lyrics about battles between the trolls of Norse mythology and Christian missionaries. (*Humppa* is the Finnish take on German *oompah* music.) With catchy folk-based riffs, humppa's characteristic speed mixed with black metal's characteristic aggression, and a tongue-in-cheek attitude toward their troll theme, Finntroll was to become one of the biggest success stories of Finnish metal abroad. Too young to drink, with big Xs on the back of my hands, I sped past the bar area right up to the foot of the stage. I didn't know I was supposed to wear earplugs, and the sheer loudness was exhilarating and overpowering as it pounded through my bones. I also didn't know that where I was standing, I would be involuntarily swept into the mosh pit, tossed helplessly amidst the swirling bodies until I came out the other side. I migrated to a safer position, more to the side, but still at the very front of the crowd – I needed to see everything that was happening. As I left the show later that night, ears ringing, I couldn't have known that the process of untangling everything I had heard, seen and felt at that first concert would still be with me ten years later, as I continued to seek out and try to understand my experiences of extreme metal music.

Looking back, I remember that even this first concert experience was bound up with research. I had won a small grant for a project on Finnish metal music, and before the concert, I interviewed one of the band members in the tour bus. He was jetlagged, and I was nervous. I remember seeing cases of beer stacked floor to ceiling near the front of the bus, and hearing the then-unfamiliar sounds of Finnish being spoken from behind the curtain that separated the sleeping quarters from the small sitting area. I sat down with Henri Sorvali, the band's keyboardist, and asked my (rather naïve) questions about the band's influences, and their musical and lyrical interest in folklore and mythology. The whole conversation probably only lasted about ten minutes, before I thanked him and wished the band a good show. The cassette recording of the interview is long gone, but I have the transcript, which now serves as a record of my first attempt at what I would later learn was called "ethnography." That summer, as part of the same project, I went on my first research trip to Finland, interviewing additional bands, exploring the Nordic landscape and attending a metal festival.

The music held me in thrall; whether listening live or on headphones, I couldn't get enough of the way the rough sounds cavorted through my body and usurped my mind. I needed to understand what was going on, how this music, though considered "not-music" by many, so captured the imaginations of its fans. I needed to know how it worked and what it did. And even prior to formal study of music theory and ethnomusicology, I knew that instinctively, this understanding that I sought would have to come from presence – from being *there* where the music is happening and listening to it all unfold. It is this spirit of presence that drives this dissertation; the experience of listening to extreme metal is foremost, and forms the avenue that leads to deeper

theoretical explorations of these experiences – particularly their aspects of loudness, the forming of rhythmic complexity and the sounding out of landscape and environment.

Extreme metal at a crossroads

Musicians do not notate it, and conventional means of transcription lay waste to the vibrant and gutting texture that gives it life. Its lyrics, which in some cases are carefully researched, arranged and prepared, are performed via screams that render them impossible to understand. It inspires dancing that consists primarily of people slamming their bodies into one another, in addition to the more individual movements of "headbanging" and "throwing the horns." Performers must wear earplugs lest they be deafened by their own music-making. It arouses awe at the virtuosic prowess and physical endurance of performers. Its communities have become embroiled in fascist and other extremist political movements and shocked Christian societies with Satanic displays. Some musicians commit crimes, from arson and assault to murder. Its scenes are not always welcoming to women and people of color. Communities often refuse to reflect upon the negative aspects of the culture. In short, extreme metal – both the music and its culture – resists analysis. Nevertheless, in recent years, scholars have become increasingly drawn toward analyzing it.

¹ Such "most pits" are found in a variety of heavy music cultures, including metal, hardcore and punk. The motion of individuals colliding in the context of the mosh pit has attracted scientific interest: a study found that moshers behaved similarly to gas molecules, which are also used as models for flocks of birds and schools of fish. The ² Keith Kahn-Harris teases out this avoidance, categorizing its varying shades as "anti-reflexive" and "reflexively anti-reflexive." See: Keith Kahn-Harris, *Extreme Metal: Music and Culture on the Edge*, (New York: Berg, 2007), 141-156.

Extreme metal stands at a crossroads – or perhaps, at a multitude of crossroads.

Once the province of wealthy, industrialized Western nations, the musical style has exploded into a global phenomenon, heralding both the incessant march of Western cultural hegemony and the arresting appeal of a musical sound centered on screams, loudness and distortion. Scenes in Botswana, Malta, Indonesia, Iraq, Egypt and elsewhere have garnered academic and journalistic attention. In some of these locations, metal music remains persecuted and forbidden, often due to the music being equated with Satanism. In these places, extreme metal has become a voice of genuine dissent and rebellion, while in places like the U.S. and Europe, extreme metal's veneer of rebelliousness rages against persecution that is largely non-existent; it has morphed into a megaphone for middle class alienation and sometimes nationalism, become a means of displaying virtuosity, and for exploring taboos about bodies, death and decomposition.

Amidst these generalizations, however, exceptions emerge: some bands, for example, have turned their attention to environmental activism.

Extreme metal is far from a unified genre, having fractured, divided and splintered into an array of subgenres that assert their differences in the conversations of listeners. Nevertheless, particularly in the West, extreme metal has also become increasingly institutionalized and stable. In the Nordic countries, where metal music

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³ For example, the 2011 edited volume *Metal Rules the Globe: Heavy Metal Music around the World* includes chapters on metal in China, Indonesia, Malaysia, Singapore, Nepal, Brazil, Slovenia, Malta and on Easter Island, as well as on metal in more established Western locations. See: Jeremy Wallach, Harris M. Berger and Paul D. Greene, eds., *Metal Rules the Globe: Heavy Metal Music Around the World* (Durham: Duke University Press, 2011). News of the metal scene in Botswana went mainstream in 2011, thanks to a photo essay on Vice.com. See: Frank Marshall, "Botswana's Cowboy Metalheads," *Vice*, March 31, 2011, accessed March 27, 2016, http://www.vice.com/en_uk/read/atlas-hoods-botswanas-cowboy-metalheads.

proliferated rapidly in the 1990s and early 2000s, this rapid growth eventually led to a process of mainstreaming. In Finland in particular, metal music has become a major cultural export and a means of selling Finland abroad, as well as a mainstay of the domestic music market. In general, even those who don't like the music still respect its cultural and artistic value. In the U.S. and United Kingdom, on the other hand, this taming of metal has occurred more through codification and academic structuring.

Making metal available in formal academic situations through courses, journals and conferences stabilizes its history and takes it down a path toward living-room respectability. The benefits of being an institutionalized musical style are improved access for fans, and a stability that opens it up to writing and analysis. The disadvantages are a closing down of subcultural movement and extreme metal's rebellious edge – a sanitization of metal's image.

The seminal musicological work on heavy metal music remains Robert Walser's Running with the Devil: Power, Gender and Madness in Heavy Metal Music.⁴ Published in 1993, it expends a great deal of energy defending the notion that heavy metal deserves academic attention at all. While such a defense would no longer be necessary (in large part due to the efforts of scholars like Walser), Running with the Devil remains relevant for its analysis of the music, performance practices, imagery and the sometimescontroversial role in American society of music now considered to be "classic" heavy metal. Extreme metal is stylistically distinct enough from classic heavy metal that his musical analyses cover different issues from those likely to be raised by extreme metal. Nevertheless, his analysis of heavy metal's aesthetic of power, which reaches for the

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⁴ Robert Walser, Running with the Devil: Power, Gender and Madness in Heavy Metal Music (Hanover: Wesleyan University Press, 1993).

edge of human capability, remains relevant for understanding extreme metal, which tends to stretch this reaching to its limit.

The first major academic take on extreme metal was Keith Kahn-Harris' *Extreme Metal: Music and Culture on the Edge* (2007), which analyzes extreme metal culture from a sociological perspective. Through the lens of "transgressiveness," Kahn-Harris explores the multiple social levels at which extreme metal scenes form and cohere, and how scene members must balance the desire for transgression of social norms with enough normativity to allow the scene to maintain its existence. His analysis focuses on the tensions, social structures and politics of extreme metal scenes; the sounds of extreme metal are largely absent.

Even over the course of writing this dissertation, the landscape of extreme metal has altered considerably. Metal grew increasingly established as a subject for academic research, as the literature I cite in this introduction and throughout the dissertation attests; the number of academic books, theses and dissertations on metal music has exploded in the last several years. Particularly robustly represented are studies of metal's social and political contexts, its history, and ethnographic studies of scenes from around the globe. The International Society for Metal Music Studies was formed in 2011, and maintains a bibliography of scholarly writing on metal and other heavy music. In 2015, the peer-reviewed journal *Metal Music Studies* (based in the UK) was launched. Academic conferences on metal have become a regular affair. Formalized programs for teaching

⁵ Kahn-Harris, Extreme Metal: Music and Culture on the Edge (New York: Berg, 2007).

⁶ The Metal Studies Bibliography can be found here: http://www.ucmo.edu/metalstudies/metal_studies_home.html.

metal seem sure to follow soon, and in some cases are already in development. Berklee College of Music in Boston, for example, began offering a faculty-lead heavy metal ensemble in 2009, and students have begun adding metal to the list of styles they are training to play in. In 2012, New College Nottingham (UK) became the first academic institution to offer a college degree in Heavy Metal, a career-oriented degree that focuses preparing students for performance and music industry work. Whether other institutions will gradually follow, perhaps eventually leading to the development of "metal studies" programs that instruct performers both on the playing of their instruments and the history of the style, remains to be seen.

Writing at such a complex and significant moment in the history of extreme metal makes my task a delicate one. To provide an all-encompassing analysis of extreme metal in the world today would be impossible – there are simply too many scenes, too many sub-genres, and too many ideological and sonic valences to make such a study feasible in the space of a dissertation. Instead, I offer a series of snapshots, grounded in moments of sonic experience, that open up issues of relevance to the study of both extreme metal music in particular and sonic practice more generally. Together, these moments provide potential answers to the question: what does an analysis of extreme metal look like? This music culture, with its intense loudness and distortion, the jubilant aggression of the concert environment, and tendency toward ideological perversity and extremism, does

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⁷ Brenda Pike, "Heavy Metal Finds its Place in the Spotlight," Berklee College of Music, May 15, 2011, accessed March 27, 2016, https://www.berklee.edu/news/3442/heavy-metal-finds-its-place-in-the-spotlight.

⁸ "New College Nottingham Rocks!" New College Nottingham, 2012, accessed July 22, 2014,

 $[\]underline{http://www.ncn.ac.uk/content/Academies/PerformingArts and MusicAcademy/HeavyMeta} \\ \underline{1.aspx}.$

not yield readily to analysis. It is not even immediately clear what aspects of extreme metal music ought to be subject to analysis – the sounds? A notated transcription? The visual aspects? The live experience? In working on this project, I have found that the challenges extreme metal poses to analysis encourage a greater integration of the many facets of the musical experience, which in turn challenge the practice of musical analysis to better incorporate the liveliness of musical experience into its doings.⁹

In this introductory chapter, I discuss the scholarly and musical forces that have shaped this dissertation, and the methodologies I use in approaching my analysis of extreme metal music. In short, this chapter asks, "what does it mean to analyze extreme metal music?" and introduces the answers that the subsequent chapters propose. I also discuss aspects of extreme metal history and culture that are necessary prefaces to the materials I cover in later chapters. Specifically, I touch on the process of institutionalization that extreme metal has undergone, particularly in the U.S., UK and Nordic countries, primarily through the lens of changes to Finland's annual *Tuska* festival. I also discuss extreme metal's history of fascist politics, Satanism and violence, and how those histories come to bear on the extreme metal of today. These discussions help to situate extreme metal in its current, twenty-first century context, and provide a

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⁹ Scholars working on electronic dance music have faced similar issues: namely, how to incorporate the music's distinctive listening practices into the work of analysis. See, for example, Mark Butler's books: Mark Butler, *Unlocking the Groove: Rhythm, Meter and Musical Design in Electronic Dance Music* (Bloomington: Indiana University Press, 2006), and Mark Butler, *Playing with Something that Runs: Technology, Improvisation and Composition in DJ and Laptop Performance* (New York: Oxford University Press, 2014), as well as Luis-Manuel Garcia, "On and on: Repetition as Process and Pleasure in Electronic Dance Music," *Music Theory Online* 11/4 (2005): accessed March 27, 2016, http://www.mtosmt.org/issues/mto.05.11.4/mto.05.11.4.garcia.html, and Luis-Manuel Garcia, "Beats, Flesh and Grain: Sonic Tactility and Affect in Electronic Dance Music," *Sound Studies* 1/1 (2015): 59-76, accessed March 27, 2016, doi: 10.1080/20551940.2015.1079072.

jumping-off point for later analyses of the music's interest in and aestheticization of power, control, freedom and submission.

What is Extreme Metal? A brief note on definitions

Several scholars have previously offered definitions of extreme metal and its subgenres. There is agreement that extreme metal's characteristic sound developed out of the "classic" heavy metal of the 1980s, as part of a pursuit of "heavier" sounds. While extreme metal still relies on the basic heavy metal set-up of electric guitar and bass, drum set and vocals, there are several notable developments in its characteristic sound. The first is the switch from sung vocals in classic heavy metal, to non-sung vocals in extreme metal, which may be screamed, growled, shouted, whispered or howled; this textural use of the voice in extreme metal plays an important role in generating the style's characteristic roughness and communicating the "extremity" of the music. A second development is the optional, but frequent use of down-tuned guitars and basses, so as to achieve a lower, "heavier" sound. Furthermore, some guitar and bass players use

¹⁰ For more about the foundational elements of the extreme metal style, see: Kahn-Harris, *Extreme Metal*; Ronald, Bogue, "Becoming Metal, Becoming Death..." in *Deleuze's Wake: Tributes and Tributaries* (Albany: State University of New York Press, 2004), 83-108; Ronald Bogue, "Violence in Three Shades of Metal: Death, Doom and Black," in *Deleuze and Music*, ed. Ian Buchanan and Marcel Swiboda (Edinburgh: Edinburgh University Press, 2004), 95-117; Natalie J. Purcell, *Death Metal Music: The Passion and Politics of a Subculture* (Jefferson: McFarland, 2003).

¹¹ For an empirical study of acoustical "heaviness," see: Harris M. Berger and Cornelia Fales, "'Heaviness' in the Perception of Heavy Metal Guitar Timbres: The Match of Perceptual and Acoustic Features over Time," in *Wired for Sound: Engineering and Technologies in Sonic Cultures*, ed. Paul D. Greene and Thomas Porcello (Middletown: Wesleyan University Press, 2005), 181-197.

instruments with extra strings, to have access to extremely low frequencies. Bands may also include a keyboard and/or other instruments.

"Extreme metal" is a general term incorporating a number of sub-genres that share this propensity for harsh timbres and non-sung vocals. The three principle sub-genres of extreme metal are known as death, black and doom metal. Death metal features an emphasis on low frequencies, clean production values and musical virtuosity. Vocals are traditionally guttural and deeply growled, and song structures may be long, lurching and unpredictable. Palm muting (in which the player places the side of the hand across the strings to be plucked) of the guitars is idiomatic. Performances tend to lack the theatricality seen in other sub-genres, and focus on competent playing and "the music itself." Lyrical themes are widely varied, ranging from themes of melancholy and anger to horror and gore.

Black metal guitar style features tremolo picking and two-note oscillations, often a half step or tritone apart and without palm muting, while black metal vocals tend toward higher-pitched shrieks. In general, black metal's sound tends to focus more on higher frequencies, which was originally a result of low-fidelity production practices; nevertheless, today, even bands with high production values continue to imitate this shrill, buzzy sound. Black metal may be virtuosic, or display punk's "aesthetic of ineptitude." Historically, black metal musicians and fans have been associated with

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¹² For more on the relationship between death metal's and black metal's sound, see: Ian Reyes, "Blacker than Death: Recollecting the "Black Turn" in Metal Aesthetics," *Journal of Popular Music Studies* 25/2 (2013): 240–257.

¹³ Paul Hegarty, *Noise Music: A History* (New York: Continuum International, 2007), 89-91.

Satanism, paganism, fascism and neo-Nazism; more recently, some black metal bands have shown an interest in environmentalism. In general, however, there has been a consensus "that black metal [is] more than just music." Whatever ideology a band may follow, some degree of theatricality in performance is expected; common displays include performer pseudonyms (often of mythological or occult origin), cloaks or costumes, corpse paint, and sets or props that promote an aura of mystery and the arcane. Bands comprised of one multi-instrumentalist who writes and performs all parts are also common in black metal. Such "bands" may either never perform live or bring in session musicians for live performances.

Doom metal can have features of either black or death metal, and is distinguished from them primarily by its use of tempi that are significantly slower than is standard for other metal sub-genres. Not all doom metal qualifies as "extreme metal," as some of it features clearly sung vocals and/or lyrical melodies consistent with the musical vocabulary of older forms of metal. Some doom metal is so slow that all sense of pulse is destroyed; this style is commonly called "drone doom metal."

As with all genre definitions, these remain constantly in flux as fans and musicians re-negotiate their boundaries. The sub-genres of death, black and doom metal, however, make up a large proportion of extreme metal, and have developed sufficiently stable cultural and musical associations that it is worth bearing these general categories in mind.

¹⁴ Caroline Lucas, Mark Deeks and Karl Spracklen, "Grim Up North: Northern England, Northern Europe and Black Metal," *Journal for Cultural Research* 15/3 (2011): 285.

Methods

This dissertation combines the efforts of fieldwork, close listening, and musical and cultural analysis toward understanding varied aspects of the extreme metal experience. Rather than attempting an exhaustive account of what extreme metal is and does, it offers accounts of musical experiences brought about by extreme metal, and uses these accounts as a means of analyzing aspects of extreme metal experience, as well as teasing out what the study of extreme metal has to offer to the field of musical analysis. This methodology is reflected in the writing style I have chosen, which maneuvers freely between experiential narration and analytical meditation. This approach conceives of music theory broadly, as a system of approaches to understanding and writing about music that can easily include input from related fields such as ethnomusicology, sound studies and ecocriticism. Traditionally concerned with "the music itself" above any extramusical issues, music theory has in recent decades grown more open to approaching musical analysis with history, culture and performance actively intertwined. One important study in this tradition is Mark Butler's Unlocking the Groove: Rhythm, Meter and Musical Design in Electronic Dance Music. Though Butler's topic differs widely from mine, this book provides one model of popular music scholarship that balances interest in the musical analysis with study of its social and cultural context, as he merges concepts and categories used by electronic dance music creators and fans with more traditional analytical approaches from the realm of music theory. 15 He additionally points out the importance of fieldwork to music theorists; citing music theory's longstanding interest in how composers (especially composers of the past) put music together, he states

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¹⁵ Butler, *Unlocking the Groove*, 23.

that music theorists who study popular music have the opportunity to get this information directly from the source through fieldwork. Another model is William Cheng's 2014 analysis of music and sound in video games, which uses first-hand experiences of game play as a means of pursuing a variety of musicological issues as they arise. ¹⁷

Ethnographic fieldwork was primarily made up of participant observation at concerts, festivals and recording studios, as well as interviews with musicians, fans, producers and industry agents. Fieldwork was conducted in Helsinki, Finland, from January-July of 2013. Shorter periods of fieldwork in Finland were conducted in May and June of 2011 and 2012. I also attended Finland's *Tuska* festival in the summer of 2006, as an undergraduate student conducting a small project on Finnish heavy metal. My notes from this trip inform my comparison of the 2006 and 2013 festivals. In the U.S., I conducted fieldwork at the Palladium in Worcester, Massachusetts, the House of Blues in Boston, Massachusetts, Royale nightclub in Boston, Massachusetts, and the Black Cat in Washington, D.C., in the years 2010-2016. Collectively, these experiences provide a rich site for exploring what it is like to listen to extreme metal and the issues that these experiences raise.

The case studies presented in this dissertation were selected from these fieldwork experiences for their potential to open up further theoretical and musicological inquiries. Given the extent to which the development of extreme metal has been closely linked with development of the audio technologies used to produce it, my project draws heavily on sound studies discourses of audio technology and cultural histories of sound. My chapter

¹⁶ *Ibid.*, 27.

¹⁷ William Cheng, *Sound Play: Video Games and the Musical Imagination* (New York: Oxford University Press, 2014).

on drone doom band Sunn O))) particularly focuses on the effects of extreme loudness and low frequencies on the body, taking into account both musical and non-musical contexts. Other moments, such as my chapter on hearing rhythm in the music of Swedish death metal band Meshuggah, delve into issues of representation – how to best deal with analysis' tendency to arrest musical flow, especially when that flow is critical to making sense of the music's patterns. The playful deceptiveness of Meshuggah's rhythmic patterns then becomes a site for exploring musical enactments of power, control, freedom and rebellion through the lens of extreme metal. Finally, I examine the intersections between extreme metal and ecocriticism, using two case studies to highlight the breadth of possibilities for musical approaches to environmentalism. This work draws on the field of literary ecocriticism, showing how music both relates to and expands upon this tradition, which seeks to show how humans use art as a means of negotiating and situating the relationship between themselves and their environment.

Taming Extreme Metal: Tuska 2006/2013

As a fan, I long thought of extreme metal as a ferocious musical force, against which the tools of musical analysis would generally be useless. In recent years, however, as extreme metal has grown more diffuse – both geographically and stylistically – a process of institutionalization has been underway. This process has worked to codify extreme metal into a predictable, reliable mode of musical performance, thus rendering it more easily studied and sold. The increasing institutionalization of extreme metal first became viscerally real to me when I attended the 2013 *Tuska* festival in Helsinki, Finland, as part of my fieldwork. I had first attended this festival in 2006, and the

intervening seven years had turned a rough and tumble Helsinki event into a smoothly operating international music festival.

The *Tuska* Festival is Finland's preeminent outdoor metal festival, held every summer in Helsinki since 1998. *Tuska* is Finnish for "pain" or "agony," a name that bills the festival as a celebration of aestheticized suffering. Exactly what pain is being celebrated or mediated is left up to the imagination: the pain of ear-destroying volume, the pain of bodies slamming against each other in the mosh pit, the pain of whiplash from headbanging, the pain of overuse injuries brought on by playing aggressively and without rest, the psychic pain expressed in the song lyrics, or some greater existential pain. The festival is nevertheless a joyous occasion for metalheads, presenting a carnivalesque inversion in which suffering – the dark side of life that extreme metal often engages – is the idea behind the festivities.

I attended the *Tuska* festival for the first time in 2006, on my first trip to Finland. The festival was then in its ninth year, and was held in Kaisaniemi Park, one of Helsinki's many urban green spaces conveniently located just behind the city's central railway station. It was organized chaos. The line to enter the festival stretched well over a block, and festival-goers drank heavily while waiting to get in, all while carrying incredible supplies of alcohol for the remainder of the day. I was traveling with my brother, and speaking English with each other while the line wormed toward the entrance checkpoint made us instant curiosities to the increasingly inebriated Finns around us. I had several conversations over the three festival days, all of which included some

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¹⁸ For a discussion of music's role in mediating pain, see: Sarah Coakley and Kay Kaufman Shelemay, eds. *Pain and Its Transformations: The Interface of Biology and Culture* (Cambridge: Harvard University Press, 2007), 147-216.

expression of surprise that we had come all the way to Finland for the festival, and that I was writing a paper about Finnish heavy metal. The stereotypical Finnish humility with regard to their country ("You came all the way to our puny little country!" said one) gave way to shared enthusiasm for Finnish metal, and Nordic metal more generally. I spoke about four words of Finnish at the time, and being overheard speaking English was enough to bring attention to myself; I was an outsider at a predominantly local event.

Inside the festival grounds, the main stage, flanked by two smaller ones, stood in the dirt, where crowds gathered, drinking and smoking, while they waited for their favorite bands to appear. Clouds of dust rose up from the thousands of shuffling feet. By the end of the second day, the portable toilets reeked in spite of regular maintenance, and the open urinal troughs supplied for the abundant population of intoxicated men were overflowing. The ground became vile with cigarette butts and empty bottles, vomit and urine. The park's enclosure was makeshift, and while most people waited honestly in the ticket line, a few climbed in and out over the fence near the side stages. Bottle collectors also permeated this boundary, cashing in on the heavy drinking taking place during the festival and gathering enormous bags full of empty bottles to recycle for a cash deposit. Garden hoses were affixed to the fence around the perimeter of the park to provide free drinking water, probably in the hopes that it would encourage people to consume liquids other than beer. Stalls offered greasy street food for sale. Because attendees were allowed to bring their own alcohol into the park, the drinks flowed freely amongst both young and old. Individuals carried cases of beer and boxes of wine with them up to the foot of the stage while bands were playing, or sat with them on the grassy perimeter of the park. People who wanted to take a breather from the sound levels near the stages used this

grassy area at the back of the park to observe the festival from a safe distance; the main stage was still clearly visible, but they could remove their earplugs and converse without shouting. The atmosphere throughout the park was relaxed and communal, despite all the filth. Attendees mingled and were curious to meet foreigners and to find out what drew them to *Tuska*, and to teach them how to scream *Perkele!* (a Finnish curse word often translated as "devil") with the proper first-syllable accent and rolled R.

2006 was a boom year for Finnish metal. It was around this time that Finnish heavy metal began to come into its own in a global way, and the country began to realize that metal was one of its most valuable cultural exports. Earlier that year, Finnish hard rock band Lordi had unexpectedly won the Eurovision song contest with "Hard Rock Hallelujah," in a performance augmented by the musicians' grotesque monster costumes. Before the competition, many Finns were embarrassed that such an outlandish act would be representing their country; others felt that after coming in last place eight times (and having never won), they really had nothing to lose. In the ensuing weeks, something about the performance's ridiculous costumes, the musicians' insistence on being referred to by their monster alter egos and the aggressive (by Eurovision standards) hard rock sound captured that year's audience, and it swept the band to an easy victory, and in its wake, shone a light on Finland's robust metal scene. Also in 2006, hard rock band HIM's album *Dark Light* was the first by a Finnish band to be certified gold in the U.S.

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¹⁹ Dan Bilefsky, "Finland Squirms as its Latest Export Steps into Spotlight," *The New York Times*, April 24, 2006, accessed July 22, 2014, http://www.nytimes.com/2006/04/24/world/europe/24finn.html?_r=0.

²⁰ Then-Culture Minister Tanja Karpela said that Lordi's victory proved that Finnish music could achieve international success. See: Sean Alfano, "Monster Rock Rules Euro Song Contest," CBS News, May 21, 2006, accessed July 22, 2014, http://www.cbsnews.com/news/monster-rock-rules-euro-song-contest/.

Around the same time, the symphonic power metal band Nightwish was reaching the peak of their meteoric rise to international fame. Their 2004 album *Once* had topped several European charts, and was their first to chart in the US, leading to a lengthy world tour.

Nightwish's unprecedented encounter with international success paved the way for other Finnish metal bands to make an international impact. The years 2005-2010 saw the explosion of the Finnish folk metal scene, a community made up of a handful of bands that harness sounds and ideas from Finnish folk music and culture, and particularly from the *Kalevala*, into a metal soundscape. These bands capitalized on the path that HIM, Nightwish and Lordi had laid out for them, and the association between "Finnishness" and "metal" their successes had created. Though these bands existed before 2005, it was only after the Eurovision victory and Nightwish's world tours that they gained notoriety abroad.

Meanwhile, the *Tuska* festival grew with every passing summer, eventually outgrowing its home in Kaisaniemi Park in 2011, and moving to a coastal industrial area at Suvilahti, where I again attended the festival in the summer of 2013. Unlike the previous leafy setting of the public park, the Suvilahti grounds exuded a grim, industrial attitude that adeptly framed the context of a metal festival. The festival enclosure was erected in the empty space at the center of a cluster of old warehouses. Disused smoke stacks rose into the sky behind the stages. At the very center of the festival area, around which the bar area was arranged, stood a defunct gasholder, once used to regulate gas pressures for the city. Today, it is a harsh metal frame rising a few hundred feet into the air. Its imposing metallic presence towered invincible over the festival, as its shadow

grew and shifted with the sun. Its image emblazoned on the festival T-shirts, this decaying gasholder has become part of the *Tuska* festival's logo, its elemental composition literally communicating "metal."

The Suvilahti festival area was thoroughly enclosed with high chain-link fencing, and police were stationed at the only possible point where people could try to sneak in - a steep hill descending from the highway at the back of the grounds. The entrance was also much more tightly controlled. Attendees were not permitted to bring any beverages into the festival; bags were inspected at the entrance, for both alcohol and any dangerous items, which could be checked for 2 Euros. Once inside, alcohol could only be purchased in fenced off "bar" areas of the festival grounds. Entry into these areas was controlled by security guards who verified the age of anyone who looked to be under eighteen. The prices inside these bars were exorbitant, and a 2 Euro container deposit ensured that you brought your empty can or reusable plastic cup back to the counter. Those drinking were also prevented by the enclosure from coming close to any of the stages, though the area was also close enough to them to prevent conversation while any bands were playing. The festival area's only strip of grass was also located inside this bar area, a narrow area leading to some portable toilets; everywhere else, the ground was cement. Seating in the bar area was very limited, and there were only a few picnic tables set up near the food stalls, and without the grassy perimeter of Kaisaniemi Park, there was no place to rest or take a break; my feet ached at the end of each day from over eight hours of standing.

In some ways, however, the Suvilahti grounds improved on those built at Kaisaniemi Park. Drinking water flowed from temporary, but recognizable, faucets set up around the perimeter of the grounds. The MCs often pointed them out between sets,

encouraging attendees to avail themselves of their presence, as well as encouraging the use of sunscreen. The portable toilets somehow stayed clean, and I didn't see any overflowing urinals. Smoking was forbidden in the area closest to the stages, where people packed in densely, and for the most part, this injunction was followed.

The crowd itself was diverse in comparison to the 2006 festival. Fans seemed to have gathered from all across Europe, and in more limited numbers from still further afield. Being a non-Finn at the *Tuska* festival was no longer remarkable. The MC's announcements were still made in Finnish, but signs and announcements were posted in both English and Finnish. What had been a Finnish metal festival had become an international one, and what had been a makeshift local event had transformed into a professionally administered and smoothly orchestrated festival.²¹

The increase in the *Tuska* festival's size has a lot to do with Finnish metal's massive international success in the first decade of the twenty-first century, as well as with the normalization of metal music within Finnish society. While in the United States and much of the world, metal remains an outsider music, a gesture of artistic rebellion, in Finland (as well as in the other Nordic countries), metal's unusual success has rendered it much more culturally central. Even amongst those who don't like metal, its cultural significance is recognized. It is also unremarkable when people who don't "look metal" (such as myself) are fans. Music shops generally have separate and sizable metal categories. Metal in Finland is also seen as fun for all ages; at the 2013 *Tuska* festival, I saw a number of families with small children (who were all carefully ensconced in

²¹ This transformation calls to mind ethnomusicologist Mark Slobin's description of the process by which "local" musics can become "transregional" or even "global." See: Mark Slobin, *Subcultural Sounds: Micromusics of the West* (Hanover: Wesleyan University Press, 1993), 17-21.

heavy-duty ear protection). Part of this phenomenon is generational, as the youths who grew up listening to metal in the 1980s and 1990s start their own families without leaving their fandom behind. For those interested in inculcating a deeper level of metal fandom in their children from an early age, there is even a heavy metal band for children; the members of *Hevisaurus* (a Finnish portmanteau of *hevi* as in "heavy metal" and –saurus, as in "Tyrannosaurus" and other dinosaur species) don dinosaur costumes and sing about prehistoric beasts to the accompaniment of power chords and wailing solos, and play their live concerts at a lower volume than most bands.

This gradual absorption of metal into Finland's mainstream culture in many ways results in the transformation of what were transgressive spaces into more circumscribed ones that offer a veneer of transgressiveness while remaining in essence a "family-friendly" event. Cordoning off alcohol and tobacco consumption and carefully monitoring what attendees bring into the event creates a calmer, more welcoming space for a wider array of people, and highly coordinated event management can keep even an extremely crowded space relatively clean and free of debris, but it also quashes a certain carnivalesque aspect of the festival. The experience becomes smooth and predictable, free from disruption but also free of joyous debauchery. There was little risk of being doused in someone else's beverage while trying to get close to the stage, but there was also no escaping to a quieter, grassy corner.

In general, the normalization of metal in Finnish culture has led to its being regarded as a sophisticated, challenging form of popular music, relatively free from negative associations or stigma. Of course, the question of why Finland in particular would enjoy such success with metal loomed large over my research there. When I asked

Riku Pääkkönen, founder of Spinefarm, Finland's top metal label, he insisted Finland's relationship with metal was due to the cold climate and lack of daylight in the winter, the gloom and frigid air producing the ideal distillery for dark and gloomy music.²² This association between music and climate is at least as old as Rousseau's suggestion that the southern (European) languages originated in cries of "Love me," and the northern ones in cries of "Help me," 23 and the music that these cultures then developed followed suit. 24 Despite its rhetorical grace, however, it is easily debunked by the existence of thriving metal scenes in Brazil, Indonesia and, death metal's early history in Florida. A more likely explanation lurked in the larger arc of our conversation, which had to do with metal as a successful means of promoting Finland and Finnish culture abroad. In this narrative, the success of bands like Nightwish, Children of Bodom and other hugely successful acts help create an international perception of Finland (and "the North" in general) as "metal" - in other words, as having a culture particularly conducive to creating this kind of music. Interest in the Finnishness of Finnish metal leads to interest Finland's history and culture, making metal an invaluable tool for national branding.²⁵

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²² Spinefarm was founded by Pääkkönen in 1989 and sold to Universal in 2002.

²³ Jean-Jacques Rousseau, "Essay on the Origin of Languages: In Which Melody and Musical Imitation are Treated," in *Collected Writings of Rousseau*, vol. 7, trans., ed., John T. Scott (Hanover: University Press of New England, 1998), 316.

²⁴ Rousseau explains, "In southern climates, where nature is prodigal, needs arise from the passions, in cold countries, where nature is miserly, the passions arise from needs, and the languages, unhappy daughters of necessity, show their severe origin." See: Rousseau, "Essay on the Origin of Languages," 315.

²⁵ For more on the relationship between metal music and the reception of Finland abroad, see: Toni-Matti Karjalainen, Laura Laaksonen and Antti Ainamo, "Analyzing Concept Building and Visual Communication within Heavy Metal Music," in *Norcode 2009 Kolding* (working paper, 2009): 2-4; Kari Kallioniemi and Kimi Kärki, "The Kalevala,

In the U.S. and UK, this process of metal's institutionalization is proceeding by a somewhat different route, primarily at the hands of academics and via educational institutions. While academic study of metal also occurs in Finland, it began in the U.S., partially as a defensive reaction on the part of academically minded fans to sociological studies that attempted to prove a link between metal music and youth deviance.²⁶

Extreme Metal and Musical Analysis

The Nordic and U.S. extreme metal scenes are closely connected through a shared history, but distinguishable due to the place metal has occupied in each society; in the former, metal rapidly became a mainstream form of popular music, in the latter, it has lingered as an outsider. The Nordic metal community is highly commercialized, streamlined and populated by musicians who often play in multiple bands. The U.S. community is widespread, fragmented and diverse, and still cultivates a culture of being "underground." While metal in both locations is converging on a state of institutionalization, in the US this process has unfolded as a development of academic, rather than commercial relevance.

Studies of extreme metal are growing rapidly in number. The bulk of these studies comprise sociological and cultural studies that seek to unpack extreme metal's undeniably fascinating human element and human context. Without ignoring this facet, as

Popular Music and National Culture," Journal of Finnish Studies 13/2 (2009): 61-72; Toni-Matti Karjalainen, "The Epic Saga of Finnish Metal," Music Business Journal 5/5 (2012): 13, 16.

²⁶ The first such study is widely considered to be sociologist Deena Weinstein's *Heavy* Metal: A Cultural Sociology (New York: Lexington Books, 1991). A revised edition was published in 2000 under the title: Heavy Metal: The Music and Its Culture (Boston: Da Capo Press, 2000).

extreme metal relies on its human creators and listeners. I wish to address the conspicuous absence of sound in many of these analyses.

This dearth of analysis of extreme metal as sound is no doubt due in large part to the formidable forces by which this music resists theoretical analysis. Few bands compose music that invites itself into conventional theoretical discourses; their music is not "complex" in a way that aligns with entrenched notions of what makes music suitable for scholarly analysis. Extreme metal's emphasis on loudness, distorted textures, moshing, screaming, and frenetic speed presents musical richness in realms for which analytical methods do not yet exist. This provocative richness invites analysis, but approaches must be developed that embrace the potential for analysis (or, more simply, writing) to bring understanding while preserving the spirit of extreme metal's resistant culture. One of the chief ambitions of this dissertation is to open a few paths toward musical analysis of extreme metal that preserves its roughness, freedom and spontaneity while making use of what scholarship offers for understanding how music fits together and works.

One of the first to work toward an analysis of extreme metal sound was literary scholar Ronald Bogue, whose Deleuzian interpretation of death, black and doom metal sounding suggests that extreme metal deterritorialized (here, decontextualized) standard Western musical practice and its internal relations through "a deliberately ascetic impoverishment of elements."27 In other words, by eliminating melody, singing and other markers of musicality, extreme metal destabilizes musical expectations. Furthermore, Bogue's "Becoming Metal, Becoming Death..." makes a critical first run at summing up

²⁷ Bogue, "Violence in Three Shades of Metal," 101.

the timbral and textural total of death metal's soundscape, concluding that "[death metal vocalists and guitarists] tend to subordinate individual differences to the creation of a single ensemble sound... In death metal, the group is a machine whose parts work equally in the production of collective efforts."²⁸ In my experience at concerts, this tends to be true; extreme metal bands do not generally have a frontperson or "star" member. Bogue also tackles death metal's tendency toward rhythmic unpredictability through analysis of a song by the death metal band Sinister. His analysis shows how death metal produces both quantitative speed (pulsed) and qualitative speed (non-pulsed, amorphic – an acceleration toward collapse), and thus demonstrates one of the aspects of extreme metal that opens toward musical analysis.²⁹

On rare occasions, extreme metal has attracted the attention of formal music theory;³⁰ the first appearance of extreme metal in a major music theory publication was an article on the polyrhythmic style of the Swedish death metal band Meshuggah,³¹ whose music I examine in chapter 2. Meshuggah's music lends itself to formal analysis in ways that most extreme metal does not – it is rhythmically intricate while generally limited in pitch content, providing a clear angle for analytical focus, and, as a bonus, their lyrics are neither so laughably poor in quality as to be a distraction, nor so obscene as to

²⁸ Bogue, "Becoming Metal," 95.

²⁹ *Ibid.*, 98-102.

³⁰ Esa Lilja's *Theory and Analysis of Classic Heavy Metal Harmony* was the first music theory book devoted to the analysis of heavy metal music, and it relies heavily on the tradition of analytical tools used in the analysis of Western classical music. Lilja does not address extreme metal. See: Esa Lilja, Theory and Analysis of Classic Heavy Metal Harmony (Helsinki: IAML Finland, 2009).

³¹ Jonathan Pieslak, "Re-Casting Metal: Rhythm and Meter in the Music of Meshuggah," Music Theory Spectrum 29/2 (2007): 219-245.

require justification or lengthy explanation. It is tempting, when faced with analyzing their music, to simply allow it to be subsumed into music theory's practices and conventions – to transcribe it note by note and break it down from there. This process, however, necessarily arrests the music's energy, and distracts the analyst from how it is heard - how it is physically felt in the body – by the majority of its fans. In chapter 2, I strive to develop a way of bringing these two ways of understanding music together, bringing the listening experience to bear on the analytical process and vice versa.

An analytical method that attempts to approach extreme metal must involve the embodied aspects of the music – the lived experience of playing and listening to it. The lived experience of hearing and *feeling* extreme metal is what keeps listeners coming back for more. And this lived experience in turn offers a window into contemporary modes of listening that seek total physical subordination to the music and the particular compulsion and pleasure of this experience. As Michelle Phillipov points out, studies of popular music have focused heavily on social context, which has lead scholars of extreme metal to explain the pleasure fans derive from listening to death metal from a socioeconomic perspectives, a lens which she finds limiting.³² Phillipov addresses the need to "think with" extreme metal in trying to determine where the pleasure in listening to it lies – the pleasures of noise, horror and technicality. For her, death metal's conventions offer a reorganization of listening practices that do not derive simply from their social contexts, and provide an opportunity to re-think musical pleasure.³³ Beyond a better understanding

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³² Michelle Phillipov, *Death Metal and Music Criticism: Analysis at the Limits* (Plymouth: Lexington Books, 2012), xii.

³³ *Ibid.*, 133-135.

of musical pleasure, I believe that analysis of extreme metal can advance conversations about the limits of the listening body, and the potential for music to explore those limits.

Dealing with Black Metal's Politics

Anyone wishing to analyze black metal must first deal with its history, which includes a spate of murders, suicides and church arsons that took place in Norway in the 1990s, as well as its associations with Satanism, neo-Nazism and other extremist (generally extreme right-wing) ideologies. While extremist, white supremacist and pagan/anti-Christian black metal can be found in any Western country home to a black metal scene, the idea of this kind of black metal has become closely wedded to Norway due to the series of murders and church burnings linked to the then-youthful scene. As a result, scholars who study black metal generally feel they must address this violent episode and the continuing associations it has caused, lest they reify an idealist musical discourse that attempts to divorce music from its cultural and social context.

References to black metal's violent past generally concern the following events:³⁴ Between 1991 and 1996, members of Norway's "Black Circle," or core members of the black metal scene, were responsible for the arson or attempted arson of over fifty churches, including historic stave churches. In 1991, Mayhem vocalist Per Yngve Ohlin (stage name "Dead") committed suicide; his bandmates photographed his body and later used the image as an album cover. In addition, Emperor drummer Bård Eithun (stage

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³⁴ One seldom-mentioned, but nevertheless significant, event occurred in Germany: in 1993, members of the German neo-Nazi band Absurd murdered a 15-year-old Jewish boy (the band members were aged 17 at the time). See: Michael Moynihan and Didrik Søderlind, *Lords of Chaos: The Bloody Rise of the Satanic Metal Underground* (Los Angeles: Feral House, 2003), 272.

name "Faust") murdered a gay man in a park in 1992, and Varg Vikernes (Burzum, sole member) murdered Mayhem guitarist Øystein Aarseth (stage name "Euronymous") in 1993.³⁵ The details of these events have been rehashed numerous times, from the accounts found in the lurid *Lords of Chaos*, ³⁶ to Ross Hagen's academically detached summary.³⁷ Twenty-five years later, these events remain in large part the core of black metal's legacy.

A stereotypically peaceful social democracy, the murders and church burnings carried out by black metal musicians in the early 1990s was not only emotionally devastating, but also sparked a perverse interest in the extremist aspect of the musical underground. Like a car wreck they couldn't look away from, people wanted to know everything they could about the young men behind these crimes. The events of the early 90s became surrounded by sensationalism, reverberations of which remain today. *Lords of Chaos: The Bloody Rise of the Satanic Metal Underground* was the first major

While serving his prison sentence, Vikernes busied himself with articulating his white nationalist viewpoints; many of these writings can be found online. For an ethnographic take on the use of music in contemporary Scandinavian white nationalism, see: Benjamin Teitelbaum, "Saga's Sorrow: Femininities of Despair in the Music of Radical White Nationalism," *Ethnomusicology* 58/3 (2014): 405-430; and Benjamin Teitelbaum, "The Path of Dreams:' Breivik, Music and Neo-Nazi Skinheadism," *Norges Musikhhøgskole* 7 (2014): 119-138.

³⁶ Michael Moynihan and Didrik Søderlind, *Lords of Chaos: The Bloody Rise of the Satanic Metal Underground* (Los Angeles: Feral House, 2003). This book details the rise, fall and crimes of Satanic black metal in Norway.

³⁷ Ross Hagen, "Ideology and Mythology in Norwegian Black Metal," in *Metal Rules the Globe: Heavy Metal Music Around the World*, ed. Jeremy Wallach, Harris M. Berger and Paul D. Greene (Durham: Duke University Press, 2011), 180-183.

publication to be released about the events of the 1990s.³⁸ Filled with lengthy interviews and graphic photos, it not only detailed the rise and fall of extremist metal in Norway, but also provided a forum in which the criminals could essentially expound their views unedited. Its lurid account of the early days of black metal remains significant as it has garnered wide readership, but it is important to note that one of its authors, Michael Moynihan, has been linked to white supremacist organizations.³⁹ In 2010, the film *Until the Light Takes Us* essentially provided a documentary film version of *Lords of Chaos*; it included many of the same interviews, but with the addition of video footage. Notably, however, the film's soundtrack did not include any extreme metal whatsoever – a puzzling move that seemed calculated to attempt a separation between music and politics. As of 2015, a true crime movie based on *Lords of Chaos* was in the works,⁴⁰ signaling that this violent episode has been sensationalized to the point of total commercialization.

Despite this sensationalism, the genre of black metal has since largely been rehabilitated in Norwegian culture, its sordid past lending present musicians a veneer of wickedness. Quantitatively, the easiest way to see black metal's transition to respectability is through the Norway's *Spellemannpriser*, music awards comparable to the Grammys. The history of radicalized black metal in Norway would suggest a cool if

³⁸ First published in 1998, a revised edition was issued in 2003 (Los Angeles: Feral House, 2003).

³⁹ Nicholas Goodrick-Clarke, *Black Sun: Aryan Cults, Esoteric Nazism and the Politics of Identity* (New York: New York University Press, 2002), 207-209, 226-227.

⁴⁰ Kory Grow, "Madonna Video Director to Helm Norwegian Black Metal Movie," *Rolling Stone*, May 4, 2015, accessed February 17, 2016, http://www.rollingstone.com/movies/news/madonna-video-director-to-helm-norwegian-black-metal-movie-20150504.

not outright icy public attitude toward this style of music, but *Spellemannprisene* tell a different story. The metal category, introduced in 2001 – six years after the last church arson – has been dominated by black metal bands: Dimmu Borgir (2001, 2003), Satyricon (2002), Enslaved (2004, 2006, 2008, 2010), Mayhem (2007) and Kampfar (2015). In addition, in 2007, Dimmu Borgir won the award for "Best Video" (across all genres) for "The Serpentine Offering." The video depicts Satanic soldiers pledging themselves to fight against Christian crusaders. Not only has black metal not suffered societal shunning in Norway, it has enough popular appeal, through Dimmu Borgir's polished symphonic interpretation of the style, to transcend the "metal" category.

Aside from the number of awards that black metal bands have won in Norway, the genre's rise to prime time palatability can also be summarized through the changing attitude of the Norwegian Radio Orchestra toward performing with the aforementioned Dimmu Borgir, known for their commoditized version of Satanic black metal. While early black metal sounded dirty, unpalatable, and was shoddily recorded, Dimmu Borgir presents black metal for the modern ear. They feature tidy, masterful production standards, and even record with a full orchestra, for a full-voiced, polished feel.

(Remember, it was their "Serpentine Offering" video that won a *Spellemannpris* in 2007.) In 1999 – before the awards had a "metal" category – the band was invited to perform live at that year's *Spellemannpriser* ceremony, and was originally going to be backed by the Norwegian Radio Orchestra. They planned a performance of "The Insight and the

⁴¹ The name "Dimmu Borgir" is taken from the Icelandic *Dimmuborgir* ("dark castles"), the name of a visually striking lava field in northern Iceland.

⁴² Ross Hagen discusses Dimmu Borgir's live television appearance at the Norwegian *Spelleman* awards ceremony in 1999. See: Hagen, "Norwegian Black Metal," 180, 198. Hagen also contends that the cleaner sound quality of increased production values placed

Catharsis," from their 1999 album *Spiritual Black Dimensions*, only to have the conductor back out over the song's Satanic content. In the end, the band played a different song from the same album, "Grotesquery Concealed," without orchestral backing. The lyrics of both songs are comparable with regard to Satanic content.

Then, in 2010, the same orchestra and accompanying choir recorded the album *Abrahadabra* with them, and then performed an entire concert with the band. Norway's Christian Democratic Party protested the concert in writing. They were particularly concerned about the program's inclusion of songs from Dimmu Borgir's 1996 *Stormblåst* album, originally recorded in the band's "explicitly Satanic" era, and re-issued in 2005. What they meant by "explicitly Satanic" is confusing, as except for *Abrahadabra*, all of Dimmu Borgir's albums contain material that either promotes devil worship or hatred of Christianity. Perhaps *Stormblåst* fell under such scrutiny because the lyrics were in Norwegian (all subsequent albums had lyrics in English), and the song "*Antikrist*" ("Antichrist") included the exhortation to "decapitate every Christian, and rape their women and children." The orchestra manager responded to the Christian Democratic Party's concerns, asserting his confidence that Satanism was a youthful error now behind

black metal more in line with the broader spectrum of extreme metal, resulting in a more socially palatable musical product, despite the continued presence of Satanic and anti-Christian lyrics and imagery. See: Hagen, "Norwegian Black Metal," 198.

⁴³ *Abrahadabra* did not include explicitly Satanic content, with lyrics focusing instead on extreme individualism.

⁴⁴ "Hogg hodet av hver Kristen/ Og voldta deres kvinner og barn."

the band; they had moved on, and distanced themselves from deep-seated or genuine Satanic views.⁴⁵

Recent years have led this rehabilitation of black metal toward forgetfulness. In 2013, Bård Eithun, the musician convicted of the 1992 murder of a gay man, returned to his band, Emperor, in a move that drew little remark from the metal community at large. (Eithun has been out of prison since 2003.) He performed with Emperor at the 2014 *Tuska* festival – held the same weekend as Helsinki Pride.

As a whole, Norway seems to be quite comfortable with the kind of decorative Satanism purveyed by bands like Dimmu Borgir. The costume version of Satanism is no bogeyman in Norway, to the extent that a great many Norwegians find it possible to dress in evening wear and politely applaud the victory of a music video about Satan's army. As heavy metal more generally became a valuable cultural export for Finland, black metal has become a point of national pride and identity in Norway. The former site of the Helvete record shop – where the young criminals socialized – and the rebuilt Fantoft stave church draw "black metal tourists" from around the world. Indeed, musicologist Ross Hagen suggests that the acceptance and even promotion of black metal in Norway that began at the turn of the century is at least in part due to the recognition that though

⁴⁵ Marken Kvamme Hagen, "Svarmetallisk Konsert på NRK," *NRK*, June 25 2011, accessed March 30, 2016, http://www.nrk.no/kultur/kork-og-dimmu-borgir-pa-nrk1-1.7687655.

⁴⁶ The performance of one Norwegian black metal band nevertheless managed to raise eyebrows abroad. At a 2004 concert in Krakow, the band Gorgoroth set the stage with "crucified" nude models, sheep heads on stakes and gallons of animal blood. A police investigation for possible animal cruelty and religious offence ended with no charges filed, but Nuclear Blast dropped the band from their label.

black metal may not have much power to sell records, it has the power to sell Norway. ⁴⁷ In the face of a homogenizing Western culture, black metal is something unique about Norway that can be sold alongside fjord cruises and Viking trinkets. Finally, as contemporary Norway is deeply secular, black metal's anti-Christian and Satanic rhetoric poses little threat; the prevailing attitude seems to be that as long as the Satanists aren't doing others or historical sites any harm, they are welcome to sing their songs to whomever wants to listen. ⁴⁸ The imagery of Satanism, despite its past uses, need not inspire fear if it has a desirable result - in this case, stimulation of the Norwegian economy and bolstering of its national identity. The performance of Satanism is safe when it becomes a commodity. ⁴⁹

⁴⁷ Hagen, "Norwegian Black Metal," 198.

⁴⁸ Norway has a national church (Lutheran) to which 77% of the population belongs. Less than 10% attend regularly.

⁴⁹ In the face of black metal's growing acceptability, some musicians have still run into trouble with the law. Most notably, Norwegian black metal vocalist Kristian Espedal (stage name "Gaahl") was imprisoned and fined in 2001 for assault, and then again in 2005, for assault and torture. See: "Gorgoroth Singer Sentenced to 14 Months in Prison," *Blabbermouth*, February 22, 2005, accessed March 30, 2016, http://www.blabbermouth.net/news/gorgoroth-singer-sentenced-to-14-months-in-prison/. In 2011, American black metal musician Jef Whitehead (of the band Leviathan, stage name "Wrest") was convicted of domestic battery. See: Michael Nelson, "Leviathan's Jef Whitehead Sentenced to Two Years Probation," *Stereogum*, June 21, 2012, accessed March 30, 2016, http://www.stereogum.com/1072852/leviathans-jef-whitehead-sentenced-to-two-years-probation/news/#respond. Such ongoing incidents have not received anywhere near the level of attention given to the crimes of the 1990s, and seem to have little effect on the general perception of black metal as a genre.

Satanism and Black Metal History

The history of Satanism in black metal is one of the genre's most fraught and nebulous aspects.⁵⁰ The Satanism of Nordic black metal bands generally attempts to repudiate the history of Christianity in the region. These musicians often propose a return to Paganism, believing that Christianity is "unnatural" to their culture; Christianity's perceived opposite – Satanism – seems to appeal to them as a logical means of protest. The fact that Satanism, as an inverse to Christianity, depends on Judeo-Christian theology for its very existence seems conveniently forgotten, and Satanism (rather than unbelief) is seen as just the needed antidote for Christianity. David Frankfurter analyzes this movement of what he terms "youth Satanism," in which self-proclaimed Satanists perform Satanism mainly within societies where there is substantial freedom with regard to public deviance. 51 He finds that these individuals fulfill "cultural roles as interpreters and performers of society's beliefs about Satan and occult conspiracies."52 Their deviance is based on reacting to Christian cultural hegemony, and a desire to become what that society fears most.⁵³ Furthermore, Frankfurter asserts that they do not only perform Satanism, but also parody it, mocking the ease with which panic can be provoked by their

⁵⁰ Earlier heavy metal was often accused of being "Satanic," most famously by the Parents Music Resource Center (PMRC), which was co-founded by Tipper Gore in 1985 and is the origin of the "parental advisory" stickers seen on albums. See: Walser, *Running with the Devil*, 137-160.

⁵¹ David Frankfurter, *Evil Incarnate: Rumors of Demonic Conspiracy and Ritual Abuse in History* (Princeton: Princeton University Press, 2006), 198.

⁵² *Ibid*., 199.

⁵³ *Ibid.*, 200, 202.

symbols and gestures.⁵⁴ From this perspective, the pleasure of being perceived as a Satanist comes from the opprobrium it provokes.

Historically, the Satanism that fueled both early Norwegian black metal and the societal reaction against it was the result of a strange concoction of genuine anti-Christian sentiment mixed with Christianity's own imagery of devil worship. It aspired to the performance of what was most evil from a Judeo-Christian perspective, and therefore most shocking to a Judeo-Christian society. Asbjørn Dyrendal considers the way the public perception of Satanism is largely constructed by non-Satanists and how young Norwegian black metal musicians stepped into the role of "devil worshipper" that was premade by "demonology, mostly filtered through popular fiction, film and music." 55 Black metal certainly embraced the outer forms and gestures of occult Satanism inverted crosses festooned album covers, musicians and stage setups, and lyrics praised Lucifer's power and imagined blasphemous narratives. This costume-Satanism garnered a lot of attention when it became associated with church arson in Norway – that is, when it transitioned into action. Nevertheless, black metal's association with Satanism is typically less about the worship of the Devil per se and more about the hatred of Christianity as a symbol of weakness and conformity in the West. As Kristian Espedal (stage name "Gaahl," former vocalist for Gorgoroth), put it:

God has nothing to do with our race [presumably he means the Norwegian "race"] in any way. We use the word 'Satanist' because it is Christian world and we have to speak their language. To the world I am a Satanist, which means resistance to everything that holds you down...But my language has no word for Satan in that manner... When I use the word Satan, it means the natural order, the will of a

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⁵⁴ *Ibid.*, 200-201.

⁵⁵ Asbjørn Dyrendal, "Devilish Consumption: Popular Culture in Satanic Socialization," *Numen* 55/1 (2008): 69-70.

man, the will to grow, the will to become the superman and not to be oppressed by any law such as the church, which is only a way to control the masses and has nothing to do with God.⁵⁶

Here, Espedal is of course also indicating that he believes Christianity is unnatural in the Norwegian context, and that a return to Paganism might be preferable. In the same interview, Espedal also stated that for him, individualism is at the core of black metal.⁵⁷

http://s355.photobucket.com/user/WD37/media/76ec8a07.jpg.html and http://i355.photobucket.com/albums/r455/WD37/755fc749.jpg. Subsequent to his two stints in prison (mentioned above, in note 46), he distanced himself from some of these statements in a 2008 interview in which he also came out as gay. See: Götz Kühnemund, "Gorgoroth Frontman Opens Up About His Sexual Orientation: 'I've Never Made Any Secret About It," Blabbermouth, October 29, 2008, accessed April 1, 2016, http://www.blabbermouth.net/news/gorgoroth-frontman-opens-up-about-his-sexual-orientation-i-ve-never-made-any-secret-about-it/. In this interview, he also claimed that he had never faced discrimination for his sexuality. In 2010, the annual Bergen Gay Gala named Espedal "Homosexual of the Year;" Espedal accepted the award saying, "I don't need an award to be myself. But if this award can help other people in the same scene as

Year," *Blabbermouth*, February 4, 2010, accessed April 1, 2016, http://www.blabbermouth.net/news/former-gorgoroth-frontman-named-homosexual-of-the-year/. Later, in a 2013 interview, Espedal said he is on good terms with "Faust" Eithun, the Emperor member who murdered a gay man. He further remarked that he did not believe the murder was a hate crime, saying, "It's just that when things come out in the media they paint this picture that shows an extreme anger against a certain group, but it's usually just an accidental fluke whether it was a black guy that got killed or a gay guy that got killed." See: J, "Unleashing Satan: An Evening with Gaahl," *Metal Blast*, November 25, 2013, accessed April 1, 2016,

me, it's a positive thing." See: "Former Gorgoroth Frontman Named Homosexual of the

http://www.metalblast.net/interviews/unleashing-satan-an-evening-with-gaahl/#disqus_thread. It seems that Espedal has pretty well internalized the individualism he claims is central to his approach to life, having little regard for community or how his words might affect others. For a discussion of fan responses to Gaahl's coming out, see: Karl Spracklen, "Gorgoroth's Gaahl's Gay! Power, Gender and the Communicative

⁵⁶ Everburning, interview with Kristian "Gaahl" Espedal, *Tartarean Desire*, October 7, 2004, accessed March 30, 2016, http://www.tartareandesire.com/interviews/gorgoroth.html.

⁵⁷ *Ibid*. Note that these are hardly the most provocative statements made by Espedal over the course of his lengthy career. In the 1990s, he made a number of extremely racist and xenophobic statements in interviews, used racial slurs and expressed his admiration for Hitler and Varg Vikernes. See: Interview with Gaahl in unidentified 1990s-era fanzine, accessed March 30, 2016,

Satanic black metal may imagine itself a critique of Christian morals and the "weakness" it perceives in them, but its methods are undeniably crude, and sometimes criminal.

As Espedal's statement expresses, Satanism manifests itself in black metal in a number of ways that can be difficult to untangle. One the one hand, there is the level of costumes and external symbols of Satanism, which to non-believers usually hold little significance or threat. These upside down crosses and blasphemous lyrics often serve the purpose of shocking a primarily Judeo-Christian society, either for the purpose of the shock value itself, or as a means of stating dissatisfaction with Christianity or organized religion in general. At the same time, there exist black metal bands who take Satanism seriously as a religion unto itself – "theistic Satanism," as opposed to the "atheistic Satanism" of someone like Espedal. One of the few theistic Satanist bands to have garnered a fair amount of success is Sweden's Watain; I use them as an example of how Satanism and fascism continue to be intertwined with black metal and provoke controversy.

The practice of Satanism as an actual religion that inverts the order of Christianity is fairly unusual. All members of Watain, however, are allegedly members of the

Discourse of the Black Metal Scene," in *Heavy Fundamentalisms: Music, Metal and Politics*, ed. Rosemary Hill and Karl Spracklen (Oxford: Inter-Disciplinary Press, 2010), 89-102.

http://www.billboard.com/artist/277850/watain/chart?f=305).

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⁵⁸ In 2010, they won a Swedish Grammy in the "hard rock" category. Their 2013 album, *The Wild Hunt*, peaked at No. 1 on the Swedish charts (see: Swedish Charts Website, accessed April 1, 2016, http://swedishcharts.com/search.asp?search=watain&cat=a), and at 158 on the U.S. charts (see: Billboard, accessed April 1, 2016,

Misanthropic Luciferian Order, a branch of theistic Satanism.⁵⁹ Watain frontman Erik

Danielsson has stated that Satanism is at foundation of his band: "But all of the qualities
on which Watain is based - all of the energies of the band, the things that collide in this
band—all of them are in nature an enemy of Christ, and an enemy of the living God
within Christianity."⁶⁰ The members of Watain have furthermore not been shy in adopting
the culturally salient external signs of Satanism, and they are known for the use of animal
blood and bones in staging their live shows,⁶¹ and have also been accused of practicing
animal sacrifice.⁶² Their practices are in earnest, and though listeners might interpret their
performances as shocking entertainment, they intend their concerts as a "mystical or
religious experience."⁶³

Politically, Watain have managed to hit all of Satanic black metal's hot buttons: sympathy with the Norwegian church burners, an individualism that sees themselves as exceptions with regard to the rest of humanity, and actions that at best show extreme insensitivity to the Holocaust and at worst are expressions of genuine neo-Nazi

⁵⁹ Markus Endres, "Watain," *Metal.de*, March 17, 2007, accessed April 1, 2016, http://www.metal.de/heavy-metal/interview/watain/36518-watain/.

⁶⁰ "Interview: Erik Danielsson of Watain," *Invisible Oranges*, October 8, 2013, accessed April 2, 2016, http://www.invisibleoranges.com/2013/10/interview-erik-danielsson-of-watain/.

⁶¹ Lauren Wise, "Watain's Erik Danielsson Talks Satanism, Pig's Blood, and Privacy," *Phoenix New Times*, July 22, 2013, accessed April 1, 2016, http://blogs.phoenixnewtimes.com/uponsun/2013/07/watain-satanic-interview-2013.php?page=3.

⁶² Toby Cook, "Diabolical Intent: Erik Danielsson of Watain Interviewed." *The Quietus*, September 9, 2013, accessed April 2, 2016, http://thequietus.com/articles/13268-erik-danielsson-interview-watain-the-wild-hunt.

⁶³ Ibid.

sentiments.⁶⁴ Speaking on the history of violent anti-Christian activity in black metal,
Danielsson has said he "identifies with" the Norwegian church arsons and sees those
activities as "natural outcomes" of black metal music.⁶⁵ As for fascism, the band is
particularly infamous for performing a Nazi salute in 2006, while wearing t-shirts of the
German neo-Nazi band Absurd, about which Danielsson remarked:

No, no, it's definitely not something that we regret, it's the misconception of other people and the lack of intellect and childish approach that people have to it that is debatable and a bit sad. But we are who we are and it's other people's problem if they don't want to understand it. It's like this: when you all of a sudden reach a bigger audience, who are not used to the devil being a big part of a band, they understand that there is something wrong with this band. They understand that there is something very dark and disturbing at the heart of this band, and they try to find that devil in Watain and they try to understand. And I think that what a lot of people do is that they go for the only evil that they know – the only devil that they know, which in Western society is very much the Third Reich and everything that happened there. And it's a bit laughable to me how people can take such an easy way out, I mean come on, dig a little deeper and you'll understand that we would be amongst the first in line to get shot in the Third Reich; what we want is chaos, anarchy and disorder and for the world to go up in flames. What Hitler wanted was a nice little paradise for Aryan fuck-heads to flourish in, where law and order would be the common denominator of society. So it's a bit ridiculous to me, and, y'know, people just have to think a little bit deeper if they want to concern me with what they think.⁶⁶

Danielsson is not the first black metal musician to be called neo-Nazi, nor is he the first to resist the accusation by calling his accusers stupid. Here, he seems to reason that because he believes he would have been a victim of the Third Reich, it's acceptable for him to use its salute to visually buttress his musical performance's presentation of "evil." His resistance also seems to imply, however, that he would differentiate between the

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⁶⁴ For a personal account and discussion of racism in contemporary metal scenes, see: Laina Dawes, *What Are You Doing Here? A Black Woman's Life and Liberation in Heavy Metal* (Brooklyn: Bazillion Points, 2012).

⁶⁵ Wise, "Watain's Erik Danielsson."

⁶⁶ Cook, "Diabolical Intent."

"evil" that Watain worships, and the specific evil of the Holocaust, which for him seems to have been too well organized to be the kind of evil he is looking for. Danielsson is correct in asserting that the Third Reich has become a prime symbol of "evil" in recent Western history, and in that sense, his choice to invoke its salute is quite meaningful as a show of support for evil.⁶⁷ And yet, he insists that observers have misinterpreted the band's actions. Danielsson seems bent on keeping evil a vague, threatening spiritual force, which is easier to worship than a discursive concept for real events that disturb our sense of humanity. And it's not only his accusers that Danielsson finds stupid; he finds that pretty much everyone but himself and his bandmates are all too "common:" "Watain is the world that we have built for ourselves in order to not be a part of the world of common man...we have built an island in a sea that is equal to a cesspool of excrement and all too often we have to take our rowing boats out into that sea."68 This dismissal of other humans is quite common amongst black metal musicians of all political stripes, and it is arguably this individualism that leads to the high number of black metal bands comprised of only one member.

When it comes to Satanic black metal, Watain is the complete package, offering sensational and shocking stage shows, ardent religiosity, dismissal of their own neo-Nazi behavior, sympathy towards the music's history, and an elitist/exceptionalist view of

⁶⁷ David Frankfurter usefully describes "evil" as a gloss for something so horrific it defies comprehension. See: Frankfurter, *Evil Incarnate*, 11. For a discussion of how the Holocaust became such a potent symbol of evil in the twentieth and twenty-first century imagination, see: Susan Neiman, *Evil in Modern Thought: An Alternative History of Philosophy* (Princeton: Princeton University Press, 2002), 250-281. As she sums it up, "What makes Auschwitz emblematic for contemporary evil...[is] that today, even crimes so immense that the earth itself cries out for retribution are committed by people with motives that are no worse than banal." See: Neiman, *Evil in Modern Thought*, 273.

⁶⁸ Cook, "Diabolical Intent."

themselves compared to the rest of humanity. Nevertheless, their fan base continues to grow, and the release of 2013's *The Wild Hunt* was promoted with a long tour of the US and Europe. Perhaps their success is in part made possible by the fact that they haven't "done" anything – haven't burned any churches, haven't assaulted or murdered anyone, or otherwise gotten into trouble that would materially prevent progress of the band. They have successfully capitalized on black metal's increasing acceptability, startling listeners who expect only a *frisson* of naughtiness with the stark reality of their views.

While Satanic black metal has achieved unanticipated success in the Nordic countries, it is difficult to imagine a scenario in which an openly Satanic musical form could gain any kind of widespread traction in the United States. Americans on the whole take Christianity more seriously than do Norwegians, and thus are more likely to genuinely fear Satanism as its evil counterpart. In the American public conceptual scheme, Satanism, and the occult activities associated with it – witchcraft/Wicca and neo-Paganism – are taken seriously by many Christians, and the threat of actual Satanic worship still sparks lively resistance. When a group planned to hold a reenactment of a "Black Mass" in a pub on Harvard University's campus in the spring of 2014, the ensuing outcry ended in the event's cancellation. The local Roman Catholic community, in particular, saw the intended reenactment as a direct mockery of their faith, and held a Eucharistic procession through the city of Cambridge, ending in a holy hour at the Catholic church in Harvard Square. The holy hour was reportedly attended by more than 1500 people, including Harvard president Drew Faust, who said she found the idea of the black mass "abhorrent," but that she would not force the event's cancellation in the

interest of maintaining "vigorous and open discussion and debate." Furthermore, nearly 60,000 individuals signed a petition against the black mass, 70 and numerous Facebook groups invoking prayer, fasting and holy hours in solidarity around the country sprang up. For believers, Satanism is not a joke – it is a true spiritual threat, and it seems that the members of a band like Watain would appreciate being seen as one.

Without disregarding the genre's violent history, I hope to turn my attention to what has happened to black metal as the genre has continued to grow and develop in the last fifteen years. Due to its history, black metal is inescapably associated with being more than "just music" – in other words, it is assumed to have ideological intent of some kind. While Satanism and fascism have made up a large part of black metal's ideological history, recent years have shown the genre's ability to move in new directions. I have found that core attitudes of resistance to the mainstream and solipsistic detachment, along with the characteristic half-lit aesthetic have remained, but ideologically, black metal has branched in a number of directions that move it beyond Satanism and fascism.

Particularly, a handful of American black metal bands have coopted black metal's harsh sounds toward environmental protest and activism. While attitudes of awe toward natural beauty can be found throughout black metal's history, this shift toward an activist environmentalist stance reorganizes black metal's priorities, shifting them away from the nexus of Satanism/(neo)-Paganism, nature worship and white nationalism, and toward

⁶⁹ Travis Andersen and Derek J. Anderson, "Amid Outcry, Black Mass at Harvard is Called Off," *The Boston Globe*, May 13, 2014, accessed April 2, 2016, http://www.bostonglobe.com/metro/2014/05/12/cardinal-sean-malley-expresses-disappointment-harvard-decision-allow-black-mass-campus/tUjYx2817C65LAHousRIeP/story.html.

⁷⁰ *Ibid*.

lamentation and anger over the failures of the human-nature relationship. In chapter 3 of this dissertation, I examine two contemporary environmentalist black metal bands, exploring the way they harness the genre's sounds toward ecological critique.

Chapter Outlines

Perched on the fringe of the extreme metal underground and named after the brand of vintage amplifiers they use, the band Sunn O))) creates 90 minute mostly-improvised live sets that focus on bass and sub-bass (20-60 Hz) tones, played at a volume of about 120 dB. With a motto of "Maximum Volume Yields Maximum Results," loudness is their musical content, and the droning, low tones they project require multi-sensory interpretation, as they are felt in the body as vibrations. Chapter 1 explores the experience of a Sunn O))) concert, as it transgresses and dominates the listener's body, controlling available sensory data. The heavily amplified low frequencies bring the listener's body into direct contact with the physical properties of sound, touching it with bone-rattling vibrations. Cloaked in thick artificial fog, the means of sound production remain hidden. This combination of visual deprivation and aural/tactile overload enacts a ritual of sensory domination, to which the audience submits.

In examining the physical experience of listening to extremely loud, low frequencies, this chapter touches on wider discussions of loudness, and its connections to deaf culture, war, torture, and submissive pleasure, drawing on the expanding corpus of sound studies research. My approach also draws heavily on the phenomenological

ethnographic work of Harris Berger, Timothy Rice, and Jeff Todd Titon, as well as Judith Becker's work on deep listening.⁷¹

Chapter 2 takes this close listening project in another direction, studying the rhythmic practices of the Swedish death metal band Meshuggah. This music is beloved of both rhythm nerds and high-intensity moshers, and I begin by discussing these seemingly divergent paths to musical enjoyment, and the intensity of experience they share.

Meshuggah's music is known for combining rigid 4/4-based song structures with looping riffs in a variety of meters. Some riffs, however, further complicate this structure by seeming to begin *in media res*. Focusing on two songs from their 2008 album *obZen*, I examine this compositional technique in which rhythmic patterns can only be heard to cohere retrospectively and with repetition. In my analyses, I move between conventional transcriptions and spectrograms, with an eye (and ear) toward questioning what each can tell us about musical events. In studying Meshuggah's music, spectrograms open up a revealing perspective on rhythmic structures, particularly with regard to visualizing event onsets, groupings and repetition of groupings. Using spectrograms in this way focuses on

⁷¹ I particularly draw on Harris Berger's phenomenological ethnography, which includes an in-depth analysis of a death metal guitarist's experience of performing his own song, as well as a broader ethnography of extreme metal in Akron, Ohio. While many ethnographers of metal focus on the listener's experience, Berger's approach primarily accesses the experiences of performers, and the way in which they organize their attention and hear their own music. See: Harris M. Berger, *Metal*, *Rock and Jazz: Perception and the Phenomenology of Musical Experience* (Hanover, NH: Wesleyan University, 1999), 200-241. See also: Timothy Rice, "Toward a Mediation of Field Methods and Field Experience in Ethnomusicology," in *Shadows in the Field: New Perspectives for Fieldwork in Ethnomusicology*, ed. Gregory Barz and Timothy J. Cooley (New York: Oxford University Press, 2008), 42-61; Jeff Todd Titon, "Knowing Fieldwork," in *Shadows in the Field: New Perspectives for Fieldwork in Ethnomusicology*, ed. Gregory Barz and Timothy J. Cooley (New York: Oxford University Press, 2008,), 25-41; and Judith Becker, *Deep Listeners: Music, Emotion and Trancing* (Bloomington: Indiana Uniersity Press, 2004).

readily apparent clusters and gaps of visual material that indicate rhythmic patterns – groupings that often align with the aural experience of the music.

In the context of a musical style that pits riffs against the 4/4-based structure, riffs that emerge as if in the middle of some much longer process destabilize this relationship. With song lyrics often centered on the desire for radical freedom or enlightenment, and musical patterns that ritualize the suppression of elements that break the "order" of 4/4, I suggest that Meshuggah's use of repetition and variation explores ideas of freedom and rigid control, liveliness and predictability.

Chapter 3 picks up where this introduction's discussion of black metal left off, examining the genre's recent interest in environmentalism. Using two case studies, this chapter demonstrates the range of possibilities for musical environmentalism, and how extreme metal is capable of engaging both the apocalyptic and nostalgic modes of ecocriticism.

Part 1 explores the idea of plants as an ecological "Big Other" – a being so different from ourselves we can never fully grasp it as subject. Moving through several literary examples of sentient plants bent on human destruction, I arrive at the music of the California-based black metal band Botanist, which imagines a future in which plants destroy human civilization and take control of the earth. This apocalyptic vision disturbs human assumptions about the passivity of plant life, thereby inviting listeners to rethink their relationship with the natural world.

Part 2 turns to *Kentucky*, the 2012 album by black metal band Panopticon. *Kentucky* blends the sounds of black metal with bluegrass, covers of coal miners' protest songs and samples from archival recordings to create an album critiquing the ecological

and socio-economic troubles of the Eastern Kentucky coalfields. In a roughly chronological approach, the album moves from the abuse of Native Americans in the nineteenth century, through the labor disputes of the twentieth century to the issue of mountaintop removal mining that threatens the Appalachian landscape today. Together, the songs present both a nostalgic sounding out of a beloved landscape, as well as a lament for what it presents as an unbroken history of misuse and exploitation. In contrast to the fantastical work of Botanist, *Kentucky* is grounded in specificity and reality, offering a clear example of an environmental issue that could be addressed.

Though the topics of my chapters range widely, they are united in their attempt to study extreme metal in a way that preserves the liveliness that attracts its listeners, by always bearing in mind the lived listening experience. Together, these chapters offer three possible approaches to analyzing extreme metal music: through loudness, through rhythm and through ecocriticism.

Chapter 1

MAXIMUM VOLUME YIELDS MAXIMUM RESULTS

6 September 2012, 10pm

The windowless room slowly fills with synthetic fog, obscuring first the dimly backlit stage with its wall of amplifiers, then each cluster of the motionless audience. Everyone is eerily quiet; there is no chanting of the band's name, no clapping, not even chatter. A shadowy, robed and hooded figure appears on the stage, heavily silhouetted against the fog, and plucks a single string on his electric guitar. The sound that fills the space, obliterating all other sounds, is thick and chunky, dense and low with a tight buzz. We all know this sound, and we wait for that sound to morph into the beloved rhythmic chug-chugging that structures heavy metal. Several seconds pass without change, until this same sound, so familiar and common, suddenly doubles itself an octave down and punches us in the gut. Mouths drop open in disbelief and eyes scrunch closed in discomfort as an alien, disturbing buzzing fills our bodies. A sound we thought we knew makes a renewed invasion of not only our ears, but our entire bodies. It shakes us, and our understanding of music, from within.

A minute passes, and so far, the guitar's string has been plucked only once, but the sound filling the room beyond comprehension grows ever richer and more complex. The shifting overtones create a counterpoint with the pulses of sub-bass vibration. Somewhere in this maelstrom of sound, the fundamental wobbles and continues to send its signal through the circuitry. After a few minutes, there is a discernible chromatic stepwise descent of a minor third, sending the already unbearably low sound even lower, and this impossibly deep sound thunders into the crowd with renewed energy and even

more gut-wrenching vibrations. As the ritualistic improvisation slowly begins to unfold, single large-scale tones generate a complex of sounds – a swelling and diminishing of feedback and distortion that develops its own sense of pulse. This series of peaks becomes a rhythmic motive, the "wah-wah" of canceling wavelengths, shaping a complete musical sub-architecture within what seems like a single note with respect to the guitar.

It is a warm September night in NW Washington, D.C. The band is Sunn O))) (pronounced "Sun"), a group that perches on the fringe of the extreme metal underground, in some ways more closely associated with the musical avant-garde. Sunn O))) is one of the few members of the "drone doom metal" subgenre. The use of "drone" here differs from the standard musical usage of the word to describe an unchanging bass pitch over which other melodies are played. In drone doom metal, the drones are the pitch content of the music and resemble the droning of heavy machinery, with a single fundamental taking on varied timbral shapes over the course of up to a few minutes. Their name a typographical representation of the brand logo on the vintage amplifiers they use, Sunn O))) creates 75-90 minute mostly-improvised sets that focus on bass (60-300 Hz) and sub-bass (20 - 60 Hz) tones, ⁷² played at a volume of about 120 dB(A)⁷³ –

Adult humans have a hearing range of approximately 20-20,000 Hz. As points of reference, a modern classical orchestra tunes to an "A" at 440 Hz and the range of the human speech is approximately 85-255 Hz. Ronald J. Baken, *Clinical Measurement of Speech and Voice* (London: Taylor and Francis Ltd, 1987), 177.

⁷³ I am using the decibel A-weighted scale, as it is the standard for measuring environmental noise in both common and legal usage. Unfortunately, db(A) says very little about the strength of the sub-bass frequencies. A dB(C) measurement would reveal more of the strength of the low frequencies at a Sunn O))) concert.

quite near the threshold of pain (approximately 130 dB(A)).⁷⁴ In the sub-bass range, the hearing of the average adult is weak, but if these sounds are produced at sufficient amplitude, they will be felt in the body as vibrations. Within the ear itself, sounds at very high pressures can cause a variety of sensations, for example, "touch," or "pricking," for sounds with a frequency of < 100 Hz, at a pressure of > 120 dB.⁷⁵ Operating under the motto, "Maximum Volume Yields Maximum Results," loudness is Sunn O)))'s musical content, and the droning, low tones they project require multi-sensory interpretation. Feeling and music are freely associated, but feeling Sunn O)))'s music is not a metaphor – it is an inescapable physical reality.⁷⁶

Focusing inward, trying to account for the massive array of sensations the subbass is pumping through me, I become aware of my body as an impressive aural-tactile

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⁷⁴ The auditory threshold of pain is approximate and varies somewhat among individuals, depending on age and previous noise exposure. As a point of reference, a vuvuzela at a distance of 1m reaches about 120 dB ("threshold of discomfort"), and a jet engine at 30m is about 140 dB – certainly painful to the unprotected ear. Eberhard Sengpiel, "Loudness Comparison Chart," *Forum für Mikrophonaufnahmetechnik und Tonstudiotechnik* (*Forum for Microphone Recording and Sound Studio Technology*), accessed November 8, 2012, http://www.sengpielaudio.com/TableOfSoundPressureLevels.htm.

⁷⁵ Barry Truax, ed. "Threshold of Pain," *Handbook for Acoustic Ecology* (Cambridge Street Publishing, 1999), accessed November 8, 2012, http://www.sfu.ca/sonic-studio/handbook/index.html.

⁷⁶ To date, Sunn O))) have released over ten albums since 2000, some in collaboration with other artists. These releases exhibit the same magnanimously slow approach to musical form, but are mastered to be listenable on average consumer grade audio equipment, and thus lack the intense focus on the sub-bass that characterizes their live performances. Because this essay focuses on the live experience of Sunn O)))'s music, I have chosen not to include any audio, as it is simply not possible to capture the sensations I describe through either standard field recording or playback equipment.

organ.⁷⁷ There is a sound that manifests as a knocking on my sternum, and another that buzzes in my sinus cavity. The beer glass vibrates in my hand, then passes the vibrations down into the floor below me. My ribcage rattles, and my teeth shiver slightly against my jawbone. Initially, the experience is shocking, even slightly nauseating. The throbbing bass competes with my heart for control over my bodily rhythms, and my chest feels tight and fluttery. I wonder if I can last an hour, or even twenty minutes. But as each sound spins through me, pulsing and reverberating in all my hollow spaces, the slowly shifting vibrational scheme takes on a sinuously soothing character. I am overcome by a strong urge to lie down and close my eyes; the sound envelops my body, cutting me off from other sensations, making me safe. Closing my eyes, I sway slowly from side to side to the slow beat of the vibrational pulses. I am touching sound.

Touch

In many instances of daily hearing, sound has lost its physical properties. The experiential immediacy of hearing exists separately from the knowledge that it is the perception of changes in air pressure. It is only when confronted with high-amplitude low frequencies that we are brought into contact with the reality of sonic perception. Michel Serres writes of the interconnectivity of the senses, "How could we see the compact capacity of the senses if we separated them?" He further asserts, "...it can be said that our whole posture is linked to our sense of hearing," as he argues that hearing comes not only

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⁷⁷ For a summary of phenomenological methods as applied to musical experience, see Wayne D. Bowman, *Philosophical Perspectives on Music* (New York: Oxford University Press, 1998), 254-301.

through the ears, but also through the feet and the joints.⁷⁸ Sunn O)))'s sounds exert pressures that activate the conscious sense of touch. At the level of the eardrum, sound is always touch, but here, the whole body begins to echo the eardrum's vibrational dance, as the rumbling bass shakes everything it comes into contact with. These lower sounds coerce the body into pressure-induced motion, drawing together two sensory territories usually conceptually separated.

Most of us have probably experienced this blending of sound and touch, either via a bass rattling a car, or thumping in electronic dance music, or when standing near the speakers at a concert. In most of these instances, however, the experience of the vibration is an extra, a side effect of sensory limits. With Sunn O))), however, these vibrations are not the exposure of an exceeded capacity, but an exploration and celebration of sensory cooperation and the forgotten physical power of sound. Hearing and touch work hand in ear to produce a singular, united musical understanding.

Deaf culture is particularly attuned to hearing's haptic essence. Hard of hearing hip-hop artists feel the beat with their bodies and flow with their hands. Thomas Edison, the inventor historically credited with the invention of the phonograph – the first device capable of both audio recording and playback – was deaf. In the process of fine-tuning his invention, he bit down on the sound horn in order to feel its vibrations in his jaw.⁷⁹ Today, Scottish percussionist Evelyn Glennie performs barefoot in order to better hear through her feet. Her "Hearing Essay" describes the way she hears with her body,

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⁷⁸ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies (I)*, trans. Margaret Sankey and Peter Cowley (New York: Continuum, 2008), 305, 142.

⁷⁹ Douglas Kahn, *Noise*, *Water*, *Meat: A History of Sound in the Arts* (Cambridge: The MIT Press, 1999), 91.

contending that, "deafness does not mean that you can't hear, only that there is something wrong with the ears." As a young music student, she learned to sense pitch by placing her hands on the classroom wall while her teacher played the timpani. Low frequencies resounded in her feet, higher ones in her chest and face. For Glennie, deafness reorganizes listening, but does not fundamentally change it, much less eliminate it. Perhaps those who listen primarily with their ears, then, require the instruction of loud, low sounds to experience this reorganization of listening as a full-body process.

Such a re-orienting of music around a sensory experience involving both sound and touch gives rise to a profound new understanding of what it means to be a hearing body. The mechanism by which sound operates on the ear, as it becomes large enough to operate on the whole body, makes itself remarkably obvious. The miracle of melodic fluidity is placed under a magnifying glass, revealing its physical crudeness.

Though interest in the potential tactility of musical experience has increased with modern sound technology, the pursuit of rumbling sounds is not inherently a product of it. The roar of the modern industrial world has shaped our reference point for loudness; other times and places experience loudness differently. One can imagine that in the eighteenth century, the *Toccata and Fugue in D minor* shook the Leipzig Thomaskirche, thundering through the congregation with novel intensity. Similarly, the nineteenth century increase in orchestral size not only made possible more options in sound color, but also enabled a substantial increase in volume as well. Sunn O))) inherits, rather than invents, a human pursuit of shocking loudness.

⁸⁰ Evelyn Glennie, "Hearing Essay," 1993, accessed May 11, 2016, https://www.evelyn.co.uk/hearing-essay/.

⁸¹ *Ibid*.

War

Artists are not the only ones to have noticed the physical effects of high amplitude sounds; military uses of sonic weapons date back to German sound cannons in the Second World War. 82 US military investigations into the possibility of both lethal and non-lethal sonic weapons date back to the 1960s, and the 1970s saw a surge in research on the effects of infrasound on humans.⁸³ While Sunn O))) emphasizes sub-bass tones, infrasound comprises tones below the human threshold of hearing, occupying the range 0 < 20 Hz. Despite early studies suggesting that infrasound at specific frequencies can cause epilepsy, and "induce headaches, giddiness, nausea, disorders of vision, breathing disorders and 'psychotropic' effects, causing a feeling of fear and loss of consciousness," by 1978, it had become clear that the main effects of infrasound were "annoyance," "aural pain and damage," and "middle ear pressure buildup," and that a lethal acoustical weapon, though technically possible, was well beyond the limits of practicality, due to the immense size of the sound source that would be required to generate the necessary 174 dB.84 Nevertheless, the US developed a number of non-lethal acoustical weapons in the 1990s that blasted directional beams of sound or infrasound intended to disperse

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⁸² Though of course, as R. Murray Schafer points out, noise has been an important component of all wars. R. Murray Schafer, *The Tuning of the World* (New York: Alfred A. Knopf, Inc. 1977), 50.

⁸³ Stuart Swezey, "Anti-Crowd Weapons Work by Causing Fits," in *Amok Journal: Sensurround Edition*, ed. Stuart Swezey (Los Angeles: Amok, 1995), 404.

⁸⁴ Stuart Swezey, "Working Paper on Infrasound Weapons," in *Amok Journal: Sensurround Edition*, ed. Stuart Swezey (Los Angeles: Amok, 1995), 407. Nick Broner, "The Effects of Low Frequency Noise on People – A Review," in *Amok Journal: Sensurround Edition*, ed. Stuart Swezey (Los Angeles: Amok, 1995), 411-415, 419.

crowds or disable individuals. In the 21st century, these instruments were supplanted by the Long Range Acoustical Device, or LRAD, which is capable of "projecting a 'strip of sound' (15 to 30 inches wide) at an average of 120 dB (maxing at 151 dB) that will be intelligible for 500 to 1,000 meters."85 These devices can hail ships, disorient crowds and issue commands. 86 Finally, while acoustical weapons that are directly lethal to humans remain impractical, evidence shows that sonar (which uses pulses of sound to locate objects underwater) has devastating effects on marine life, particularly whales. Biologists found that Low Frequency Active Sonar (LFAS), with an output of >230 dB as 1 μPa broadband waveforms and a frequency range of 250-3000 Hz, caused mass strandings of beaked whales in Greece.⁸⁷ Further research has found that high sound pressure levels can lead to the formation of gas bubbles in marine mammal's vasculature, resulting in decompression sickness ("the bends") when the animal surfaces. 88 Several stranding incidents have been linked to the U.S. Navy's use of sonar, and in some cases the whales have been found with bleeding in the ears and brain. As a result, in September of 2015, the U.S. Navy agreed to limit use of sonar in certain Pacific Ocean habitats due to the

⁸⁵ Suzanne G. Cusick, "Music as Torture/Music as Weapon," *Trans: Revista Transcultural de Música* 10 (2006), accessed November 18, 2013, http://www.sibetrans.com/trans/article/152/music-as-torture-music-as-weapon. Bruce Johnson and Martin Cloonan also discuss sonic and musical weaponry, particularly as used by the US military. Bruce Johnson and Martin Cloonan, *Dark Side of the Tune: Popular Music and Violence* (Burlington, VT: Ashgate, 2008), 147-154.

⁸⁶ Cusick, "Music as Torture."

⁸⁷ A. Frantzis, "Does Acoustic Testing Strand Whales?" *Nature* 392/29 (March 5, 1998), accessed January 27, 2016, doi:10.1038/32068.

⁸⁸ Lawrence A. Crum and Yi Mao, "Acoustically Enhanced Bubble Growth at Low Frequencies and Its Implications for Human Diver and Marine Mammal Safety," *The Journal of the Acoustical Society of America* 99 (1996): 2898-2907, accessed January 27, 2016, doi: 10.1121/1.414859.

harm caused to whales.⁸⁹ Taking Kittler's perspective on the entertainment industry as "an abuse of army equipment" into account, it is as if Sunn O))) co-opts the overpowering qualities of highly amplified low-frequency sound toward pleasure, giving listeners the opportunity to voluntarily experience the effects of extreme loudness on body and mind.⁹⁰ Their performance echoes these sonic weapons, as its loudness impedes verbal communication and even smothers thought, yet in this instance everyone in the audience has paid money for the experience and takes pleasure in the bewildering assault.

6 September 2012, 10:15 pm

Others in the room seem to be as overcome as I am by the physical intensity of the music. ⁹¹ There is no moshing or screaming. In fact, the audience is almost completely still, only swaying slightly in time as repeating waves of feedback become recognizable patterns. A few move their heads up and down with the shockwaves passing through them, as if headbanging in slow motion. One man gesticulates with his arms, waving them slowly above his head as if participating in a sacred ritual. Through the fog, I can see the guitarist drinking from a bottle of red wine. His instrument hangs untouched from

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⁸⁹ Virginia Morell, "U.S. Navy to Limit Sonar Testing to Protect Whales," *Science*, News, September 16, 2015, accessed January 27, 2016, http://www.sciencemag.org/news/2015/09/us-navy-limit-sonar-testing-protect-whales.

⁹⁰ Friedrich A. Kittler, *Gramophone*, *Film*, *Typewriter*, trans. by Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford University Press, 1999), 97. For further discussion on the fluidity between sonic weapon and music, see Steve Goodman, *Sonic Warfare: Sound, Affect, and the Ecology of Fear* (Cambridge, Massachusetts: The MIT Press, 2010), 27-39.

⁹¹ Michael Heller calls this feeling of being overcome by loudness "listener collapse." See: Michael Heller, "Between Silence and Pain: Loudness and the Affective Encounter," *Sound Studies*, 1/1 (2016): 44-46.

his neck, but thanks to electricity's gift of endless sustain, the sound is as dense as ever as it emerges from a labyrinth of unseen effects and amplification circuitry.

Ritual Domination

The characteristics of this experience are more like those of a sacred rite than those of a metal concert. Most music is ritual in that it gathers people for a common purpose with a set of specified hierarchies and behaviors, and it seems that Sunn O)))'s ritual is that of ripping music apart at the seams to examine what's inside – crushing its bones to feel the texture of the marrow. This performance proceeded under principles of hierarchy and mystery. The members of Sunn O))) stood on stage and produced sounds, to which the audience listened, standing on the floor in front of the stage, moving only minimally. The sheer loudness of the music made talking essentially impossible; we were capable only of submitting to what they put out. The music was done to us, and we (presumably) voluntarily relinquished control of our sonic environment to the band.

In reflecting on the ritual aspects of this concert, particularly the use of artificial fog to obscure the performers and their machinery, I reconsider my perception of the concert's beginning, which was tied up in that first familiar tone that came pumping out of the speaker cabinets. That is, I return to the moment when the music began. The fog, however, began pouring out of the machines several minutes before the first note sounded. It was with the dimming of the house lights and the start-up of those fog machines, not the beginning of the music, that the audience fell silent and moved toward the stage in intensified anticipation. The music itself was part of a larger performance

ritual that began with the obscuring of the space – the preparation of the audience for the coming onslaught.

Sunn O)))'s stage plots warn of high volume, low frequencies and the physicality of the sound, as shown in Figure 1.1:

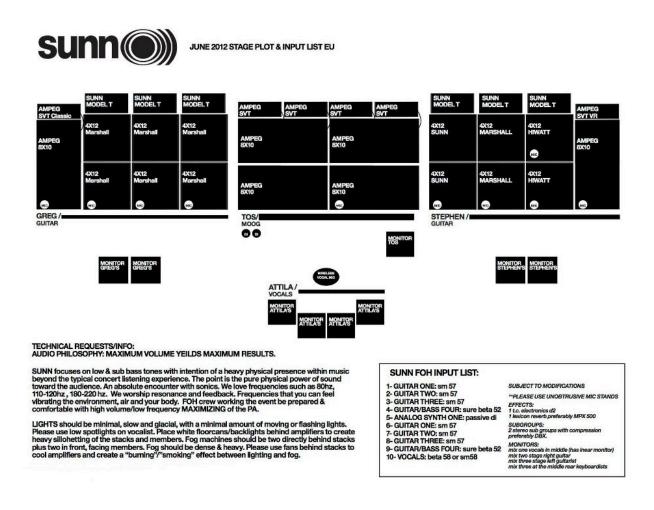


Figure 1.1. Sample Sunn O))) stage plot, from performance at KOKO London, June 13, 2012. (This show additionally featured a MOOG synthesizer.)

Physicality is at the forefront of Sunn O)))'s concert plan, and the path to its achievement is through loudness.

As Sunn O))) floods the performance space with artificial fog, they demarcate it as their own, exerting sensory control over the environment. Forcibly decreasing

visibility in the performance space, they activate the capacity of the other senses to attempt compensation for the one that is lost. The ear's sensitivity to sounds increases as its task of relaying information about the environment expands. As the band then fills the space with sounds loud enough to cause pain, they capitalize on this increased sensitivity, preventing any sounds but their own from being heard through sheer volume. When the fog and loudness are then combined with the tactile element of the sub-bass tones, Sunn O))) dominates the data received by three of our five senses.

This assertion of control over the environment obscures the technical elements of Sunn O)))'s playing. While we faintly see the guitar string being plucked, the subsequent treatment of that signal through loops, fuzz and effects pedals is kept in the dark; we are not meant to consider exactly how it is that so many shades of difference can result from such seemingly simple playing. Most of the "playing" happens at the musicians' feet, and the audience is not invited to observe this process. The curtain of fog limits the audience's sensory data to sound and touch – product and reaction – preventing access to realizations of "how." Sunn O))) prevents the audience from discovering their musical method in their concert setting; the realization of sounds is cloaked in obscurity, and the denial of our visual capacity means that the band's sound is able to overwhelm the listening body with impunity.

The audience's acceptance of this domination of their sensory experience dovetails with Fred Maus' exploration of listening as masochistic submission. In "The Disciplined Subject of Musical Analysis," Maus brings together music theorists' expressions of the submission inherent in listening to music with the writings of BDSM practitioners, presenting in a metaphor of particular sexual practice what concertgoers

environment into clearly separated active and passive roles, giving up constant, reciprocal negotiation in favor of a clearly defined, if only temporary, function as performer and listener. From his perspective, almost any voluntary listening experience could be construed as possessing some shade of this masochistic quality. At the classical symphony concert, for example, the listener is "bound and gagged," as audience participation is typically limited to quiet, seated listening, with applause at the end of the performance. Throughout the experience, however, there remains the knowledge that consent to this submission is predicated on a social fiction; accepting a passive role as listener is consensual and conceptual – the symphony is not a literal, inescapable force. Sample of the passive role and conceptual – the symphony is not a literal, inescapable force.

Sunn O)))'s performance style of sonic domination and visual incapacitation proceeds further toward literal force exerted on their audience. Consent to the onslaught on the part of the listener remains operational, as she may exit the venue at any time, but Sunn O)))'s loudness actually blocks out other sound data. If you stomp your feet at the symphony, you and those near you will hear. At tonight's concert, the stomping of your own feet on the concrete floor registers only as the impact on your joints. Submission to this level of loudness is more radical than in the former instance, as it involves not only

⁹² Fred Everett Maus, "The Disciplined Subject of Music Analysis," in *Beyond Structural Listening?: Post-Modern Modes of Hearing*, ed. Andrew Dell'Antonio (Berkeley: University of California Press, 2004), 13-43. Masochistic submission to sound can also be explicitly sexual. Bruce Johnson and Martin Cloonan describe a London BDSM club in which women are allegedly brought to orgasm by being tied to a large speaker blasting a "magical" frequency of 33 Hz. See: Johnson and Cloonan, *Dark Side of the Tune*, 21-22.

⁹³ Maus, "The Disciplined Subject," 35.

giving in to norms of hierarchical concert behavior, but also temporarily giving up access to normal sensory perception, even regarding one's own body.⁹⁴

Furthermore, in creating a sensorally limited space, Sunn O)))'s sonic domination of their audience is more complex than the generation of a top/bottom relationship. By blotting out most sensory inputs beside their own sound, they generate an environment that is relatively free of distractions – the listener simply cannot pay attention to anything else. This is indeed a dominated space, but it is also a meditative one. In submitting to this sensory overtake, we are invited to free ourselves from thoughts of how and why and simply be with and in the sound. I recall how stressed and nearly ill I felt when the music first began. When my body stopped fighting the overload, however, and submitted, I discovered a state of freedom and relaxation so intense as to be soporific. In this environment, the listener must either fight or submit, and most seem to take the latter route, letting the sound fill their bodies and gently rock them to and fro. The band members' long, hooded robes lend a monastic air, marking a retreat from the (sonic) mundane.

6 September 2012, 10:40 pm

After about forty minutes, a third cloaked, hooded figure drifts through the fog to the as yet unused center microphone and begins to growl, slowly, deeply and indecipherably. As a new texture, still low and rough, but vibrantly human, enters the

⁹⁴ My experience of Sunn O)))'s performance echoes Salomé Voegelin's encounters with Merzbow, Otomo Yoshihide and other sound artists who use noise. Of noise, she writes that it "pulls listening down to [her] feet" and her discussion of Yoshihide in particular describes how the overwhelming sounds produced by the artist assault the entire body and require complete submission of the senses. Salomé Voegelin, *Listening to Noise and Silence: Towards a Philosophy of Sound Art* (New York: Continuum, 2010), 43, 48-50.

mixture, the volume of the guitars drops significantly, making the vocalist the centerpiece of the sound for his first several minutes on stage. Gradually, they bring the volume all the way back up to its previous brain-curdling level, and the voice weaves in and out of the pulsing roars of the guitars. At first, he restricts his vocals to a low spoken growl at the bottom of his range. As the minutes pass, however, he begins to explore more of his voice's possibilities. He growls, screams, speaks, shrieks and even sings. The shrieks in his upper range violate the low register of the performance, ringing out toward an external musical realm. Once, he sings at the bottom of his range, with just enough roughness that his vocal timbre blends with the guitar, making the two impossible to distinguish.

Half an hour later, the vocalist leaves the stage, and the concert enters its final third, refocusing on the sound of the guitars, a recapitulation of the concert's opening. Like other recapitulations, it is a return to a now-familiar place; though it does not literally repeat earlier music, the multitude of physical sensations I experience have all been felt before. The intensity has not lessened; in fact, listening has become downright exhausting – not only my ears, but my whole body is tired. It is a struggle to remain standing. The power of this music to make my body vibrate, with or without my consent, has begun to register as a kind of forced dance that I cannot escape, whether by plugging my ears or standing still. The feedback waves on and on, and my insides shudder like the fat strings on a bass.

Thirty minutes pass in this way, and finally, the guitarist raises his instrument by the body vertically above his head. Somewhere in the fog, the bassist slowly drifts into an octave with the guitar. As the loops of other feedback slowly fade away, the volume

increases, crossing the threshold of discomfort in my ears (despite earplugs). This last musical gesture lasts beyond my ability to remember when it began and then abruptly cuts off. The "silence" that follows is full of the sounds of the last 75 minutes; they extend control over the environment beyond the act of playing, as the ringing in my ears reminds me for the next several hours of where I have been. The musicians remove their hoods and step to the front of the stage, signaling that the ritual has come to an end. Thick, slow applause emerges from the crowd, as we rediscover our ability to make sound and not only to receive it. The band bows together, and they utter the only discernible words of the evening, a shout of "Thank you!" and exit the stage. The applause, now studded with a few shouts of approval and some "metal horns," gradually dies away. As we leave, many are silent. A few eagerly try to put into words what they felt. One man declares to his friend that his glasses had been vibrated off his face.

Conclusion

At the experiential level, Sunn O)))'s music explores the physical process of listening. From an analytic vantage, they critique conceptualizations of musical content and musical repetition. The sound objects that make up Sunn O)))'s musical content are not easily individuated. The timbral tapestry defies analysis in terms of pitch and duration, pointing the listener instead toward conceptions of transformation, textural variety and loudness. In particular, the recapitulation that made up the last third of the concert gestures toward a more generous notion of musical repetition. My perception of return in the final half hour of the concert was not based on any particular melodic, rhythmic, harmonic memory, but rather on remembered and resurrected sensations. My

body buzzed in the way it had before – the repetition was internalized in me, the listener. The piercing, shaking loudness is what I remembered and what I perceived as returning. Heavy, low sound at extreme volume was itself the recapitulating motive.

Sunn O)))'s concert featured no drum set, no display of virtuosity, no crowd surfing, no moshing, no stage banter littered with obscenities (in fact, the musicians never spoke to the audience at all, except after they finished playing). So many elements that seem to typify the live extreme metal experience were conspicuously absent, yet 75 minutes listening to Sunn O))) taught me more about metal than every other show I've attended put together. Sunn O))) is metal about metal. Many writers have noted the rich, metallic churning of the distorted electric guitars as essential to and even definitive of the extreme metal sound. Sunn O))) takes this definition literally, stripping away other musical elements and exploring every shade of sound this electronic buzzing has to offer. With them, extreme metal's rough, rebellious edge develops into a sonic monster, obviating drums and vocals; guitar and bass prove they are everything metal ever needs – they scream, wail, growl, rumble, batter, assault, roar and, occasionally, sing. They forge the raw materials that are metal and then use these materials to batter the audience with a heaviness that at a more typical concert would be felt only at brief intervals. A Sunn O))) concert is the most intense moment of a death metal concert, stretched out over an hour. Having taken a magnifying glass to sound itself, they similarly place one over heavy metal, revealing both what is heavy and what is metal.

The insistence on sub-bass frequencies forces the audience to feel with their entire bodies what is normally conceived of as acting only on the ears. Sunn O))) is coercive synesthesia, as low frequencies are magnified into physical entities. The main content of

a Sunn O))) concert is 120 dB of sound emerging from dense fog, and it seems that as "feeling the music" transforms from experiential metaphor into physical reality, the listener is drawn into a private, invisible dance of the being-vibrated-body, rather than to the public dance of moving to the music. In other words, this music dances you.

Music is sometimes uncomfortable. It helps us feel strange, difficult things. The physical experience induced by this concert taught me that my teeth rest in sockets that are ever so slightly hollow, and that hearing and touch can connect like smell and taste. It broke sound into many component parts, rumbling fundamentals and screeching overtones, and slowed down the changes of a sound over its lifespan so that I could hear them as individuals. This breakdown, however, was not a laboratory of observations, but a performance in which stretched, exposed and broken sounds were the music. Sunn O)))'s roaring, rumbling invasion of my body demonstrates how precious, multifaceted and delicate each sound is.

Chapter 2

"So Complete in Beautiful Deformity:" Hearing the Rhythms of Meshuggah's obZen

Anticipating the Attack

May 19, 2012

In a gutted art deco theater in Worcester, MA, metalheads from the entire New England region pack the room, crowding into the pit, shifting impatiently as roadies finish assembling Meshuggah's entirely wireless stage setup. The stage is unusually tidy – no mic stands, no cables, just the drumset, speaker cabinets, monitors, and racks of guitars to either side of the stage.

The venue's background music turns off and the house lights go down. A roar of anticipation rises from the crowd, as hundreds of metal horns gesture frantically toward the stage. I am standing about two-thirds of the way back, on the risers where the venue's stadium seating used to be. Below me, in the pit, something incredible is happening: the impatient jostling and shifting of the crowd has erupted into a full mosh pit – before the band has even come onto the stage. A physical anacrusis to an anticipated downbeat, the show has *begun before the beginning*; as the churning mass of listeners hurls itself in violent circles, willing the music to happen, I check that my earplugs are fully in place.

As if in response to the hundreds of screaming, moshing conductors, the band launches its attack: a sonic beating that will last an hour and a half, the stamina and relentlessness of which can only be described in terms of heavy machinery. They do not rile the audience, nor do they gesture or banter; they only assail the crowd with a continuous volley of sound. Each of the five musicians stakes out his spot on stage, and

roots himself there, a gear in a sonic war machine. The vocalist plants one foot on the monitor in front of him, opens his chest like an opera singer and roars into a wireless handheld mic. Veins stand out along his temples. His timbre is rough, yet incredibly even, a melody-denying pure percussiveness, each consonant precisely placed. Guitar and bass, often doubling each other at the octave, reverberate with their crisp, metallic chug, pummeling the audience with another layer of percussive blasts. Behind them, the drums battle on with impossible speed, every stroke clear and even. Together, these five humans create an inhuman sound, an assault on the ears that beats the body into motion – a headbanging, fist pumping, body-hurling search for an ever-shifting accent scheme. Grooves develop, only to be cut off and supplanted by new patterns. All throughout, the lightshow syncs with the music's rhythms, so that the patterns are driven directly into eyes, ears and bones. There is no letup, no slow song, no lyrical interlude, nothing remotely singable. They show no signs of exhaustion, even as the moshers drip with sweat and are driven to drink water rather than alcohol.

Above me, in the balcony seats, sit those who come not to mosh but to count. These students of polymeter decipher every pattern, listening for each stroke to be placed accurately. For them, Meshugghah's performance enacts a quieter, subtler battle of fine motor control and mental management of multiple metric layers. One of them alleged that the band made exactly one mistake that evening (in terms of deviating from the recorded track) – a single misplaced sixteenth note. While Meshuggah is hardly the only extreme metal band to write rhythmically complicated music – as the entire genre of so-called

⁹⁵ As is typical of extreme metal performance practice, their live performances tend to faithfully reproduce their recordings. Occasional discrepancies do emerge, however, and I discuss some of these later in the paper.

"math metal" demonstrates – their compositional style remains grounded in a sense of propulsion and groove that gives their music a visceral, bodily appeal that both draws listeners into the mosh pit and encourages them to listen closely and decipher the rhythmic patterns. This ability to create music that is both physically and analytically engaging has enabled Meshuggah to remain a standard of the death metal scene for nearly three decades, and has also brought them the (dubious, perhaps) honor of being the first extreme metal band to be taken under the wing of formal academic analysis.

Introduction: Polymeter, Groove and Repetition

Meshuggah is a death metal band from Sweden, named after the Yiddish word for "crazy" or "nonsense." They formed in 1987, released their first album in 1991, and in 2014 they completed a 25th anniversary world tour; they are by now a well-established element of the extreme metal world. Respected by metalheads for their commitment to virtuosic, aggressive playing, Meshuggah has also developed a following amongst listeners interested in rhythmic intricacy – including among people who may not be interested in metal more generally. They are respected across a wide swath of musical styles – I have heard them referenced by jazz musicians, classical musicians and music scholars as an example of creativity, technical excellence and masterful complexity in the music of today. 97

⁹⁶ The name of the band does not signal any particular connection to or reflection on Judaism or Jewishness. Jonathan Pieslak notes that the band claims they chose it because it "sounds cool." See Jonathan Pieslak, "Re-Casting Metal: Rhythm and Meter in the Music of Meshuggah," *Music Theory Spectrum*, 29/2 (2007): 219, n.1.

⁹⁷ Meshuggah have not been without their detractors. Criticism of their music has focused on the lack of melody and lack of textural variation, elements which fans often praise.

When listening, one notices that the sound lurches and rolls, grooves and hiccups, unpredictable yet paradoxically organized - a controlled tumult of drums, guitars and screams. Pitch content is often minimal, seemingly arbitrary and rarely melodic in any conventional sense. Jagged patterns emerge, stop short and begin again, continually interrupting the familiar and the predictable. Round pegs stuck into square holes, these riffs are simultaneously even and odd, regular and irregular. These feelings of simultaneous conflict and stability are wrought through the band's primary compositional technique of creating metrically even large-scale musical structures and filling them with local patterns in conflicting meters. Typically, Meshuggah builds songs in segments of eight, sixteen, or thirty-two measures of 4/4. I use "song segment" to refer to these larger time-spans by which Meshuggah organizes their music, as their songs tend not to have identifiable verses, choruses, etc., though most feature a guitar solo. Songs generally follow a pattern of sections without vocals alternating with sections with vocals. They do repeat riffs, but rarely in a consistently alternating pattern. Furthermore, a song could have a dozen different riffs, with one or two of them repeating at some point. In short, individual song segments do not typically inform listeners "where" in the song they are.

Within these song segments, riffs in other meters – such as 9/8, 7/4, 11/8, 7/16, etc. – play on loop, repeating as they fall in and out of phase with the 4/4 background structure. In many cases, the 4/4 meter remains explicitly articulated, often by means of a steady quarter note pulse in the cymbals, a backbeat on the snare, or by means of whole notes in the lead guitar marking the 4/4 downbeats. When the looping riff reaches the

They are also thought to have spawned the "djent" sub-genre, which takes Meshuggah's stylized, processed guitar tone (for which the sub-genre is onomatopoetically named) and incorporates it into more melodic styles of metal music, often with heavy use of electronics.

edge of the eight, sixteen, twenty-four or thirty-two measure song segment, it is typically cut off wherever it happens to be in its process – and a new riff is initiated. The combination of the simultaneous articulation of two meters, the lack of transition between riffs, and the looping of each riff results in rhythmic sensations of lurching, rolling and stopping short, yet with a lurking continuity as if some invisible ordering force were in control.

Amidst the deafening thunder of their music, the linguistic content of Meshuggah's lyrics blurs into the texture; only occasionally does one clearly pick out a word or phrase. These fiercely screamed words, however, offer oblique reflections on the musical structures they inhabit. Particularly, their frequent emphasis on de-tangling systems built on deception, and alternatively, on being trapped in or freeing oneself from these systems dovetails succinctly with the conflicting and overlapping rhythmic patterns that largely define Meshuggah's style. Like other death metal bands, Meshuggah's sound is loud, aggressive and abrasive, but their idiosyncratic brand of musical (and lyrical) attention to complex and deceptive, yet well-ordered systems reveals a unique compositional practice.

As a brief methodological aside: despite the clarity that their definitions offer, I am hesitant to designate Meshuggah's style as "polymetric" or "polyrhythmic" in any kind of strict fashion. Whether the music is heard as multi-metered or as some kind of "weird 4/4" depends on the listener (and the song), and I am attentive to and interested in

⁹⁸ In their 2012 album *Koloss*, the band begins to weaken the edges of this 4/4 based hyperstructure, allowing riffs to spill over the edges of their song segments, and playing with the looping of riffs within each song segment – modifying them to create subtle motivic variations. See, in particular, the songs "Do Not Look Down," "Break Those Bones Whose Sinews Gave It Motion," and "Swarm."

both of these ways of listening. To my mind, there really are (at least) two ways of "getting" this music. Someone who is following the 4/4 in all its weirdness is enjoying it differently, but no less fully, than a listener who parses the music as polymetric.

Meshuggah's fast, percussive riffing enacts a stylistic norm of their genre, but their polymetric rhythmic schemes made them pioneers, and attracted the attention of music theorist Jonathan Pieslak. In 2007, Pieslak's article "Re-Casting Metal: Rhythm and Meter in the Music of Meshuggah," appeared in *Music Theory Spectrum*. The first part of his article summarizes the band's rhythmic style from their founding in 1987, through the release of the album *Nothing* in 2002, commenting in particular on large-scale odd time signatures, rhythmic super-imposition and mixed meter. In the second part of the article, Pieslak explores the band's 2004 EP *I*, in which the rhythmic and pitch patterns are long enough to thwart assignment of any local meter, despite a nevertheless clear hypermetrical phrase rhythm. This study was the first to introduce extreme metal to rigorous formal analysis, thereby anointing it a complex music worthy of theoretical attention, and giving institutional support to the interests of the "nerds" who attend Meshuggah concerts.

The need for visual representation in formal analysis typically means that the music must be notated prior to study. In the case of Meshuggah's music, due to the band's repeated insistence that their music is in 4/4 and the fact that transcription in 4/4 does generally best show the music's larger organization, their music has been primarily analyzed as a series of local destabilizations of a rigid 4/4 hypermeter. 99 I seek out

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⁹⁹ Other studies of rhythm in the music of Meshuggah include: Matthiew Metzger, Meshuggah: Une formation de Métal atypique: Esthétique et technique de composition, (Masters Thesis, Universités de Poitiers, 2003); Eric Smialek, Rethinking Metal

moments where this interpretation becomes problematic, as the notation begins to suggest patterns of rhythmic organization that do not necessarily pan out aurally. In concentrating on understanding rhythmic events as they unfold in Meshuggah's music, I take on Christopher Hasty's exhortation that theorists deal with "real potentiality, indeterminacy, and novelty," in the process of untangling the temporality of musical events.

Nevertheless, the drive to transcribe their music is understandable, as the availability of notated scores assists performers who wish to learn their music themselves, and provides a resource that greatly speeds the process of gathering analytical data. Recently, music theorist and composer Derek Johnson has been collaborating with the band on a forthcoming book of transcriptions of their songs, in addition to an interactive app meant to help musicians learn the music. Where Pieslak's transcriptions are minimalistic, and geared toward representing his rhythmic arguments, Johnson's transcriptions are magnificently detailed, capturing every bend and slide in the guitars, exhaustively mapping the expansive drum kit and laying out their ever-shifting rhythmic patterns against the grid of 4/4 time. Example 2.1 shows two systems from Johnson's transcription of "Bleed," from 2008's album *obZen*:

Aesthetics: Complexity, Authenticity, and Audience in Meshuggah's I and Catch Thirtythr33, (Masters Thesis, McGill University, 2008); and Charley Rose, The Meshuggah Quartet: Applying Meshuggah's Composition Techniques to a Quartet, (Masters Thesis, Conservatorium van Amsterdam, 2013). Guy Capuzzo further presented a paper at SMT 2014 titled: "A Beat-Class Approach to Polyrhythm in the Music of Meshuggah."

¹⁰⁰ Christopher Hasty, *Meter as Rhythm* (New York: Oxford University Press), ix.



Example 2.1. "Bleed," m. 50-53, 1:41-1:49. Transcribed and engraved by Derek Johnson. (Notated one half-step above sounding pitch.)

Such a transcription offers nearly as detailed an account of what is heard on the album as is possible with conventional notation. Each palm mute is marked, and accent marks are painstakingly placed in the guitar and drums parts. Even changes in dynamics appear, an unexpected sight in a genre mainly thought of as "loud." Perhaps the only missing element is the indication of the vocalist's slight changes in pitch as he screams – possibly an indication that such information is not considered essential to the identity of

the song.¹⁰¹ The level of detail provided by this transcription offers an immense practical resource for musicians wishing to learn to play Meshuggah's music, as well as a wealth of data that could be applicable for analytical study.

Johnson's transcription, in all its magnificent detail, also effectively communicates musical complexity – having, to quote the Emperor Joseph II in the film *Amadeus*, "too many notes" for the eye to take in at a glance, along with heaps of performance instructions. This kind of transcription feeds into the idea that this music is staggeringly complex, and this method of notating it elevates its status by placing it into the notational language of Euroclassical art music. In doing so, it also capitalizes on and provides documentation for the band's own claims about their music.

The band members themselves have a history of insisting that their music is entirely in 4/4, and they have been reluctant to discuss the use of rhythm and meter in their music in any great detail. When asked, they tend to state simply that everything is conceived in 4/4, and that is how they hear and count it:

Analyses of Meshuggah's music, including my own, tend to focus on instrumental passages to the exclusion of the vocals. In my opinion, this is primarily because the rhythmic activity in the guitars and drums is already quite complex, and as the vocals tend to work independently of these rhythmic patterns, rather than being integrated into them, analysts may feel that including the vocals might become confusing or distracting. Furthermore, vocals in extreme metal, despite their distinctively harsh sound, are not the central instrument they are in other popular music styles, and may even be considered less important than the guitars and drums. In the case of Meshuggah's music, I believe inclusion of the vocals in analysis and discussion of how they relate rhythmically to the other instruments would be productive avenues for further study. In this song, for instance, the vocals remain well within the confines of 4/4 with typical rock-style vocal syncopations, strengthening the sense of 4/4 meter when they are present. Later in this chapter, I initiate a discussion of the relationship between text and music in Meshuggah's work.

¹⁰² Of the five current members, only the bassist (Dick Lövgren) is formally trained in music. Lövgren studied jazz at the Gothenburg Music University.

They are not in odd times...It's not a big deal to us. It's not a matter of us wanting the listener to hear the music the way we do it. This whole album is straight 4/4 all through.

You have of course a cycle that's repeating. For example, a pattern of snare and kick could be nine hits over an 8/8 bar, and that nine-beat cycle keeps repeating while my cymbal/hi-hat hand and the snare play a straight beat as well. So the context of the song is 4/4, but if you wanted to you could say this measure is 13/16 or something, but we really don't think about it like that.¹⁰³

The idea of considering each bar a "different movement" sounds like a difficult way to play, especially given the typically high bpm rates of their music (J = 100 or more), but it could be possible. (In a 2012 interview, Haake says they learn the music in "chunks" of four, eight or sixteen measures, which sounds more practical. The band's rhythm guitarist, Mårten Hagström, however, has also mentioned the importance of groove to their style of playing:

We've always been about the groove...Granted, we have a pretty twisted way of approaching how we groove...Sometimes people think we set out to create these crazy patterns and then make them work. That's not how it works, because most of the time it sounds like shit with that approach. You just have to find the groove and then work with the weird stuff until it makes sense. 105

And:

I mean, the effect it [Meshuggah's music] has on people may be that of a mathematical equation, but where it comes from on a writing standpoint it's more

¹⁰³ David Weiss, "Tomas Haake: Meshuggah Goes It Alone," *Drum!* Magazine, May 20, 2010, accessed March 10, 2016. http://www.drummagazine.com/features/post/tomas-haake-meshuggah-goes-it-alone/.

¹⁰⁴ Interview with drummer Tomas Haake and vocalist Jens Kidman. 2012. https://www.youtube.com/watch?v=Ry1Mm1q_FBg.

¹⁰⁵ Brad Angle, "Interview: Meshuggah Discuss Their New Album, *Koloss*," *Guitar World*, January 4, 2013, accessed April 1, 2015, http://goo.gl/Oud1CJ.

like funk, you know, we're trying to create a groove but from a different point of view than your usual metal song.¹⁰⁶

Focusing on groove takes some of the emphasis off of abstraction and complexity, and instead underlines the role of intuition and "feeling" in their music. "Groove" is, of course, a notoriously slippery musical concept, and one that has primarily been studied in the context of jazz improvisation. As Ingrid Monson writes, groove "simultaneously refers to interdependent musical structures [the musical parts that make up an ensemble] and an aesthetic ideal larger than any one individual, [the feeling of togetherness that "being in the groove" engenders]." Her ethnography of jazz musicians also reveals that the word groove can be used either as a noun or verb, and that for many it has a sense of inevitability – it's what happens when the musicians no longer have to "try," but can simply play in the moment. Lawrence Zbikowski furthermore finds that groove is a kind of embodied musical knowledge, associating physical movement with the finding of the groove. In the context of the Meshuggah concert I attended, both the moshers and the "nerds" in the balcony were searching for the groove in their own way – one emphasizing the physical aspects of participation, and the other, the mental.

The band's tendency to downplay the complexity of their music not only performs a nonchalant, rock-is-from-the-heart attitude, and reassures fans that they need not be

¹⁰⁶ "Meshuggah Guitarist on Songwriting Process, 'Math Metal' Tag," *Blabbermouth*. October 4, 2008, accessed April 1, 2015, http://www.blabbermouth.net/news/meshuggahguitarist-on-songwriting-process-math-metal-tag/.

¹⁰⁷ Ingrid Monson, *Saying Something: Jazz Improvisation and Interaction* (Chicago: University of Chicago Press, 1996), 93.

¹⁰⁸ *Ibid.*, 67-68.

¹⁰⁹ Lawrence M. Zbikowski, "Modelling the Groove: Conceptual Structure and Popular Music," *Journal of the Royal Music Association* 129/2 (2004): 272-297.

theory experts to enjoy the music, but also reminds us of the role of rhythmic instinct as embodied group knowledge in their compositional style. That they are admired by both those who wish to count each rhythmic stream as it goes by as well as by those who would prefer to slam their bodies against one another gives credence to both perspectives. In this chapter, I strive to incorporate elements of both worlds – the vigorous energy of the listening experience and the elegance of abstraction – into my analyses of Meshuggah's rhythmic designs.

A Composite Approach

Due to the relative paucity of pre-existing theoretical frameworks designed for the analysis of extreme metal music, I draw freely from a variety of sources, many originally designed for approaching music of the Euroclassical tradition. Music theory was chiefly developed for examining the music of common practice tonality, and unless these methods are tried out on other repertoires, the tendency for classical music to be subject to formal analysis while the vast array of the world's "other" music is subject to primarily socio-cultural analysis will be reinforced. This exclusion of non-classical music from formalist discourse (while classical music, meanwhile, receives the attentions of formal, historical *and* socio-cultural study) has been extensively critiqued by Martin Scherzinger. In his essay, Scherzinger criticizes anti-formalist tendencies in ethnomusicological approaches to African music, but I apply his argument to theoretical approaches to non-classical music more generally:

¹¹⁰ Martin, Scherzinger, "Negotiating the Music-Theory/African-Music Nexus: A Political Critique of Ethnomusicological Anti-Formalism and a Strategic Analysis of the Harmonic Patterning of the Shona Mbira Song Nyamaropa," *Perspectives of New Music* 39/1 (Winter, 2001): 12, 26.

But if it is true...that analytic formalism is an ideological trick designed to support a specific repertoire of music and to construct and uphold a purported continuity in a certain Western tradition, then why, in the wake of this exposure, do we choose to turn away from formal analysis instead of deploying it to strategically reconstellate culture?¹¹¹

In other words, Scherzinger is arguing that use of formal analytical tools on repertoires for which they were not originally intended has the potential to gradually chip away at the hegemony of particular kinds of music in theoretical discourse. In the process of musical analysis, particularly analysis of musics outside the Euroclassical tradition, it is important to remember, as Vijay Iyer asserts, that music theory is not "neutral," but "heavily inflected by its own cultural assumptions." Given the field's historical focus and cultural habitus, these assumptions privilege certain musical structures and patterns, and view other kinds of musical expression as contrasting with or deviating from those patterns. As Iyer's critique of Mark Butler's analysis of Electronic Dance Music (EDM) suggests, the tools and lenses of musical analysis too easily seem to proceed from classical music and its expectations. In particular, and as is relevant to Butler's work and mine, the analysis of rhythm and meter proceeds from an assumption of a hierarchy of

¹¹¹ *Ibid.*. 26.

Scherzinger's comments are problematic from an ethnomusicological perspective; his approach runs the risk of imposing hegemonic discourses and perspectives onto music cultures to which they do no apply and that have been historically marginalized. Ethnomusicologists such as Steven Friedson have argued that their ethnographic methods do not essentialize Africa, as Scherzinger suggests, but are "rather an acknowledgement of the reality of a different way of being-in-the-world." See: Steven Friedson, *Remains of Ritual: Northern Gods in a Southern Land* (Chicago: University of Chicago Press, 2009), 11. As Meshuggah's music, however, is a product of European-American popular music culture, rather than any of Africa's many distinct music cultures, I sidestep these ethnographic quagmires.

¹¹³ Vijay Iyer, Review of *Unlocking the Groove: Rhythm, Meter, and Musical Design in Electronic Dance Music*, by Mark Butler. *Journal of the Society for American Music* 2/2 (2008): 276.

strong and weak beats and overall rhythmic symmetry. ¹¹⁴ From the perspective of this rhythmic culture, off-beat rhythms are deviations, and polyrhythms are almost mystically complex. If, however, as Iyer's critique continues, musical contexts – such as American popular musics, or African music – that assume a "sustained, composite polyrhythmic framework that privileges specific kinds of asymmetry" can become the ground of the analytic imagination, the music in question becomes less surprising and more approachable. ¹¹⁵ As I move forward with analyzing Meshuggah's music, I'd like to heed Iyer's and Scherzinger's shared advice that the basis of musical analysis be questioned, and that rhythmic asymmetry and polyrhythm be treated like musical phenomena rather than mystical and "Other" complexities – deviations from a presupposed norm. ¹¹⁶

As Iyer's critique of Butler's analytical work demonstrates, every transcription is already a form of analysis; it is never neutral or unbiased.¹¹⁷ The tendency to transcribe Meshuggah in 4/4 reveals biases in favor of regularity and symmetry – the large-scale regularity of their music is favored over local polymeter. Furthermore, the band's own insistence that the music is in 4/4 seems to privilege this particular reading of their music.

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¹¹⁴ *Ibid*., 274.

¹¹⁵ *Ibid.*, 274. Also keep in mind the hundreds of moshers, who may or may not have any particular theoretical training in rhythm, who are intensely, physically engaged by this music.

¹¹⁶ At the same time, I am sympathetic to Butler's use of familiar analytical tools, not least because of Scherzinger's suggestion that they may be deployed to help "reconstellate culture."

¹¹⁷ Of course, debates over the purposes and methods of transcription have long been central to ethnomusicological discourse. See, for example: Charles Seeger, "Prescriptive and Descriptive Music-Writing," *The Musical Quarterly* 44/2 (1958): 184-195. These issues have become increasingly important for music theory, as popular and other non-notated musics receive more frequent analytical attention.

On the one hand, the band insists on a consistent 4/4 meter for all of their songs, simultaneously indicating simplicity and complexity in their music's approach to rhythm. As the default meter for much of Western music, 4/4 represents the normal and familiar. The fact that they must defend their claim of using this meter – meaning that some listeners struggle to find 4/4 in their music – tells us that their use of it is somehow atypical. They promise rhythmic complexity in the guise of 4/4 as you've never heard it before – complicated and made strange. Knowing that the music is *somehow* in 4/4 drives some listeners to spend hours untangling a song to see how it fits that framework. On the other hand, the band also insists on the role of groove and instinct in their music – elements that emphasize embodied knowledge and close listening, regardless of the interpretational frame. I choose to look beyond the band's interpretation of their use of rhythm, examining how riffs hang together and create rhythmic propulsion. There is no reason the analyst should feel bound to Meshuggah's hearing of their own music; instead, I choose to "proliferate specific possibilities about what the music *could be* [rather] than to foreclose its complexity by asserting what it is in general terms." ¹¹⁸ For some, these possibilities could be an exploration of what makes the music pleasurable to mosh to; for others, they could be more formalistic explorations of the sounds themselves and their organization.

¹¹⁸ Scherzinger, "Negotiating the Music Theory/African Music Nexus," 25.

Shaping Riffs: Accent and Attack Patterns

Rhythmic groupings in Meshuggah's music arise primarily through attack patterns and their accompanying accents. The tendency toward crisp timbres and clear attacks across all instruments, along with the limited, non-melodic use of pitch gives the music a percussive quality. Dynamic accents, slides and bends are used to further shape rhythmic gestures. Meshuggah often shapes riffs by means of durational accents, with a long duration delimiting the end of a riff. Contour and registral accents (pitches that stand out because they are higher or lower than the surrounding ones) often help shape the riff's perceived attack points into a clear rhythmic gesture, sometimes in conjunction with dynamic accents.

The musical devices Meshuggah uses to shape their riffs are not unique in and of themselves; what is interesting from an analytic standpoint is the use of these devices to bring about temporal re-organization. In some cases, Meshuggah uses accents and attack patterns to suggest that what is temporally the locational beginning of a riff may not be its functional beginning. In other words, in the process of listening to a song segment, the sense of where the repeating riff begins and ends changes, resulting in a retroactive sense

¹¹⁹ There are some resonances between my analysis of rhythmic grouping in Meshuggah's riffs and Simha Arom's delineation of segmentation in music of Central Africa. See: Simha Arom, *African Polyphony and Polyrhythm: Musical Structure and Methodology*, trans. Martin Thom, Barbara Tuckett and Raymond Boyd (New York: Cambridge University Press, 1991), 233-248.

¹²⁰ Some songs having at least one riff in which "ending" is indicated by a durational accent include: "Stengah" (*Nothing* 2002); "Electric Red," "Lethargica," "Pineal Gland Optics," "Pravus" (*obZen* 2008); "Marrow" (*Koloss* 2012).

¹²¹ Some songs having at least one riff shaped primarily by contour or registral accents include: "Bleed," "Pravus," (*obZen* 2008); "The Demon's Name is Surveillance," "Swarm" (*Koloss* 2012).

that the riff "began in the middle." This chapter examines a few of these moments, combining attack-point analysis with comparison between the rhythmic data provided by spectrogram analysis and data provided by conventional transcription, to examine how attack-points and accents re-shape the sense of a riff's beginning and ending points.¹²²

In the analyses that follow, I make use of both conventional transcriptions and spectrogram analysis, with an eye (and ear) toward questioning what each can and cannot tell us about musical events. As my analyses are heavily focused on the emergence of rhythmic groupings and the repetition of these groups, I find that the barlines of the transcription sometimes pose a distraction to understanding how a riff works over the course of a song segment. That said, as a representation of musical events, a spectrogram is not necessarily any more "neutral" than a score; spectrograms come with their own set of challenges and biases. Nevertheless, they open up a revealing perspective on rhythmic structures, particularly with regard to visualizing event onsets.

Spectrogram analysis affords the ability to visualize grouping structures without mapping them onto a meter. Meshuggah's tone is crisp, and on a spectrogram, the kick drum generates particularly distinct attacks, with the guitars often showing clearly as well. This form of visual data assists in identifying rhythmically orienting moments, showing alignment and divergence without the hierarchy of a metered grid. Spectrograms are frequently referenced in timbral and micro-timing studies, which tend to require a reader to achieve a certain degree of facility with examining spectrograms. The kind of

There are some resonances between Martin Scherzinger's study of meter formation in *mbira* music and my study of Meshuggah's riff structure here. See: Martin Scherzinger, "Temporal Geometries of an African Music: A Preliminary Sketch," *Music Theory Online* 16/4 (2010), accessed April 13, 2015, http://www.mtosmt.org/issues/mto.10.16.4/mto.10.16.4.scherzinger.html.

rhythmic analysis presented here, however, relies on readily apparent groupings – clusters and gaps of visual material – that indicate rhythmic patterns, and do not require specialized knowledge of spectral analysis.

Beginning in the Middle: The Temporality of Rhythmic Re-orientation

My analyses of these riffs that seem to "begin in the middle" are grounded in Christopher Hasty's theory of meter as "projective process," which emphasizes the importance of heard internal relationships between durations that unfold and develop while listening. 123 For Hasty, the perception of metrical rhythms in music is based on the experience and projection of durational spans as they form into patterns of strong and weak beats. A weak, or unaccented beat is the result of a prolongation of the mensural potential of an earlier beginning: "if the earlier beginning is still 'present' and active – this new beginning will be unaccented and 'not-beginning' in relation to the larger event that has already begun and continues to be in the process of becoming." The emergence of a sense of strong and weak occurs not only on a note-by-note level, but also at the level of groups of notes, phrases and even in the context of the entire piece. The durational relationships that emerge and form these hierarchies are malleable and subject to change as later events continue to influence their perception. My analysis of these riffs rests primarily at the level of "groups of notes," examining how they hang together to

¹²³ Hasty, *Meter as Rhythm*, ix-x.

¹²⁴ *Ibid.*, 104.

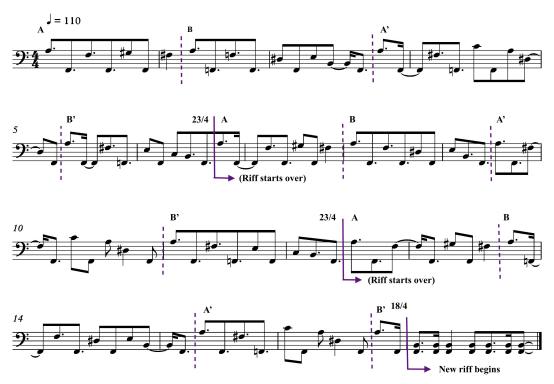
¹²⁵ *Ibid.*, 114-115.

create a clear rhythmic profile with a distinct beginning, middle and ending. ¹²⁶ While I do not follow Hasty's method of analysis exactly, I do strive to use a style of moment-by-moment analysis derived from his approach to metrical forming that allows for documentation of how a "beginning" could become a "middle." This style of analysis relies on rhythmic intuition that is emergent in listening; the importance of close listening for understanding these analyses cannot be overstated.

While notating Meshuggah's music in 4/4 elegantly visualizes their use of conflicting metrical schema, it sometimes obscures the subtlety of the rhythmic patterns

¹²⁶ Though my analyses focus on the formation and communication of "beginningness," "middleness," and "endness," I wish to distinguish my approach from semiotic and Formenlehre approaches that have focused on this process of signification in the context of tonal music. Most notably, William Caplin's notion of formal functions and semiotic studies of tonal music (e.g. those of Kofi Agawu and David Lidov) have both concerned themselves with how different kinds of musical patterns communicate "beginningness," "middleness" or "endness," to the extent that acculturated listeners can arrive late to the symphony and reliably tell where in the movement they are, based solely on the sounds they hear. The establishment of such strong semiotic norms meant that composers such as Haydn could "joke" with audiences, for instance by beginning with a cadential gesture that strongly evoked "ending." (See: Janet Levy, "Gesture, Form and Syntax in Haydn's Music." in Haydn Studies: Proceedings of the International Haydn Conference, ed. Jens Peter Larsen, Howard Serwer and James Webster (New York: W. W. Norton and Company, 1981), 355-363.) Euroclassical music is unique in its development of strong conventions for indicating beginnings, middles and endings, to the point where listeners have forgotten that there is nothing intrinsic to the sound of a cadence that necessarily says "ending." (On formal functions, see: William E. Caplin, Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart and Beethoven (New York: Oxford University Press, 1998.); William E. Caplin, James Hepokoski and James Webster, Musical Form, Forms and Formenlehre: Three Methodological Reflections, ed. Pieter Bergé (Leuven: Leuven University Press, 2009). On semiotics of tonal music, see, for example: Kofi V. Agawu, Playing with Signs: A Semiotic Interpretation of Classical Music (Princeton: Princeton University Press, 1991.); David Lidov, Is Language a Music? Writings on Musical Form and Signification (Bloomington: Indiana University Press, 2005.) While my analyses do investigate the formation of beginnings, middles and endings in Meshuggah's music, they occur outside of tonality's cultural frame; Meshuggah's music enacts neither local nor large-scale tonal processes. As there are no background tonal processes, the analyses remain local and tied to the musical gesture in progress.

that emerge while listening, oversimplifying the intricate yet instinctive organization of what is heard. These instances in which riffs seem to begin in the middle upend their typical compositional paradigm. Generally, the grouping formed by the riff's initial presentation forms in a manner in which the temporal order of events aligns with the rhythmic expectations set up by the grouping. A clear example of this alignment can be found in the opening of the song "Lethargica," from *obZen* (2008). The guitar riff for mm. 1-17 is shown in Example 2.2.



Example 2.2. "Lethargica" opening guitar riff, mm. 1-17, 00:00-00:38. 127

Unless otherwise specified, guitar transcriptions represent both the rhythm and bass guitar, which typically play in unison one octave apart. Meshuggah uses down-tuned eight-string guitars (most common tuning: F, Bb, Eb, Ab, Db, Gb, Bb, Eb), and five-string basses (most common tuning: Bb, F, Bb, Eb, Ab). All transcriptions are at sounding pitch. All transcriptions are mine unless otherwise noted. I generally omit ornaments and articulation marks (slides, bends, palm muting, etc.) to prevent clutter; these transcriptions are meant as a visual aid to understanding certain rhythmic processes,

As Example 2.2 shows, the opening riff of this song has a total length of 23/4, which can be broken into four shorter segments of 5/4, 6/4, 6/4 and 6/4, respectively. I find that the groupings that comprise this riff are particularly intuitive, with pairs of segments relating to each other in a "question and answer" manner reminiscent of antecedent and consequent phrases in a period; the sub-segments of the riff follow a roughly *ABA'B'* pattern. Because the groupings are so coherent, a strong sense of rhythmic expectation develops as the riff loops over the sixteen-measure song segment.

Within the sixteen-measure song segment, the full 23/4 of the riff will repeat two full times, and continue through 18 beats of a third repetition before hitting the boundary of the song segment; at m. 17, the vocals enter, and the guitars change from the opening riff to a chugging tritone power chord pattern. When the riff reaches the end of m. 16, it is just beginning the fourth segment of the 23-beat riff (B'); this abruptly becomes the power-chord pattern of the next song segment at the downbeat of m. 17. This cutting off of a riff in progress, unexpectedly halting its momentum and transferring it to the next pattern is what generates the typical lurching sensation that accompanies listening to a Meshuggah song – a carefully calculated buildup and denial of rhythmic expectation. The location of the 23/4 pattern's beginning is clear; its temporal placement aligns with its rhythmic momentum.

My analyses in this chapter examine three instances of riffs in which the temporal beginning is not aligned with the rhythmic gesture of "beginning." I designate what is

rather than as a set of instructions that would allow a player to faithfully imitate every aspect of the recording (i.e., they are descriptive, rather than prescriptive).

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heard first as the riff's "temporal beginning," and what *sounds like* the beginning of the riff as the "rhythmic beginning." For example, one might imagine rotating the "Lethargica" riff so that it began (temporally) on the riff's high C (beat 15). In the case of this riff, the rhythmic momentum and character of the sub-components are such that they would eventually re-align mentally with the original presentation. In other words, the riff would have begun in the middle; its rhythmic beginning would have come after its temporal beginning. The listener's formation of a concept of the riff as a unit with a clear beginning and ending would have evolved in the process of listening. The riffs I examine here exhibit temporal beginnings that do not align with the rhythmic beginnings that emerge and cohere the riff into a single unit over the course of the song segment.

These song segments and their rotated riffs provide the listener with novel and distinctive challenges. The process of having to mentally re-orient the riff while also untangling its meter demonstrates a further complication of an already intricate compositional process, and weakens the instinct for where song segment boundaries should fall. I examine the factors that help to create these distinctively knotty riffs, how they evolve over the course of their song segment, and what effect they have on the ending of their song segment and the movement into the next one. There is no uniform way in which Meshuggah creates "beginningness" in their music, but their inclination toward groove makes interpretation of rhythmic grouping relatively instinctive, even in the case of unusual meters. All examples are from the 2008 album *obZen*.

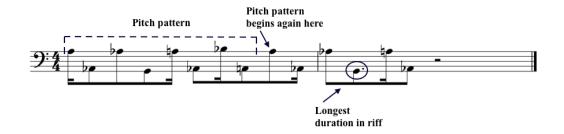
"Pineal Gland Optics"

The opening segment of "Pineal Gland Optics" showcases this process of beginning in the middle, and how notation can obscure rhythmically significant moments. The song's title refers to the pineal gland, a small endocrine gland shaped like a pinecone found in the brains of vertebrates. It produces melatonin, and was viewed by Descartes as "the principal seat of the soul," and today remains connected to the theosophic concept of the third eye. It is primarily to this latter understanding that Meshuggah refers in the lyrics to this song, which are concerned with mystical visions of a deeper reality; I consider these lyrics later. Below, I examine the opening guitar riff, which, in combination with the patterns of the drums and lead guitar, provides a nuanced example of riff that seems to "begin in the middle." Examples 2.3 and 2.4 show the rhythm guitar riff that is repeated throughout the first forty seconds of the track.



Example 2.3. Opening riff of "Pineal Gland Optics," notated in 6/4.

¹²⁸ Gert-Jan Lokhorst, "Descartes and the Pineal Gland," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, (Stanford: Stanford University, 2015), accessed January 2, 2016, http://plato.stanford.edu/archives/fall2015/entries/pineal-gland/.



Example 2.4: Opening riff of "Pineal Gland Optics," notated in 4/4.

This riff in 6/4 as shown in Example 2.3 forms one stream of the song's polymeter. The pitch pattern, a half-step oscillation around A in the upper voice and A in the lower voice, is only eight attacks long, and the resulting isorhythm substantially weakens associations between pitch and duration. Most of the durations in the riff are eighth and sixteenth notes, with one dotted eighth near the end of the riff, a moment in the riff that strongly influences aural interpretation. While the pitches form a half-step oscillating pattern, the durations do not immediately cohere into an audible pattern, creating an erratic, jagged pattern of upward and downward leaps that only gradually becomes familiar.¹²⁹

The perception of a 6/4 meter in the case of this riff derives primarily from the sense of the entire rhythmic pattern repeating. Otherwise, the "sixness" of the riff is considerably obscured by the uneven pattern of sixteenths and eighths, as well as by the isorhythm. Note that even the metrically important duple division of the bar after the third beat is obscured by the $A^{\frac{1}{4}}$ held over the half-bar. In other words, the expected metrical accents of a 6/4 measure are not heard. Given the otherwise unstable

10

¹²⁹ I imagine that for someone learning to play this riff, developing some sense of an attack point pattern would be useful. Here, counting sixteenth notes, the attacks could be grouped 122, 212, 122, 123, 12.

configuration of this riff, the dotted eighth near the end of the riff, as the longest duration in the rhythmic pattern, comes to have an important role in shaping the riff's perceived orientation.

Example 2.4 shows the riff as it would be notated in the song segment's broader context. Though the riff itself expresses a local meter of 6/4, once the other rhythmic cycles are taken into consideration, a meter of 4/4 better expresses the organization of larger spans of time. (Notation in 4/4 also avoids having a note tied over the half-bar, making for easier reading.) This broader context is depicted in Example 2.5, which shows the first sixteen measures of "Pineal Gland Optics," marking important moments discussed below. (This clip can be heard here:

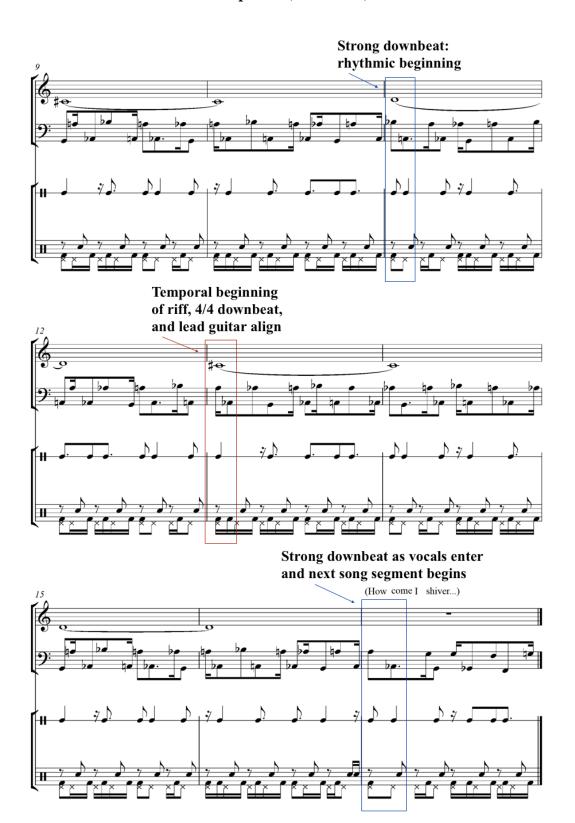
https://drive.google.com/open?id=0B8p_kK9owPgHZHNaUy1zNjJvSHc)

Example 2.5 "Pineal Gland Optics," mm. 1-17, 00:00-00:42. Note: Haake uses multiple cymbals, but for the sake of simplicity, throughout this chapter I transcribe them as a single instrument. In general, in transcribing percussion parts, I strive to minimize the use of rests in the service of visual simplicity, even when the sound notated is an attack followed by rapid decay.

Example 2.5



Example 2.5 (Continued)

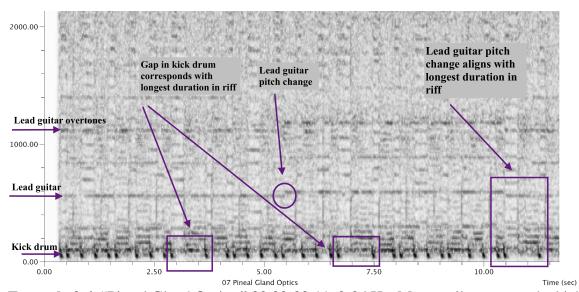


The riff shown in Examples 2.3 and 2.4 receives rhythmic support from the bass drum, as shown in Example 2.5; the drum does not sound with every guitar attack, but never contradicts the guitar pattern. The hi-hat foot pedal fills in the drums largely at the sixteenth note level. The snare drum strikes the second half of every beat (arguably articulating 4/4). Above these cyclic patterns hangs a solitary tone in the lead guitar, registrally separated from the rest of the music and slowly oscillating between C# and D every eight beats (or two measures of 4/4). Cymbal strikes reinforce the temporal beginning of the riff only when it aligns with a change of pitch in the lead guitar (see mm. 1, 7 and 13); otherwise, the temporal beginning of the riff aligns with a sixteenth rest in the cymbal (see mm. 2, 4, 5, 8, 10, 11, 14 and 16). The cymbals always sound in support of the Π . figure that appears on beat five of the riff, appearing for the first time at the downbeat of m. 2. With the exception of sounding/not sounding based on the context of the riff's temporal beginning, the cymbals play a consistently repeating pattern, like the other instruments. This slight variability in the pattern, however, is unusual for Meshuggah's music, which usually consists of strictly repeating patterns, making it initially more difficult for the ear to decipher. This context-dependent alteration in the cymbal pattern results in a flexible, spontaneous feel that sounds sensitive to the clarification of rhythmic definition in the guitar parts.

The red boxes in Example 2.5 show moments of alignment suggested by a transcription in 4/4 – moments when the temporal beginning of the riff aligns with the change of pitch in the lead guitar, which necessarily means that it also aligns with the downbeat of a 4/4 measure. From an abstract, notation-oriented perspective, these moments (mm. 7 and 13) mark the point when the competing cycles converge for an

instant before continuing on their paths. Typically, the convergence of the rhythmic cycles gives the listener a feeling of being back at the beginning – a brief flash of rhythmic stability. In this case, however, the weaknesses of the various patterns result in a feeling of rhythmic instability, and point to other moments in the passage as rhythmic signposts.

Considering this passage from a more aurally focused perspective, while looking at the passage through the eyes of a spectrogram, suggests evidence for alternative rhythmic groupings, based on the blue boxes in Example 2.5. Example 2.6 shows a spectrogram of the first eleven seconds of the song.

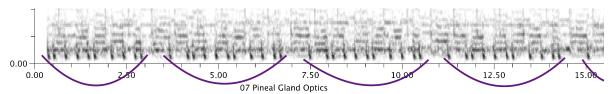


Example 2.6. "Pineal Gland Optics," 00:00-00:11, 0-2 kHz. Most easily seen are the kick drum hits and lead guitar fundamentals and overtones. (All spectrograms created with LARA – Lucerne Audio Recording Analyzer)

The most salient aspects of this excerpt are the lead guitar's oscillation, due to its slow speed and relatively high register, and the kick drum's support of the rhythm/bass guitars' isorhythmic riff. These elements make clear marks on the spectrogram – long

horizontal lines in the case of the lead guitar, and short, vertical ticks in the case of the kick drum. The high-register lead guitar oscillation between C# and D\$\bar{\pmath}\$ every eight beats provides the contrasting 4/4 architecture that slips in and out of phase with the other patterns. While many of Meshuggah's songs use a similar oscillating pattern as a metric anchor, the relatively slow pulse of "Pineal Gland Optics" means that the duration of the eight-beat span between each attack is uncomfortably long for use as a rhythmic reckoning tool. Nevertheless, each pitch change initiates a strong sense of downbeat which tends to conflict with the pulse organization generated by the other layers of activity. These changes of pitch show up distinctly, with clean cutoffs and onsets in the spectrogram.

Zooming in along the bottom of the spectrogram to look at the black marks of the kick drum hits, visual grouping begins to emerge more clearly (Example 2.7).



Example 2.7. Groupings of kick drum hits, "Pineal Gland Optics," 0-15s.

The gaps between these groups of kick drum hits show a gap between onsets that is longer than any gap within the groups. Comparing this image with the transcription, these large gaps correspond to the \square figure in the guitars near the end of the 6/4 pattern. As the dotted eighth is the longest duration in the riff, this moment suspends activity long enough to stand out, tending to re-orient the rest of the riff around itself; together with the

eight note that precedes it, the Π . figure generates a strong feeling of "one-AND." As Example 2.5 above shows, this figure is always supported by cymbal strikes. (There are also consecutive drum strikes – bass then snare.) This moment, which initially seems to be the fifth and part of the sixth beats of the riff, begins to sound like its beginning, due to the strong durational accent.

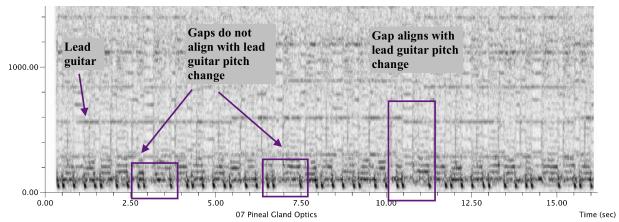
A closer examination of the kick drum marks in Example 2.7 reveals further indications that the riff begins somewhere other than the beginning: the first group of kick drum marks appears slightly shorter than the subsequent groups, and the internal spacing of the marks within the group differs. For example, the first two marks in the first group are close together, while in each subsequent group, they are further apart. Perhaps even more telling is that while the first group contains only ten individual kick drum marks, the rest contain eleven.

These visual groupings, however, do not tell the whole story, as to my ear, what in Examples 2.6 and 2.7 appears to be the gap between groups actually sounds like the beginning of the riff, due to the Π . figure in the guitar and the way the cymbal pattern is configured.

This reinterpretation of the rhythmic beginning of the riff has implications for the moments of alignment with the eight beat cycle imposed by the lead guitar. The moments when the \square gesture aligns with the shifting of the lead guitar's pitch (see mm. 5 and 11 in Example 2.5) form the passage's clearest rhythmic anchoring points and sense of

The downward leap of an octave or ninth taken by the \square . further strengthens the gesture, giving it more "weightiness."

downbeat. These moments can also be seen in a spectrogram; the first instance of this is shown in Example 2.8.



Example 2.8. "Pineal Gland Optics," 0-15s, (non)alignment of kick drum gaps with lead guitar pitch change.

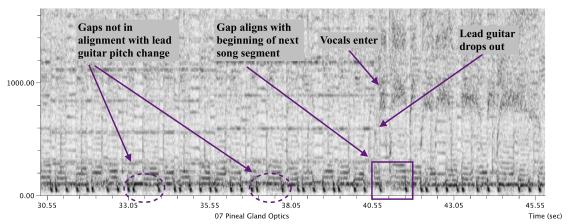
This alignment of the big gap/ \square . gesture with the pitch oscillation in the lead guitar occurs twice over the course of the song's sixteen-measure introduction, in mm. 5 and 11.

This reorientation of rhythmic perspective does not alter the length of any of the metrical patterns involved; either way you look at it, the riff is in 6/4. Taking the first note as the riff's beginning makes sense from a practical, notational perspective, as well as from the viewpoint of the band's typical compositional practice. From this perspective (as can be seen in Example 2.5), the riff repeats ten full times, and is two thirds of the way through the eleventh repetition at the downbeat of m. 17, when the vocals enter and the next song section begins.

From the perspective of actively listening to the music unfold, however, hearing the riff as beginning, ending and then beginning again with the \mathbf{r} rhythm becomes

increasingly difficult, especially after m. 5 when the \square gesture aligns with the lead guitar oscillation. (Here, particularly, the lead guitar's return to the initial C# pitch adds to the feeling of "home.") If we re-orient our thinking about the riff, however, to understand its beginning as the \square gesture, then we have to contend with the idea that the song begins with the riff in the middle of its process.

Typically, Meshuggah's music is not so deceptive with regard to the beginnings and endings of musical segments; as exemplified by the "Lethargica" excerpt, what is heard first is generally "the beginning," recognizable when it comes again after the riff's "ending," and then cut off mid-stride whenever the next song section begins. This cutting off of riffs mid-stride when they reach the edge of their eight or sixteen measure song segment is what creates the lurching sensation familiar to Meshuggah's listeners, as "middle" unexpected collides with a new "beginning." In the case of "Pineal Gland Optics," however, the band seems to have taken nearly the opposite strategy. Example 2.9 shows via spectrogram the moment when the riff ends, the lead guitar drops out and the vocals enter – the beginning of the next song section.



Example 2.9. "Pineal Gland Optics," 30-45s, 0-1.5 kHz. Shows the moment of transition from the song's introduction into the first verse.

As it happens, the downbeat of m. 17 is exactly where the Π . would appear if the riff were to continue unchanged. And in fact, it does appear here: the stabilizing Π . figure ushers in the next song section, spectacularly performing its "beginning" function. Here, what initially confused the beginning of the riff clarifies the transition into the next song section. Meshuggah thus reverses an element of their conventional compositional process, temporally beginning a riff at what turns out to be mid-stride, while concluding it in the most logical place. ¹³¹

Though the \square . figure that sounds in the beginning of m. 17 seems as if it will re-start the same riff, the rhythmic and pitch patterns do change here, though they are certainly based on the initial riff. The 8-bar verse from mm. 17-24 descends half a step in both voices, hovering around Ab and Gb. The rhythmic pattern in these eight measures contains elements of mm.1-16's riff in 6/4, as it remains a jagged up-and-down pattern and makes use of the \square , \square . and \square rhythmic elements of the first pattern. There is no set pattern in this verse; it divides into segments (using \square . to mark "beginnings") of 21/16 + 19/16 + 21/16 + 11/16 + 21/16 + 19/16 + 16/16.

The subtleties of this organizational process are easily missed when relying on notation as a guide. Yet aurally, the reinterpretation of middle as beginning is relatively clear. On the one hand, this type of "beginning in the middle" is atypical of Meshuggah's style, and is in some respects more complicated than their usual tactic, requiring retroactive rhythmic understanding. On the other hand, the way the Π figure is placed so that it falls right onto the opening of the next song segments shows an instinct for creating a gesture of "beginning," whether thought of by the composer as such or not.

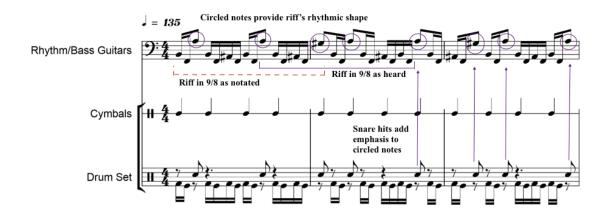
Following the first verse, there is an instrumental interlude from mm. 25-32, which returns to the initial riff in quasi-inversion, and beginning on the Π . rhythmic figure – except as an upward rather than downward gesture. The pitches hover around G in the upper voice and Ab in the lower voice. This riff repeats a full five times, and is then cut off mid-stride after two beats of the sixth repetition. Here, then, Meshuggah uses the riff in a manner that is more typical of their compositional style, reinforcing the idea that the riff's initial presentation began "in the middle."

From a notational perspective, it is fairly clear how a time signature of 4/4 makes sense for this music. Each segment of the song divides neatly into groups of eight or sixteen measures of 4/4, divisions typical of a wide swath of popular music. 4/4 notation also communicates the music's sense of cycles of alignment and divergence, and demonstrates that in the end, it is the edges of the song segments that govern when a particular pattern begins and ends its journey. It holds, then, that 4/4 be the standard against which other, more fleeting patterns are judged. Nevertheless, over-dependence on notation risks the possibility of missing out on moments such as the opening of "Pineal"

Gland Optics," when the rhythmic orientation of one of these fleeting patterns lies in the process of its unfolding, as the performing of it sorts out its rhythm as it goes.

"Pravus"

A similar rhythmic situation unfolds in the song "Pravus," this time in a short segment from the middle of the song (from about 1:41 to 1:55). Example 2.10 shows the first three measures of this segment transcribed in 4/4. (This clip can be heard here: https://drive.google.com/open?id=0B8p_kK9owPgHWGVfWjd1SVFNejg)



Example 2.10: First three measures of riff that follows the first verse of "Pravus." (1:41-1:46)

The rhythmic situation here is, in some respects, simpler than the one at the opening of "Pineal Gland Optics," as there are fewer parts to align; here, there is no lead guitar figure, the cymbals keep a steady quarter note pulse, and the snare and kick drum rhythmically duplicate the guitar riff.

Evidence from auditory scene analysis – the study of how the brain segments or "streams" auditory information – may prove useful in showing how the elements of this

riff cohere. While the laboratory experiments involved in auditory scene analysis generally use isolated series of tones, rather than complete musical contexts, Albert Bregman has argued that music relies on the properties of primitive auditory processes to achieve its effects, and that these processes work the same way in the laboratory and the wider world. 132 In the case of the riff shown in Example 2.10, the circled notes in the top line form the riff's rhythmic shape and momentum. Experimental evidence suggests that tones closer together in time tend to be grouped together mentally, as well as those close in pitch.¹³³ The circled notes in Example 2.10 are only a semitone apart, while the other pitches are a sixth or more lower, in addition to sounding softer, causing the upper As and G# s to hang together in a coherent "stream." Snare hits further support each of these eighth notes. The temporal gap between adjacent As, as it is longer than the temporal gaps between the A and G# or the G# and the A, further causes each iteration of the A-G# -A pattern to cohere into a unified musical figure. Each iteration of this pattern is then separated by this longer temporal gap, setting up the experience of a looped riff. That this longer temporal gap comes near the beginning of the song segment plays an important role in creating a sense that the riff began in the middle.

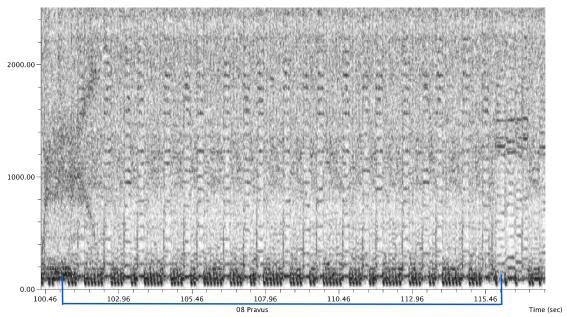
The purple bracket in Example 2.10 shows the rhythmic unit into which these accented guitar notes group themselves: a riff in 9/8 that counts "ONE-two-and-three-and-FOUR-five-and-SIX-seven-and-eight-and-nine-and," with the last three eighth notes sounding almost like a "dead space" that separates iterations of the A-G#-A pattern that

¹³² Albert S. Bregman, *Auditory Scene Analysis: The Perceptual Organization of Sound*, (Cambridge: MIT Press, 1990), 528.

¹³³ *Ibid.*. 52.

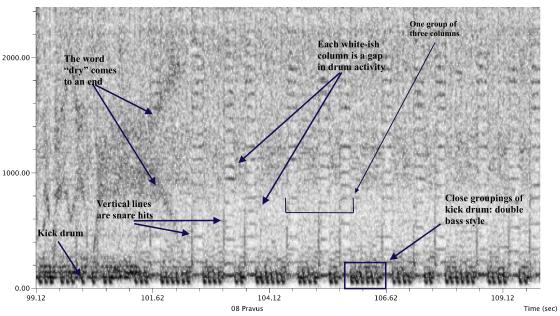
substantially forms the riff. By simply examining the notated pattern starting with the first measure (the dotted red bracket), one could still deduce a pattern in 9/8, (which could be counted "one-and-TWO-three-and-four-and-five-and-SIX-seven-and-eight-and-NINE") but this arrangement has an unaccented beginning followed by the three eighth notes worth of "dead space" that separates iterations under the former understanding of the pattern. Furthermore, if the temporal beginning of the riff is followed, the ending of the riff is then accented and occurs on the G# lower neighbor to the As, directly in the middle of the tension and release pattern that forms the backbone of the riff.

Because of the clarity of the drumming pattern in this passage (just kick and snare, with the cymbal keeping even quarters), it is possible to deduce the entire rhythmic organization of this passage from a spectrogram, allowing the visualization of rhythmic groupings described above. Example 2.11 shows a spectrogram of this short song segment.



Example 2.11. "Pravus," with the song segment from 1:41-1:55 bracketed. 0-2.5kHz. The double bass kick drum pattern can be seen along the bottom, as well as the gaps in drumming into which the loudest guitar tones and their overtones fall.

Zooming in on the beginning of the passage, the drumming pattern emerges more clearly:



Example 2.12: "Pravus," 1:39-1:50, 0-2.5 kHz.

Example 2.12 shows this riff emerging out of the first verse, with the roar of the word "dry" running over its beginning. Once the riff is underway, the snare hits make clear vertical lines ascending from the end of each group of double bass strikes. The subsequent gap in drum activity provides a slot for the accented guitar pitches. In other words, the double bass rolls fill the time between each of the "structural" guitar pitches (the circled As and G#s in the transcription, Example 2.10), whose onsets align with the snare strikes.

Example 2.12 also shows "columns" – the gaps of whiter space where the kick drums have paused to allow the guitar to sound – that emerge and form groups. Each group is composed of three columns, the first one slightly further away from the subsequent two. Each group of columns is separated by a slightly larger distance than that between the first and second column of each group.

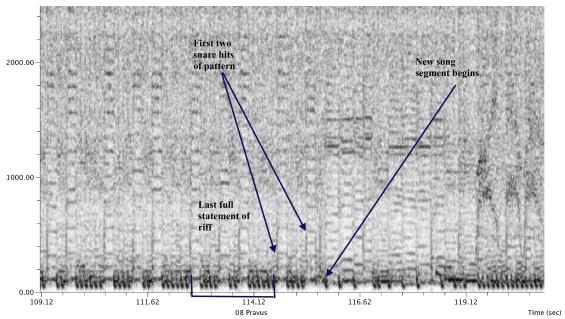
At the bottom of the spectrogram, the kick drum hits provide clarity about timing in this passage. Each kick drum strike is evenly, yet tightly spaced; each group is a short burst of double bass activity. As the smallest visible subdivision in the spectrogram, it is convenient to interpret them as sixteenth notes.

Within each group of columns, the first and second columns are four strikes apart (one quarter note). The second and third columns are two strikes apart (one eighth note). The third column is then separated from the next column – the beginning of the next group – by six strikes (one dotted quarter note). This information allows us to determine that the count of each set of guitar tones is "ONE – two – three – FOUR – five – SIX," with a dotted quarter note's worth of "dead space" before the next group. Altogether, this adds up to nine eighth notes, demonstrating that this riff is in essence a pattern in 9/8.

Looking toward the left of the spectrogram in Example 2.12, just before the 101 second mark, the very first column emerges from the vocals, which obscure most of it. This column marks the beginning of the passage. The spectrogram shows that the first column is six bass drum strikes away from the next column, meaning that the passage essentially begins with the end of the riff – its last half note's worth, most of which is the "dead space" between iterations of the pattern. In other words, the passage begins with what turns out to sound like the middle and end of the riff.

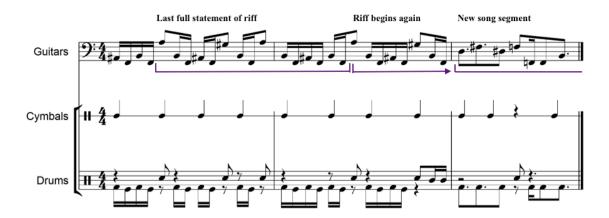
As with the beginning of "Pineal Gland Optics," this "beginning with the middle" has a disorienting effect when it comes to initially making sense of this passage. Instead of being able to grasp the pattern at the beginning of its first repetition (i.e. by projecting based on the first statement of the pattern that what follows will be the same), there is a delay in processing that comes from assuming that the beginning is, in fact, the beginning, only to have that assumption denied when another pattern takes shape. With the way the vocals hang over the beginning of this passage, it sounds as if the riff has been going on for a while underneath some other music, and finally happens to surface for a brief moment.

Finally, this orientation of the riff makes for a more rhythmically convincing transition into the next song segment (which in this case is a two-measure "fill" before a new riff and the re-entry of the vocals). Example 2.13 zooms in on the ending of the song segment.



Example 2.13. "Pravus," 1:50-2:01, 0-2.5 kHz.

A transcription of the last three measures of this passage – Example 2.14 – shows how this process works out in the context of a song segment based on 4/4.



Example 2.14. "Pravus," 1:52-1:56.

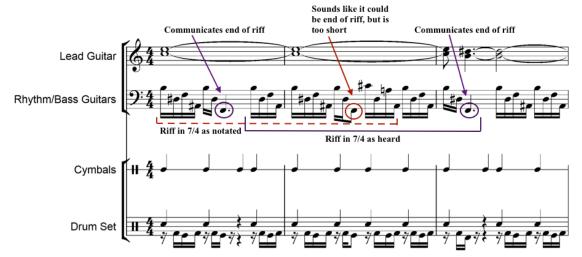
After the last full statement of the riff, the first 5/8 of the riff sounds before the beginning of the next song segment cuts it short just when the third and last of the accented guitar tones should sound. (For the last 1/8 of the riff, the two kick drum strikes that have appeared in previous iterations are exchanged for tom hits, which do not show up as clearly in the spectrogram.) The downbeat of the next song section falls at the moment when rhythmic expectation is highest in the riff. The arrival instead on the "wrong" note and a new rhythmic figure feels different than the typical lurch that arises from a riff being cut off mid-stride in the transition to the next song segment; there is a stronger feeling of evasion or denied expectation. Unlike when the accented moment of the "Pineal Gland Optics" riff ushers in the beginning of the verse, here, strong expectation of such a continuation is created, but then evaded.

The spectrogram in Example 2.11 shows that there are six full statements of the riff, along with 5/8 worth of it in the beginning of the passage and 5/8 of it again at the end. This all adds up to 8 measures of 4/4 – a typical Meshuggah song segment.

"Pravus," Part Two

Later in the song "Pravus," from about 2:31 to 3:00, there is another instance of a riff that begins in the middle, with yet another treatment of the moment when one riff meets the next after sixteen measures. Example 2.15 shows the first three measures of this riff. (This clip can be heard here:

https://drive.google.com/open?id=0B8p_kK9owPgHR3hBQVhtdXZoNkU)



Example 2.15 "Pravus," 2:31-2:36.

This riff is in 7/4, with quarter note beats firmly emphasized by both the pulse kept in the cymbals and the drum pattern of a snare hit followed by a double bass roll. Like "Pineal Gland Optics," this passage has a slow lead guitar part in a higher register. In this song, however, the lead guitar drifts along more loosely with the riff, demarcating units of approximately eight beats – sometimes an eighth note more or less. ¹³⁴ In the context of Meshuggah's style, this riff in 7/4 forms a relatively simple pattern, with minimal rhythmic conflict. In this case, the only argument against completely notating it in 7/4 is the convenience with which 4/4 communicates the larger song structure, and to reduce the number of meter changes throughout – as the passage would probably need to open with a measure in 3/4 before moving into 7/4.

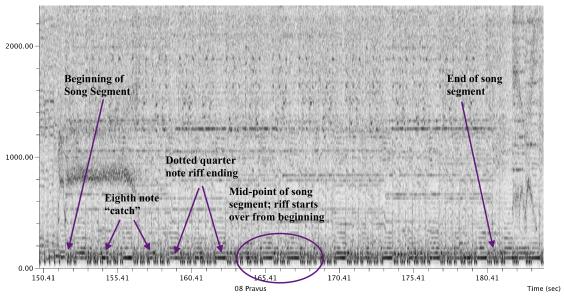
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¹³⁴ There are some discrepancies with regard to performance of this lead guitar part. In the album version of the song, the lead guitar in this passage is mixed well to the back, to the extent that it has a hazy "background" effect compared to the structuring role of the lead guitar oscillation in "Pineal Gland Optics." In live renditions of "Pravus," however, the lead guitar is more clearly audible, and the pitch changes occur strictly every eight beats, as in "Pineal Gland Optics." I have chosen to transcribe the lead guitar as I hear it on the album version, in the interest of consistency with my other examples.

As with the "Pineal Gland Optics" example, this passage is rhythmically oriented primarily by a long duration of low pitch, in this case a dotted quarter note on a low F that sounds like the ending of the riff. The lead guitar pattern roughly follows these long durations, changing pitch either simultaneously with the onset of the long duration or slightly after. The fact that the change of pitch in the lead guitar aligns with the ending point of the riff adds emphasis to these moments and helps join the iterations of the riff into a more continuous flow based on the gradual descent in the lead guitar.

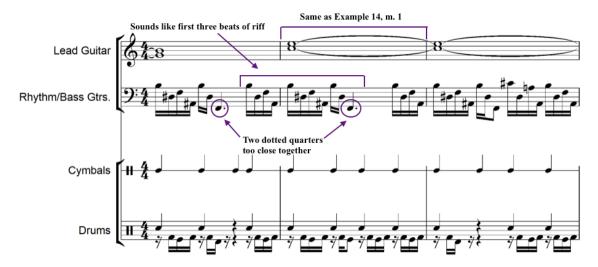
What is particularly interesting about this passage is the eighth note that sounds halfway through m. 2 of Example 2.15. Measure 1 contains a statement of what seems like a riff in 3/4. The remainder of m. 1, up until the eighth note in m. 2, sounds like a repetition that becomes an extended version of the riff. The eighth note causes a "catching" or "pausing" feeling, that at first listen sounds like the ending durational accent to which we are accustomed in Meshuggah's riffs. In other words, it initially causes the expectation that this statement will be four beats long. The continuation, however, until the dotted quarter note comes during the sixth beat, demonstrates that both initial projections were incorrect; two sets of rhythmic expectations are denied back to back. With repetition, this eighth note in the third beat becomes the marker of a 3 + 4 subdivision of the 7/4 riff.

This particular song segment is sixteen measures long (if notated in 4/4), and is divided in half with the entire pattern starting over at the downbeat of m. 9. Example 2.16 shows a spectrogram of this song segment, with the mid-point circled; there are four full statements of the 7/4 riff on either side of the midpoint, which can be easily identified by the drumming pattern.



Example 2.16. "Pravus," 2:30-3:01, 0-2.5 kHz.

In the spectrogram, clusters of kick drum action are separated by short and long horizontal marks representing the eighth note "catch" and the long duration that ends the riff, respectively. The short and long marks alternate, until the midpoint of the riff, when the spectrogram shows two long durations too close together, with no intervening short "catch." This apparent glitch in the pattern occurs because, at the ninth measure of the song section, the entire process begins again with the "beginning in the middle" – there is a starting over at the temporal beginning. Example 2.17 shows a transcription of mm. 8-10 of this passage.



Example 2.17. "Pravus," 2:45-2:49. Mid-point of song segment, with start-over at m. 9.

At the end of m. 8, the first quarter note's worth of the riff is played, and as is typical of Meshuggah's compositional style, it is simply cut off mid-stride at the barline. In re-starting the riff, they re-start with the temporal beginning, repeating the process of beginning in the middle. The lead guitar's re-launch of its pitch pattern at the beginning of m.9 further emphasizes the repetition. What makes this moment more aurally complex is the fact that the beginning of the riff as played at the end of m. 8 actually joins seamlessly with the riff segment played at the beginning of m. 9; aurally, it is simply the first 3 of the 3 + 4 that makes up the 7/4 riff – until what should be the eighth note "catch" lasts too long. When listening, it is only retrospectively – after the "catch" lasts too long and the next full iteration of the 7/4 riff has gone by – that we can know there has been a re-statement of the temporal beginning. This process renews the destabilization of the difference between the eighth note "catch" in the middle of the riff and the ending long duration of the dotted quarter note.

At the end of the song segment, the transition from the sixteenth measure into the seventeenth plays a similar trick; Example 2.18 shows a transcription of the last two measures of the riff and the first of the next song segment.



Example 2.18. "Pravus," 2:57-3:02.

The new riff that begins the next song segment is a call and response pattern between a jagged figure ending with a long duration similar to the previous motive, alternating with rising sixteenths doubled at the octave. The last full statement of the riff in 7/4 ends in m. 16, beginning again in the last beat of the measure. At the downbeat of m. 17, it is cut off mid-stride, but the gesture that begins the new riff continues the same rhythmic pattern, albeit with different pitches. The long low F in beats 2-3 of m. 17 is, however, on the "right" pitch, and is held for the correct dotted quarter note length. The octaves that begin at the end of m.17 firmly demonstrate that a new riff has begun.

Though the change in pitch content signals that a new pattern could be beginning, due to the rhythmic continuity provided by the beginning of the new riff, clear understanding of

the song section's border comes only retrospectively, once the rising octaves signal that there is, in fact, a new riff.

In this instance, Meshuggah has blended the ending of one song segment with the beginning of the next; the change in pitch makes the border aurally distinguishable, but the similarity of the rhythmic pattern lessens the lurch that is typical of movements between song segments in their music.¹³⁵

A Note on Live Performance

Meshuggah's members have repeatedly demonstrated that they are capable of performing their music with near-mechanical accuracy in live settings, and they have furthermore admitted that achieving this level of performance requires a great deal of practice. Due to the difficulty of performing their music live, songs for a tour's setlist are decided well in advance to allow for sufficient rehearsal time; for example, "Bleed" (also from *obZen*) allegedly took drummer Tomas Haake over six months of practice to be able to play through continuously. ¹³⁶ The band has also admitted that there are some songs that will likely never receive a live performance – songs like "The Demon's Name is Surveillance" (from 2012's *Koloss*) – as they have not been able to get to a point where

¹³⁵ This rhythmic "blending" effect also occurs in "Bleed," though it is used to confuse repetitions of a 9/8 + 9/8 + 6/8 riff within the song section, rather than the borders between song sections. See: "Bleed," 3:37-4:13.

¹³⁶ David Weiss, "Tomas Haake: Meshuggah Goes It Alone," *Drum!* May 20 2010, accessed April 1, 2015, http://www.drummagazine.com/features/post/tomas-haake-meshuggah-goes-it-alone/.

they can perform them without physical discomfort.¹³⁷ Similarly, they say they will never perform the twenty-minute single-track EP I (2004), with Haake describing the song's form as "random" and saying "no one [in the band] knows how I goes."¹³⁸

With respect to the two songs discussed at length in this chapter, "Pravus" has featured in many live performances, while "Pineal Gland Optics" has, as far as I can tell, never been performed live. I can only speculate as to why they have chosen not to include this song in their live setlists – perhaps they simply don't like the song that much – but I am willing to hazard that it has at least something to do with the difficulties presented by the many conflicting rhythmic processes presented in the various parts. Compared to many of their other songs, it is not overly fast, nor is there much double bass work in the drums. The guitar parts, however, could present memorization difficulties, given the use of complicated isorhythms, the fact that all the riffs are derived from the opening one but none are exactly the same, and that the verse patterns (during vocals) are irregular variations on the opening riff that never quite settle into a repeating riff. Furthermore, the use of patterns that sound as if they begin in the middle, as was analyzed here, adds an additional layer of complication from a performance perspective. Though "Pravus" also makes use of this technique, its context is generally more straightforward, particularly as

¹³⁷ Dave Previ, "Web Exclusive Interview with Meshuggah's Tomas Haake," *Modern Drummer*, June 17, 2013, accessed April 1, 2015, http://www.moderndrummer.com/site/2013/06/web-exclusive-interview-with-meshuggahs-tomas-haake/#.VRu5CkbXV19.

¹³⁸ Interview with Tomas Haake and Mårten Hagström, 2010, accessed February 24, 2016, https://www.youtube.com/watch?v=omq-wJN763k. A large portion of Pieslak's Meshuggah article consists of an analysis of *I*. See: Pieslak, "Re-Casting Metal," 223-242.

the drum and cymbal patterns forthrightly support the patterns being performed in the guitar.

Despite being on the slow side for Meshuggah song, "Pineal Gland Optics" is perhaps more difficult to perform than average, and it seems unlikely to appear on a setlist anytime soon. That said it is well within the realm of the possible to play, as several YouTube musicians have demonstrated. The fact that Meshuggah composes songs that they will not attempt to perform live reminds listeners of the significant role of technology in their music-making. Tomas Haake has spoken about how programming has replaced the demo in their songwriting process. The challenge, then, is that they can program anything, but they "need to be able to play it as well;" 139 Haake adds that the temptation in programming is for the mind to outstrip the body's ability, and that he resists this temptation by trying to "feel" his way through the programming process. 140 While most issues with tempo seem to be dealt with at the recording stage, they have occasionally shown flexibility with regard to performance tempi. Most notably, live performances of the title song "obZen" are slower than the recorded version by about 10 bpm. The role that Meshuggah have allowed music technology to play in their creative process has pushed them toward discovering their limits as human performers, as the sky is the limit in the early phases of songwriting. Nevertheless, they remain committed to producing pieces that by and large work in a live setting. That they give an impression of "sonic machines" during performances has not only to do with the role they allow

¹³⁹ Interview with Tomas Haake, 2015, accessed February 24, 2016, https://www.youtube.com/watch?v=hYjjwL022-0.

¹⁴⁰ *Ibid*.

technology to play in their compositional process, but also the meticulously synced lightshow, the lack of banter or excessive movement on stage, and Kidman's robotic vocals, which together form the band's carefully cultivated performance style.¹⁴¹

Conclusion

In the context of a music culture that values transgressive displays of aggression, Meshuggah's use of looping riffs that are consistently cut off by a rigid 4/4-based hypermetric structure enacts a ritual of freedom and control that has long been identified as a core component of metal music's aesthetic, beginning with Robert Walser's 1993 book *Running with the Devil: Power Gender and Madness in Heavy Metal Music*. As Walser writes:

Musically, a dialectic is often set up between the potentially oppressive power of bass, drums and rhythm guitar, and the liberating, empowering vehicle of the guitar solo or the resistance of the voice. The feeling of freedom created by the freedom of motion of the guitar solos and fills can be at various times supported, defended or threatened by the physical power of the bass and the violence of the drums. The latter rigidly organize and control time; the guitar escapes with flashy runs and other arrhythmic gestures. The solo positions the listener: he or she can identify with the controlling power without feeling threatened, because the solo can transcend anything.¹⁴²

Though Walser's context for this claim is the "freedom" of wild guitar solos arising out of the "control" of the rhythm section, I believe Meshuggah's riff/structure struggle – which is almost always resolved in favor of the structure – proceeds from this same artistic instinct. With song lyrics often centered on the desire for or achievement of

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¹⁴¹ Tomas Haake discusses the band's interest in having a "mechanical" sound and "monotonous vocals" in a 2008 interview. See: Interview with Tomas Haake, June 3, 2008, accessed March 5, 2016, https://www.youtube.com/watch?v=Mazw9sFapuM&feature=related.

¹⁴² Walser, Running with the Devil, 53-54.

radical freedom from invasive, oppressive and deceptive systems, and musical patterns that ritualize the suppression of elements that break the "order" of 4/4, it seems not too much of a stretch to suggest that repetition and variation as used in Meshuggah's music explore ideas of freedom and rigid control, liveliness and predictability. Just as their manipulations of meter exhibit competing realities – one of which exerts control over the other – the texts that Jens Kidman screams often deal with competing realities, and the struggle to either escape a malicious one or discover what is truly real. Take, for example, these lines from "Pineal Gland Optics:"

Unbound this new vision, optical regenesis Threatening, so complete in beautiful deformity

 $[\ldots]$

Cast off – the concealing veil, the rational cloak of doubt Torn off – the restraints, the blinded's shackles Burned away – the agony, the fear, the grief A new set of eyes cleansed by a new belief.¹⁴³

Here, the text centers on the narrator's discovery of a perceived truth, in an experience akin to receiving new eyes. The event is life-altering, and brings the subject a heretofore unknown freedom, a reality that is "complete in beautiful deformity." This lyric remarks on the compatibility of deformity and aesthetic pleasure. Joseph Straus' study of concepts of disability in music theory notes that, "musical works often benefit aesthetically from the presence of formal deformations and abnormalities, tonal problems with their

¹⁴³ Meshuggah's lyrics are written by Tomas Haake, the band's drummer. Haake also writes the rhythms for the vocal parts. See: Anders Björler and Owe Lingvall, *Konstrukting the Koloss*, DVD (2012; Sweden: Nuclear Blast).

attendant imbalance and unrest, and dissonances requiring normalization."144 As is all too often the case in the enumeration of analytical frameworks, issues of rhythm do not make the list, but Meshuggah's treatment of competing meters qualifies for consideration through Straus' lens. The riff struggles to deform the structure, and the structure normalizes the riff, forming boundaries for its excursions and bringing to mind the normative social forces applied to human bodies in everyday life. While Meshuggah's music does not necessarily encode disability per se, their use of polymeter reflects on the liveliness and aesthetic pleasure of difference, as well as the competing comfort of regularity and predictability – in this case perfectly represented by 4/4, with all its attendant history and significance for Western music. "Pineal Gland Optics" and "Pravus" (whose lyrics contemplate the inescapable inevitability of suffering, violence and death: "By the poisoned nails of history stung...the blades of hurt inexhaustibly swung"), by playing with the temporal signification of rhythmic grouping, offer yet another way of hearing the encounter between norm and aberration, conformity and rebellion.

Meshuggah's music offers a great deal to the world of musical analysis, particularly in terms of musical parameters that have long received the respect and attention of music theorists: a coherent but evolving compositional style with a distinctive way of handling local and large-scale metrical patterns, and a unique management of motivic development. They offer enough in the way of these parameters that the lack of any conventional sense of harmony or melody passes without comment. With a rhythmic

¹⁴⁴ Joseph N. Straus, "Normalizing the Abnormal: Disability in Music and Music Theory," *Journal of the American Musicological Society* 59/1 (2006): 175.

surface that does not easily and immediately yield to interpretation, it comes as no surprise that Meshuggah is the first extreme metal band to inspire a *Spectrum* article, and I suspect it will only be a matter of time until there is a recognizable, if small, school of "Meshuggah analysis," like those devoted to other composers. In taking advantage of the possibilities that notation and a growing community of theorists interested in Meshuggah's work provides, it is important to remember that significant aspects of this music are easily overlooked when notated. In this chapter, I have focused on one of these aspects, dissecting how in some instances, interpretation of the gestures that constitute beginnings and endings can seem to shift as a song segment unfolds. Developing a rhythmic understanding of these moments – indeed the very understanding that a reorientation is taking place – depends on the temporality of listening. Without listening, the lurches and reorganizations that comprise a key element of Meshuggah's style lose their vitality, and the reason that fans hurl their bodies against each other in the mosh pit grows obscure.

In his study on rhythm in electronic dance music, Mark Butler finds that:

Metrically ambiguous sections encourage the listener to *construe the meter* actively rather than absorb metrical information passively. On the dance floor, this construction occurs in and between bodies as well as in minds.¹⁴⁵

When listeners tune in to the rhythmic patterns of Meshuggah's music, or hurl their bodies about the floor in front of the stage, they likewise demonstrate the combination of physical and mental energy that makes a Meshuggah concert such an arresting experience for fans. Further, Vijay Iyer finds that:

¹⁴⁵ Butler, *Unlocking the Groove*, 137. Emphasis in original.

Music perception and cognition are embodied activities, depending crucially on the tangible features of our sensorimotor apparatus, and also on the sociocultural environment in which music perception, cognition, and production are situated.¹⁴⁶

Rhythmic understanding, therefore, is both embodied and culture-specific. Iyer also observes that according to neuropsychological data, the mental processes that produce physical movement are the same as those involved in listening to music.¹⁴⁷ The listeners who appear to be primarily absorbed in the intensely physical process of moshing, then, are also involved in music cognition, in a sociocultural situation that encourages a distinctly violent mode of musical participation – one that enacts freedom from specific social norms within the control of the musical event.

The listeners preferring to count are, for their own part, more physically engaged than it would appear. From the perspective of those who explicitly prefer numbers,

Jeanne Bamberger and Andrea diSessa have explored "music as embodied mathematics," an effort to empirically support Leibniz' assertion that "Music is a secret arithmetic exercise in which the soul is not aware that it is counting." The affinity between music and math is a longstanding one, though not typically associated with attendance at extreme metal concerts. The "nerds" in the balcony use the embodied cognition of the music for the pleasure of processing the rhythmic patterns as they go by,

¹⁴⁶ Vijay Iyer, "Microstructures of Feel, Macrostructures of Sound: Embodied Cognition in West African and African-American Musics" (PhD diss., University of California, Berkeley, 1998), 137.

¹⁴⁷ *Ibid*.. 30-31.

¹⁴⁸ Jean Bamberger and Andrea diSessa, "Music as Embodied Mathematics: A Study of a Mutually Informing Affinity," *International Journal of Computers for Mathematical Learning*. 8/2 (2003): 123-160.

¹⁴⁹ "Musica est exercitium arithmeticae occultum nescendis se numerare animi." From a 1712 letter to Christian Goldbach.

while preferring to keep the motion in their minds. It seems then, that the nerds and moshers share more of the concert experience than meets the eye. The moshers count implicitly with their bodies, while the "nerds" count explicitly with the aid of embodied musical knowledge and habits. They offer differing surface animations of similar internal activities – engagement with sound.

Much like the concert itself "began before the beginning," Meshuggah's music makes a plaything of rhythmic gestures of beginning, middle and ending. Perhaps the opening moments of the concert, when the moshers began jostling and jumping before the music began, enacts another instance of the way their music plays with these toys, as physical movement began before a single beat was laid down. In that moment, the audience came to have their own role in Meshuggah's habit of playing with time.

Meshuggah's music seems equipped to provide deep physical and mental engagement, expressed divergently in moshing and counting. The moshers and the nerds in the balcony share this aspect of the concert experiences: they are all deeply musically engaged – they are all intensely musicking.

Chapter 3

Black Metal and Ecocriticism

Introduction

As the new millennium reaches adolescence, concerns about the sustainability of human life on earth have become more pressing. Predictions of climatological disaster have grown more dire, and calls for corrective action more urgent. Those working in the arts have responded to this increased urgency, resulting in a cascade of books, films, music and other media aimed at voicing a warning in the language of the arts and entertainment. Such pieces take a variety of paths toward providing their audience with an absorbing story that simultaneously strives to inspire a radical attitude adjustment with regard to environmental issues. One particularly successful archetype remains the environmental morality play, as seen, for example, in Margaret Atwood's popular MaddAddam trilogy (Oryx and Crake, 2003; The Year of the Flood, 2009; MaddAddam, 2013), in which human life on earth is all but wiped out by a bio-engineered virus. The few survivors are primarily members of a group of environmental activists, rewarded for their moral perseverance with their lives. The small group must struggle for survival as the infrastructure of their former society crumbles around them. With them are a new race of herbivorous humanoids, bio-engineered to be free of the causes of human suffering and moral failing – possessiveness, lust, social hierarchies and most non-literal use of language, and intended by their late human creator to inherit the newly cleansed earth. Dystopian and mournful at its outset, the trilogy ultimately ends on a hopeful note, bearing out apocalyptic ideas of renewal for the righteous.

Extreme metal has responded to this increased sensitivity to environmental issues, and due to the norms of the genre, faces little pressure to present a hopeful outlook for the future of the relationship between humans and the planet. These norms mean that extreme metal is aptly positioned to both explore abject outcomes of the current environmental crisis and meditate on the sufferings caused by environmental exploitation. Black metal's tendencies toward apocalyptic rhetoric, astonishing anger and mythological logic position it so as to be able to both stir up the primal terror of impending ecological catastrophe and wistful longing – often infused with nostalgia – for a future better attuned toward environmental balance. ¹⁵⁰ In this chapter, I present two case studies of ecocritical black metal; the divergent perspectives presented by these two cases reflect the enormous range of possibilities for musical ecocriticism. Part 1 delves into the apocalypticism of the California-based black metal band Botanist, whose lyrics imagine a future in which plants violently rise up to take over the earth and eliminate humankind. Part 2 considers Panopticon's 2012 album *Kentucky*, which deals with the social and environmental damage wrought by the Appalachian coal industry, investigating how the album's sounds and texts contribute to articulating the region's history of devastation. This chapter's analytical process engages with multiple expressive modes, examining how timbre, musical style, sound effects and texts work together. Rather than focusing on any one aspect of the music (e.g. loudness, or rhythm, as in previous chapters), I trace the mergings of several sonic parameters and how they interact with environmental discourse. Studying musical environmentalism contributes to a greater understanding of

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¹⁵⁰ For more on how these two approaches (terror and nostalgia) inform ecocriticism see Alexander Rehding, "Ecomusicology between Apocalypse and Nostalgia," *Journal of the American Musicological Society* 64/2 (2011): 409–414.

what musicologist Aaron S. Allen terms the "failure of culture" that has led to the current ecological situation; he writes that while climate science can identify the extent of the crisis and its makeup, the answer to why it has occurred, and thus also how the situation might be mended, lies in the study of human nature-culture.¹⁵¹ These two bands' differing approaches to musical environmentalism open a window onto the possibility for black metal's redemption and the ways in which its characteristically harsh sounds can contribute to critiquing the troubled relationship between humans and their environment.

Part 1: Plants with Voices, Plants as Terrorists

John Wyndham's 1951 apocalyptic science-fiction novel *The Day of the Triffids* relates the rise of a species of venomous, carnivorous plants. A mysterious meteor shower causes a plague of blindness over the earth, and the "triffids" take advantage of their human captors in this moment of weakness. Capable of locomotion, hearing and intra-species communication, the plants multiply rapidly, flocking toward the sounds of humans (and other animals) stumbling about a suddenly darkened world. Before the meteor shower, triffids had been kept as ornamental plants and cultivated for their valuable extracts, their lethal power kept in check with chains, stakes and fences. When humans lose their main advantage over the plants – sight – they become easy prey for their lethal stings.

Six years after the meteor shower, two of the surviving humans (who by happy accident retained their sight) reflect on the extent to which human civilization has crumbled in such a short time:

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¹⁵¹ Aaron S. Allen, "Prospects and Problems for Ecomusicology in Confronting a Crisis of Culture," *Journal of the American Musicological Society* 64/2 (2011): 414.

Viewed impressionistically from a distance the little town was still the same...but it was an impression that could not last more than a few minutes. Though the tiles still showed, the walls were barely visible. The tidy gardens had vanished under an unchecked growth of green...Even the road looked like strips of green carpet from this distance...

"Only so few years ago," Josella said reflectively, "people were wailing about the way those bungalows were destroying the countryside. Now look at them." "The countryside is having its revenge, all right," I said. "Nature seems about finished then – 'who would have thought the old man had so much blood in him?""

"It rather frightens me. It's as if everything were breaking out. Rejoicing that we're finished, and that it's free to go its own way." 152

In this scenario, humans are no longer the dominant species, and are fading fast toward extinction. Increasing amounts of precious time and energy must be spent defending themselves against the rapidly multiplying triffids. Failing a long-term solution, humanity is doomed.

Wyndham's novel presents the essential narrative of apocalyptic bioterrorism: humankind, with wanton hubris, has sown the seeds of its own destruction, and earned whatever horrors befall it on the way to elimination. The appealing circularity of such narratives enacts the form of a contemporary morality play, in which the natural world justly punishes humanity's wickedness. While *The Day of the Triffids* is tinged with Western Cold-War-era suspicions of all things Soviet, more recent iterations of this narrative tend to indict human society as a whole, and wealthy, industrialized nations in particular.

¹⁵² John Wyndham, *The Day of the Triffids* (London: Michael Joseph, 1951), 269.

The Big Other: Killer Plants

The prospect of killer plants rising up to destroy humankind at a moment of weakness provides for fantastical, outlandish science fiction. This scenario, bizarre though it may seem, has interested an array of artists. In possibly the most popular depiction of a killer plant, the 1980s comedy/horror musical Little Shop of Horrors depicts a space alien bent on world domination that takes the form of a carnivorous plant requiring human flesh and blood for food. 153 Fictional plant violence has also been motivated by self-defense; in J.R.R. Tolkien's *Lord of the Rings* trilogy, an ancient race of trees rises up to defend itself against Saruman's destruction of their ancestral forest. Other depictions have hewn more closely to reality, taking up the damaging potential of plants such as giant hogweed (heracleum mantegazziani); the progressive rock band Genesis weaves an apocalyptic tale based loosely on the reality of the plant's toxicity. Attaining a height of 2-5.5 meters and native to Asia's temperate zones, giant hogweed was first introduced to the British Isles as an ornamental plant in the nineteenth century, where it quickly became an invasive species; it is now found throughout northern Europe and North America. Furocoumarin in giant hogweed's sap causes a phototoxic response in human skin. Contact with the sap can cause blistering burns (phytophotodermatitis) that may require hospitalization, and leave dark scars that remain for months or years. If the sap comes into contact with the eyes, it can cause temporary or permanent blindness.

Genesis' song, "The Return of the Giant Hogweed," (*Nursery Cryme*, 1971) exaggerates the plant's real damaging potential, and imbues the plants with agency and a desire for revenge against humanity's "herbicidal battering:" The song's final verse

¹⁵³ *Little Shop of Horrors* has been through many iterations: the original 1960 film, a 1982 music based on the 1960 film, and the 1986 film adaptation of the musical.

switches to the hogweed's point of view, as they reach the population tipping point that ensures their victory:

Mighty hogweed is avenged Human bodies soon will know our anger Kill them with your hogweed hairs Heracleum mantegazziani

Here, the vocals take on a new timbre, as the singers enunciate the plants' words on rising lines that break into falsetto. (Listen to a clip here, with google account:

https://drive.google.com/open?id=0B8p_kK9owPgHQVh5YTQ4T3VmRWM.)

The fascination with killer plants speaks to the fact that humans are profoundly dependent on plants for necessities such as food and clean air, as well as for relative luxuries such as erosion control, fuel, building materials, medicine, textiles and cosmetics. Plants vastly outnumber us, but conveniently, they cannot move from where they are rooted, cannot hear, cannot see and generally respond to stimuli slowly. As organisms, plants are so extraordinarily different from us that mortal terror of them is incomprehensible. Even plants that house lethally toxic compounds strike no real terror; one can simply walk away, while it remains rooted to the spot, unable to follow. In Frank Schätzing's *The Swarm* (*Der Schwarm*, 2004), swarms of single-celled organisms initiate attacks on humans, driven by a single hive-mind. Like these organisms, plants can be understood as the Lacanian Big Other, a "radical alterity, an other-ness which transcends the illusory otherness of the imaginary because it cannot be assimilated through identification." In other words, they are so different from us that we cannot conceive of their subjectivity – we cannot identify with plants. As organisms they are so different

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¹⁵⁴ Dylan Evans, *An Introductory Dictionary of Lacanian Psychoanalysis* (London: Routledge, 1996), 133.

from us that we don't normally even think about being afraid of them. As each of these artistic depictions demonstrates, plants with volition and agency are a terrifying prospect; without the ability to grasp their way of being, it is difficult to determine how they might be stopped if they were to attack.

The question of plant agency is not new, having been the subject of a slew of pseudoscientific experiments in the 1950s and 60s, detailed in the hit 1973 book *The* Secret Life of Plants, which suggested plants are sentient, can read the human mind, do basic arithmetic and have the capacity to suffer pain. 155 All of the "studies" supporting these claims have long since been repudiated, but that they were conducted betrays a widespread interest in understanding what plants can sense and know. Some of the most famous of these experiments dealt with plants' responses to different kinds of sounds – generally attempting to prove that rock music stunted plants' growth, and was therefore also dangerous to human health.¹⁵⁶ Current research suggests that plants cannot hear as such, but may be sensitive to being vibrated, such as occurs with highly amplified low frequencies. ¹⁵⁷ In recent years, there has been a resurgent interest in the anthropomorphization of plants as a means of better understanding their ways of being. 2015 saw the publication of two nonfiction books in this vein: Richard Mabey's *The* Cabaret of Plants: Botany and the Imagination and Peter Wohlleben's The Hidden Life of Trees: What They Feel, How They Communicate – Discoveries From a Secret

¹⁵⁵ Peter Tompkins, *The Secret Life of Plants* (New York: Harper and Row, 1973).

¹⁵⁶ Daniel Chamovitz, What a Plant Knows: A Field Guide to the Senses (New York: Scientific American/Farrar, Straus and Giroux, 2012), 78.

¹⁵⁷ *Ibid.*, 82.

World. In these books, ideas of plant communication and intelligence are used to increase sympathy in the reader, while also imparting the uneasy sense that plants' perceived passivity and unconsciousness have been taken for granted. Artistic anthropomorphizing that projects anger onto plant life builds on this history of pseudoscience. This process of anthropomorphization re-interprets plants' sophisticated defense mechanisms, many of which are dangerous to humans, as offensive mechanisms under the power of a botanical will.

Beyond their rootedness, the silence of plants further adds to their appeal as subjects for artistic renderings of the Big Other. With the exception of exploding seed pods found on plants such as members of the acanthus family, plants are generally perceived as passive sound makers: the wind rustles them or makes them groan as they bend. If plants make sounds of their own, they do not fall within the range of human hearing. Nevertheless, scientists and artists have increasingly found ways to "listen" to seemingly noiseless organisms. Some artists have attached transducers to plants, converting the plant's biofeedback into sound and amplifying it to a level audible by the human ear. Sophia Roosth, in analyzing the effects of sonocytology (amplification of cellular vibration to audible levels) on the understanding of cellular activity, hones in on Jonathan Sterne's definition of sound as "a product of the human senses and not a thing

¹⁵⁸ Richard Mabey, *The Cabaret of Plants: Botany and the Imagination* (London: Norton, 2015). Peter Wohlleben, *Das geheime Leben der Bäume: Was sie fühlen, wie sie kommunizieren – die Entdeckung einer verborgenen Welt* (München: Ludwig Verlag, 2015).

¹⁵⁹ See for example, the work of Leslie Garcia. Leslie Garcia, "Pulsu(m) Plantae," Personal Website, accessed May 9, 2016, http://lessnullvoid.cc/pulsum/. (Website in Spanish.)

in the world apart from humans,"160 expanding it to include any "vibration that can be heard by an organism."¹⁶¹ Acoustic technologies enable us to amplify cellular vibrations that were previously inaudible to us. Roosth's essay particularly examines the discovery that yeast cells "scream" when doused in alcohol. 162 By interpreting the change in the vibrations of the yeast in the presence of alcohol as screams, the listening scientist grants the cells voices and agency, creating what Roosth calls "cellular subjects." Sound has been and continues to be used as a means of mapping and understanding that which cannot be seen – from the bottom of the ocean to the inside of the human body, and now, the internal activities of cells. 164 As Roosth points out, however, to refer to cellular vibrations as voices, capable of responding to adverse stimuli with screams, is to "project cultural notions of what it means to be human, to be subjective and have agency, and even for something to be meaningful, into a cellular milieu." Similarly, novels like *The* Day of the Triffids or songs like "Return of the Giant Hogweed" project subjectivity onto plants, while cataloguing their physical attributes – including their "voices" – in unavoidably anthropoid terms.

¹⁶⁰ Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham, NC: Duke University Press, 2003), 11.

¹⁶¹ Sophia Roosth, "Screaming Yeast, Cytoplasmic Milieus, and Cellular Subjectivities," *Critical Inquiry* 35/2 (2009): 335.

¹⁶² *Ibid.*, 338–339.

¹⁶³ *Ibid.*, 339.

¹⁶⁴ *Ibid.*, 349.

¹⁶⁵ *Ibid.*, 350.

Artistic imaginings of dangerous and angry plants show an interest in the possibility of conscious plant vocalization. Wyndham's triffids communicate with one another by rattling appendages on their stalks. Audrey II, the carnivorous alien/plant of *Little Shop of Horrors* speaks and even sings human language, in a much less realistic imagining of plant vocalization. Folkien's Ents move a step further, able in their great anger to bring about physical destruction by the sounds of their voices alone: As they launched their assault on Isengard, the Ents "roared and boomed and trumpeted, until stones began to crack and fall at the mere noise of them" (*The Two Towers*, Book III, Ch. 9 "Flotsam and Jetsam"). Botanist also delves into the lethal potential of plant vocalization, with an album exploring the mythology of the mandrake's "scream."

Together, these songs and stories in which plants take action, work together, speak, scream and commit acts of violence against humans betray an interest in understanding radically Other – alien – life forms. No artist has gone as far in impersonating and taking up the cause of kingdom *plantae* as the California-based oneman black metal band Botanist. Combining these ideas of violent, anthropomorphized plants with the apocalyptic environmentalist morality play, Botanist fantasizes a future in which plants rid the world of human life and inaugurate a new era with themselves as the dominant life form.

¹⁶⁶ In the 1986 film, Audrey II's speech patterns and physical characteristics are based on racist caricatures of African Americans. For an essay unpacking how the film's "monster metaphor is...grounded in white anxiety about racial integration," see: Marc Jensen, "Feed Me!' Power Struggles and the Portrayal of Race in *Little Shop of Horrors*," *Cinema Journal* 48/1 (2008): 66.

The Sound of Botanist

The musician behind Botanist, in the tradition of black metal pseudonyms, operates under the name "Otrebor." He released his first album in 2011, replacing black metal's typical electric guitars with a hammered dulcimer, heavily treated in post-production to meet the genre's demands for strident din; later albums incorporate the guitar, but still heavily feature the hammered dulcimer. In interviews, Otrebor has stated that the choice of the hammered dulcimer was based on his inability to find a guitarist to work with; as a drummer, he found learning the dulcimer easier than taking up the guitar: "for a drummer, it just makes sense to make melody by hitting things in time." Otrebor furthermore found that the hammered dulcimer expanded his ability to create percussive melodies:

You can play paradiddles on a hammered dulcimer. You can't play paradiddles on bass guitar... If you want to include drum rudiments in melody, hammered dulcimer opens up a whole new thing that you couldn't really do on other instruments. ¹⁶⁸

As for the dulcimer's association with Appalachian music, Otrebor says he doesn't "even know the first thing about it." Interviewers have tried to read the use of the hammered dulcimer in Botanist's music as a deliberate turn toward the acoustic in line with the

¹⁶⁷ Lars Gotrich, "Botanist: One-Man, Hammered Dulcimer Black Metal (No, Really)," *NPR: All Things Considered*, last modified September 2, 2011, accessed July 29, 2015, http://www.npr.org/sections/allsongs/2011/09/02/140122676/botanist-one-man-hammered-dulcimer-black-metal-no-really.

¹⁶⁸ *Ibid*.

¹⁶⁹ *Ibid*.

band's eco-critical perspective,¹⁷⁰ but Otrebor has resisted this interpretation, repeatedly emphasizing the dulcimer as a means to percussive melody-making. Moreover, given the extent to which the dulcimer is distorted and otherwise treated in his music, its sound quality is no longer acoustic.

Of the environmentalist black metal bands I have studied, Botanist is the most extreme in his outlook for the future of the human species, declaring that the earth would be better off without us, and that on our way out, we deserve suffering and violence.¹⁷¹ A sticker on the front of his first album even labeled it "eco-terrorist black metal," conjuring up the possibility of connections between Otrebor and fringe groups such as the Earth Liberation Front. While support for eco-terrorist activities would create an exciting

¹⁷⁰ Khaled El-Naqib, "Interview with Botanist," *Rock Era Magazine*, 2015, accessed July 29, 2015, http://www.rockeramagazine.com/mag/index.php/interviews/item/663-interview-with-botanist.

¹⁷¹ Other metal bands known for their involvement in environmental issues include the French band Gojira, who have written environmentally-themed songs such as "Toxic Garbage Island," "A Sight to Behold" (*The Way of All Flesh*, 2008), "Ocean Planet," "World to Come," and "Global Warming," (From Mars to Sirius, 2005). They are also known for their support of Sea Shepherd, a direct-action marine conservation organization, with plans for an EP to benefit the activist group. Sea Shepherd has also received support from German extreme metal band Heaven Shall Burn, with a video from the environmental group being played at concerts on the band's 2013 *Veto* tour. See: André Epp, "Classroom: Heavy Metal Concert – An Area of Excess or a Place of Learning?," in Modern Heavy Metal: Markets, Practices and Cultures, ed. Toni-Matti Karjalainen et al. (Helsinki: Aalto University & Turku: International Institute for Popular Culture, 2015), 79–87. It is tempting to suggest that environmentalist metal artists' support of Sea Shepherd comes from a desire to align aggressive music with styles of activism that are more aggressive and direct – and viewed by some as eco-terrorism (see: James F. Jarboe's (FBI) testimony before the House Resources Committee and Subcommittee on Forests and Forest Health on February 12, 2002). It is worth noting however, that Sea Shepherd has received support from non-metal acts such as the Red Hot Chili Peppers. "Red Hot Chili Peppers Show Big Love for Sea Shepherd at Big Day Out Music Festival," Sea Shepherd, January 22, 2013, accessed December 16, 2015, http://www.seashepherd.org/news-and-media/2013/01/22/red-hot-chili-peppers-showbig-love-for-sea-shepherd-at-big-day-out-music-festival-1480.

narrative for black metal history in which the activities of church burning have been channeled into those of tree spiking, Otrebor claims he is not interested in such activities or their associated political movement; "rather, the eco-terrorist stance is a reflection of the Botanist's view of the natural world's reclaiming of the earth and particularly in direct opposition to humanity. The Botanist sees humanity as flora's nemesis, and as such, flora will do all that it can to eradicate its enemy." In his own view, then, plants themselves are the terrorists, and humans are the victims of their avenging wrath.

Musically, Botanist is cacophonous. A choking, emetic growl ushers in onslaughts of amplified, distorted hammered dulcimer and snappy, over-trebled drums. Together, the drums and the dulcimer create a haze of high frequencies that guitar-based black metal could only fantasize about. It is pitchy percussion at its most abrasive, and the gagging grunts of the vocalist assault the ears. In live performance, the Botanist and his live session musicians wear long, hooded brown robes, sometimes decorated with wreaths or vines. Images of plants are projected on a screen behind the musicians. As with many other black metal bands, creation of a ritual atmosphere is an important part of the live aesthetic.

Beyond upping the sonic ante with his grating dulcimer, Otrebor's shift to a narrative of Botanical revenge marks a thematic shift away from traditional black metal themes, while retaining black metal's interest in the esoteric and arcane. He claims to be a medium for an entity called "the Botanist," who is the voice of the "Verdant Realm,"

¹⁷² Kelly Hoffart, "Deposition: Botanist," *Botanist*, accessed May 9, 2016, http://botanist.nu/interview%20full.

which awaits its chance to destroy humanity and usher in a new era of floral dominion. 173

The lyrics that accompany his music delineate the bloody revenge of kingdom *plantae* in violent detail. The Botanist's fantasies include such delights as humans vomiting blood from the ingestion of black hellebore ("Helleborus Niger"), grayanotoxin found in rhododendrons leading people to a "hallucinogen grave," ("Rhododendoom") and the fatal halting of human protein synthesis caused by *abrus precatorius*, a legume with seeds more toxic than ricin ("Abrus Precatorius"). Indeed, the lyrics read as a graphic ode to the world's toxic plants, and their potential to rule the earth's ecosystems. The frequent use of Latin taxonomical terms and obscure medical terminology pays homage to black metal's tendency toward the esoteric; it is arguably more horrific to croak out "mycorrhiza" than "root fungus."

Beyond the violent potential of toxic plants, Botanist's songs are also a celebration of plants and their diversity. His scientifically meticulous lyrics enumerate what plants offer the world – visual beauty, fragrance, symbiotic relationships with other organisms, and a variety of chemical compounds with the power to nourish or destroy us. His 2014 album *VI: Flora*, in particular, steers almost completely clear of human demise, instead focusing on describing the reproductive traits, leaves, growth patterns and

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¹⁷³ "Botanist Biography," *Botanist*, accessed May 9, 2016, http://botanist.nu/biography.html.

¹⁷⁴ Botanist's detailed presentation of obscure, specialized botanical knowledge inherits and goes beyond the practice of bands like Carcass, an early death metal band known for gruesome lyrics about death and dismemberment littered with medical jargon like "osteoporous enzymes" (from "Pungent Excruciation," *Reek of Putrefaction*, 1988) or "crepitating neoplasm" (from "Ruptured in Purulence," *Symphonies of Sickness*, 1989). Michelle Phillipov devotes chapter seven of her book, *Death Metal and Music Criticism: Analysis at the Limits*, to Carcass' comedic approach to death and gore. See: Michelle Phillipov, "Becoming Death: Pleasure and Play in Death Metal," in *Death Metal and Music Criticism* (Plymouth: Lexington Books, 2012), 107-118.

natural habitats of plants such as wisteria, dianthus and mangrove. (One song, "Cinnamomum Parthenoxylon," considers the titular plant's production of safrole, the precursor to MDMA; this is the only song on the album in which plants deliberately interfere with humans.) On this album, the relationship between humans and plants is contained in human knowledge of the plants; the plants' existences are framed in terms of what humans see and smell. The plants of *VI: Flora* have no agency and no plan for world domination. In general, however, Botanist's work proceeds from a spirit of apocalyptic environmentalism that views plants as the worthy heirs to a planet cleansed of human life.

One of Botanist's most intriguing albums is *IV: Mandragora* (2013), as it brings together the narrative of vengeful plants with a mythology of lethal plant vocalization. *IV: Mandragora* tells the story of an army of mandrakes that exterminates the human race with its lethal screams. The genus *mandragora* (mandrake) belongs to the nightshade family, and the toxic alkaloids it contains have long been valued for their anticholinergic (blocking the neurotransmitter acetylcholine), hallucinogenic and hypnotic effects on humans. These chemicals, in addition to the plant's characteristic large taproot, which is often branched such that it has a vaguely humanoid appearance, led to the proliferation of folklore, witchcraft and mythology concerning the mandrake and its powers. ¹⁷⁵ Botanist's album mixes and matches mandrake lore of a variety of origins, but hews closely to the

local substitute or sometimes counterfeited as mandrake. See: Anthony John Carter, "Myths and Mandrakes," *Journal of the Royal Society of Medicine* 96, No. 3 (2003): 144–147.

most sinister stories, which held that mandrakes sprouted from the ejaculate of hanged men, and would scream when uprooted, killing anyone within earshot.¹⁷⁶

Over the course of five songs, *IV: Mandragora* tells the story of the mandrake army raised by the "Botanist" – the fictional entity "channeled" by the musician Otrebor. Vengeful trees hang their "human prey," and the mandrakes sprout below their corpses. The second song details the mandrake's distinctive botanical features, and its chemical attributes and their effects on humans, while the third and fourth detail how the Botanist will bring the army to maturity: At the vernal equinox, the mandrakes are dug up and replanted on graves. After a month they are dug up again and soaked in milk in which three bats have been drowned, then dried, at which point they "awaken," ready to kill. In the final song, "Mandrake Legion," the army of mandrakes, "progeny of man / now the engine of its demise," destroy the human race:

Shrieking soliders amass Extermination cries piercing Wiping clean the earth.

(Hear this clip of "Mandrake Legion," (1:55-2:25) here:

https://drive.google.com/open?id=0B8p_kK9owPgHVmJJcUR3QmR2Q1E) In this narrative, human corpses provide the seeds for the plants that will eventually destroy their entire species. Sanitized of its violence, it becomes a typical apocalyptic environmental narrative: humanity has sown the seeds of its own destruction, and deserves whatever

¹⁷⁶ This myth naturally resulted in the proliferation of strategies for safely uprooting the mandrake. In the first century, the historian Josephus suggested tying a dog's tail to the mandrake and running away. The dog follows, uprooting the mandrake, and dies from the plant's scream. The dog's owner, having run out of earshot, is spared, and can now safely handle the mandrake root and harness its powers. See: Flavius Josephus, *Josephus: The Complete Works*, trans. William Whiston (Nashville, TN: Thomas Nelson Publishers, 1998), 910.

horrors befall it. What is distinctive about the *Mandragora* narrative is the role of sound in bringing about human demise.

The reality of the mandrake's "scream" is merely the faint groaning and cracking of the taproot pulling free of the soil – sounds which can be heard when uprooting a variety of well-developed, deeply rooted plants. When this sound, however, is amplified by the mythology of the mandrake's powers, it becomes lethal. The sound of the mandrake's scream is never articulated in the course of the music; Otrebor instead leaves the sound up to the listener's imagination. The sound of *IV: Mandragora*, like Botanist's other albums, hovers in the realm of the caustic, heavily emphasizing cymbal crashes and the electronically distorted dulcimer, and creating a cloud of noise in the upper frequency ranges. Electricity amplifies the hammered dulcimer to a grating, acrid, overwhelming mess of sound, just as mythology amplifies the groan of snapping roots to a deadly scream.

Botanist and Apocalyptic Environmentalism

Like Wyndham's novel about the triffids, Botanist taps into the rhetoric of apocalyptic environmentalism, which Lawrence Buell calls "the single most powerful master metaphor that the contemporary environmental imagination has at its disposal." Greg Garrard lays out the power of the apocalyptic for bringing attention to environmental problems: In Western society, Christianity's role in the formation of culture has ensured the importance of the eschaton as idea, as believers await the second

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¹⁷⁷ Lawrence Buell, *The Environmental Imagination: Thoreau*, *Nature Writing*, *and the Formation of American Culture* (Cambridge: Harvard University Press, 1995), 285.

coming of Christ, which will bring with it the end of the world.¹⁷⁸ The imminence of the end times varies among Christian sects, but in general is used as a reason for repentance from sin and moral perseverance against persecution. Apocalyptic logic has been successfully used by a much wider variety of groups, ranging from Nazis and communists to today's environmentalists.¹⁷⁹ In these cases, judgment comes not from the divine, but from "superior" humans (generally the in-group, or "true believers" of the apocalyptic message) or Nature, but the logic of straining toward a total collapse that will result in a cleansed, re-born world remains largely the same. Botanist takes up this logic, depicting a world cleansed by plants fed up with human damage to their world.

Apocalyptic logic is difficult to depict through sound alone, and it is for this reason that this mode of environmentalism has largely been the province of literature and film (as my examples from Atwood, Wyndham, et al. attest); their ability to construct clear narratives that build up to doomsday make them clear choices for expressing this kind of environmentalism. Music, on the other hand, has tended toward the nostalgic mode of environmentalism, which uses "the commemorative and community-building powers of music in the service of ecological approaches." Botanist's investment in apocalyptic environmentalism shows both music's potential for contribution to this metaphor, as well as the challenges of communicating this kind of crisis in a sonic medium.

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¹⁷⁸ Greg Garrard, *Ecocriticism*, second edition (New York: Routledge, 2012), 94.

¹⁷⁹ *Ibid.*, 93.

¹⁸⁰ Rehding, "Ecomusicology between Apocalypse and Nostalgia," 413.

The apocalyptic mode of creative environmentalism uses the imagination of apocalypse to attempt to prevent a real-world crisis of similar proportions. ¹⁸¹ Garrard identifies two modes of apocalyptic thought, which he calls "tragic" and "comic." 182 The tragic strand of apocalypticism is fatalistic, and points toward inevitable doom; it is this strand to which Botanist most closely adheres – in the world of his music, the end of humankind cannot be averted. As Garrard points out, one of the significant stumbling blocks faced by tragic apocalypticism is that its adherents may face ridicule when their predictions fail to materialize. Further, if the apocalypse is truly unavoidable, there is little incentive for change. 183 In comic apocalypticism, on the other hand, events are "episodic and open-ended," changes of course are possible, and good and evil need not be as sharply divided. 184 Comic apocalypticism need not rely on having its exact predictions come true, and its focus on warnings rather than the exact nature of impending doom makes it less prone to breakdown or dissolution into violence. 185 The comic strain, in avoiding futility, often proves more useful for inspiring change; if there is no future and humans have no power to change the course of events, then there is no reason to change our ways. Or as Garrard puts it, "only if we imagine the planet has a future, after all, are we likely to take responsibility for it." The trick, then, is untangling the significance of

¹⁸¹ Garrard, *Ecocriticism*, 94.

¹⁸² *Ibid.*, 94.

¹⁸³ *Ibid.*, 114–115.

¹⁸⁴ *Ibid.*, 96.

¹⁸⁵ *Ibid*.

¹⁸⁶ *Ibid.*, 116.

a project like Botanist, steeped in a tragic apocalypticism that suggests there is no hope for the human race.

Whatever the weaknesses of tragic apocalypticism for inspiring environmental reform, Botanist's project embraces its fatalism. In the context of his project, humanity is the evil from which the natural world struggles for release, and which will be unequivocally eliminated. The indulgence in fatalism is characteristic of black metal, with its tendency toward nihilism and misanthropy. Media scholar Michelle Phillipov has discussed the perceived political lethargy of metal music, finding that "metal's nihilism and fatalism is thought to divert the attention and energies of disaffected youth away from more productive political goals." While the "politics" Phillipov has in mind have primarily to do with socio-economic (in)equality, Botanist's fatalistic view of environmental degradation fits the general description of ostensibly politically apathetic metal that she outlines. Given the esoteric nature of Otrebor's project, in which the voices of plants speak their righteous indignation, it is unsurprising that a practical take-away for listeners is hard to find; the message seems to be that human life is, in the end, inconsequential. Even outside his music, Otrebor remains apathetic with regard to the effectiveness of environmentalism as a political movement. He shows deep cynicism with regard to the current state of environmental politics, suggesting that environmental reform will remain sidetracked unless it becomes a pressing economic issue for those wielding political power:

Unfortunately for the natural world, the issue of saving the environment is primarily the concern of a portion of the middle class in first world nations, which is very nice when all the lefties in San Francisco or New York are making sure

¹⁸⁷ Phillipov, *Death Metal and Music Criticism*, 54.

their compostable garbage is in a special biodegradable bag, or when youth hostels make you pay for your contribution to CO2 emissions, but the rest of the planet's human population, the vast, vast majority, is made up of a) people too poor to know, care, or be able to do something about deforestation or the ozone layer, and b) those of immense wealth who enable those with none to continue to be unable to do anything...When the environment becomes an economic issue rather than a moral one, change will be made. 188

As a musical project, Botanist actively disengages from political realities and focuses instead on building an apocalyptic narrative that destabilizes the assumed significance of human life, and in this interview, Otrebor works to justify this decision, emphasizing what he perceives as the futility of political discourse on the environment. He also suggests that a failure to "save the world" would eventually become irrelevant, as it would only result in the elimination of human life, not all life on earth:

Fortunately for the natural world, even if humanity nukes the planet 800 times over and destroys every living thing on it, nature will bounce back eventually and carry on as it always has. Mankind cannot ruin nature. It can only ruin it for itself.189

And

Humanity's blowing it, and if we don't change, the planet will kill us, and it'll move on.¹⁹⁰

Here, Botanist shows the influence of James Lovelock's popular "Gaia hypothesis," which considers the earth as resembling a single complex organism in which all systems and species are interdependent. Lovelock concludes, however, that many larger species,

¹⁸⁸ Louis Pattison, "'Humanity is Doomed': The Botanist Interviewed," *The Quietus*, February 15, 2012, accessed January 24, 2016, http://thequietus.com/articles/07988botanist-interview-black-metal.

¹⁸⁹ *Ibid*.

¹⁹⁰ Noah Berlatsky, "An Interview with Black Metal's Green Prophet (of Doom)," *The* Awl, July 29, 2014, accessed January 9, 2015, http://www.theawl.com/2014/07/aninterview-with-black-metals-green-prophet.

including humans, are inessential for the earth's survival and could be eliminated without much harm to their ecosystems.¹⁹¹ Environmental philosopher Kate Soper further refines this idea that humanity cannot actually destroy the earth by distinguishing between what she refers to as "deep-level" nature, the "complex of causal powers and structures" that determines what happens to "surface-level" nature – the "set of resources and surface environment," which we could very well destroy.¹⁹² It is this "deep-level" nature that humanity cannot destroy: "Nature at this level is indifferent to our choices, will persist in the midst of environmental destruction, and will outlast the death of all planetary life."¹⁹³

Botanist seems to execute apocalyptic judgment on the world with an indifferent shrug of the shoulders, exhibiting no attachment to his own place in the world. Phillipov has argued that it is this cynicism that has led to charges of metal's political impotence. She goes on to assert, however, that hastening to conclude that extreme metal is politically ineffective overlooks the listening practices that are unique to extreme metal. She contends that the "politics" of extreme metal cannot be approached in the same way that music with clear vocals and more straightforward song structures – and thus in her opinion a clear message – can. Instead, extreme metal must be understood with regard to the listening pleasures it affords: 194 the embrace of "transgressive forms of

¹⁹¹ See, for example: James Lovelock, *Gaia: A New Look at Life on Earth* (Oxford: Oxford University Press, 1979).

¹⁹² Kate Soper, *What is Nature? Culture, Politics and the Non-Human* (Cambridge: Blackwell Publishers, 1995), 195.

¹⁹³ *Ibid.*, 159-160.

¹⁹⁴ Phillipov, *Death Metal and Music Criticism*, 74.

representation,"¹⁹⁵ that follow in the tradition of the carnivalesque and its disruption of identities, boundaries and hierarchies.¹⁹⁶ Ronald Bogue, from his Deleuzian perspective, similarly finds that the intensity of extreme metal's listening experiences "converts the lived body into a dedifferentiated sonic body without organs."¹⁹⁷ Both Bogue and Phillipov thus find that the pleasures of listening to death metal involve, at least on some level, the disturbance or disruption of the listener's sense of integrated identity and enable a "safe" exploration of the abject and liminal subjectivities. In this case, engagement with the fatalistic apocalypticism of a band like Botanist enables listeners to explore the limits of their own subjectivity and thus feel themselves as part of some larger process in which humanity's centrality in the world is interrogated.

Botanist's project strives toward an eco-centric perspective in which human life has – at best – no more value than other life forms, and is irrelevant in the grand scheme of things. From an anthropocentric point of view, his lyrical narratives express a hopeless, unavoidable apocalypse; from the invoked perspective of the plants, however, the stories communicate hope for a better world. Kate Soper critiques the possibility of achieving a truly eco-centric perspective, as our ideas of plants' or animals' intrinsic value are, in the end, projections of human desires onto nonhuman beings. As she writes,

If nature does genuinely have value independently of human estimation of it, then, strictly speaking, we cannot know what it is, nor, a fortiori, applaud or condemn it and should refrain from pronouncing on its qualities....The ascription of 'intrinsic' value remains human-oriented both in the sense that the worth of nature is being judged and advocated by reference to human criteria of value (notably,

¹⁹⁵ *Ibid.*, 90.

¹⁹⁶ *Ibid.*, 110.

¹⁹⁷ Ronald Bogue, "Becoming Metal, Becoming Death..." in *Deleuze's Wake: Tributes and Tributaries* (Albany, New York: State University Press of New York, 2004), 106.

the value placed on non-instrumental valuing), and in its assumption that human beings, unlike any other species in nature, could in principle subordinate their own interests to those of the rest of the 'rest of nature.' 198

In other words, Botanist's assessment of plant revolution as justice is a human act of judgment, rather than an ability to "get beyond" an anthropocentric perspective.

Nevertheless, there may be value to using the idea of ecocentrism to disturb and interrogate one's sense of self and the centricity of one's own narrative. As Soper continues, ecocentric perspectives "invite us to think more seriously about how nature may be said to have value, and about the incoherence of attempting to speak for this except by reference to human utilitarian, moral or aesthetic interests and predispositions." Botanist's music works in this vein, inviting listeners to reconsider their assumptions about the relationship between human and plant life.

Botanist brings together many of the threads that run through black metal – the elitism, the nature-worship, the desire for transcendence, the misanthropy, the theatricality, the solipsism, the spirituality, the violent lyrics, the raspy, harsh timbres and the errant harmony. Otrebor orients his whole project around imagining the looming moment when plants will rise up and mercilessly annihilate humans and their civilization – and he revels in this eventuality. His approach to his artistic work is intimidating in its attention to detail and mythical in the scope of its prophecy, attempting to bring listeners toward a primal terror that gives way to reverence for nature's power.

¹⁹⁸ Soper, What is Nature?, 255–256.

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¹⁹⁹ *Ibid.*, 257.

Interlude

Botanist hews closely to black metal's historical proclivity for fantasy, as seen in the Norwegian scene's daydreams of an ethnically homogeneous, neo-Pagan Norway – ideas that were based in both misanthropy and ill-informed nostalgia. Botanist's fantasy, however, is not based on a misunderstanding of the past, but a projection into the future and an indictment of all of human civilization. It tries to build a musical world that conjures up Daniel Grimley's exhortation to "Listen, or else..." Botanist's tone is bleak and moralizing, and resonates with the ideas of writers like Roy Scranton, whose 2015 book Learning to Die in the Anthropocene: Reflections on the End of Civilization candidly forecasts the (self-inflicted) demise of human civilization at the hands of anthropogenic climate change.²⁰¹ In Scranton's view, most of what we consider environmental activism today (marches, summits, social media campaigns, etc.) is weak, ineffectual and pointless. He suggests, in line with Aaron Allen, that it is humanistic study that has the potential to interrupt the inexorable march toward apocalypse, by "suspending stress-semantic chains of social excitation through critical thought, contemplation, philosophical debate and posing impertinent questions."²⁰² Botanist's music participates in this activism-by-disruption by conjuring up a world in which human dominance has been upended. In Botanist's imagination, we are already (as good as) dead), which leads to the question, "what are we going to do about it?"

²⁰⁰ Daniel Grimley, "Ecocriticism and Musicology," (colloquium at the annual meeting of the American Musicological Society, Nashville, Tennessee, November 6-9, 2008.)

²⁰¹ Roy Scranton, *Learning to Die in the Anthropocene: Reflections on the End of Civilization* (San Francisco: City Light Books, 2015).

²⁰² *Ibid.*, 108.

Panopticon, whose album *Kentucky* I discuss below, moves away from this history of dwelling in fantasy, grounding his music much more firmly in history and current reality, and relying on contemplation more than disruption as a means of inspiring change. This approach signifies a turning point for black metal as a genre, demonstrating that it can retain its energetic wrath while addressing complex problems, and treating human suffering with empathy rather than disdain. Botanist's music mocks the humans who suffer and die in his apocalyptic fantasy; Panopticon's mourns with those who suffer at the hands of the coal industry.

Part 2: Black Metal and Appalachian Coal Culture in Panopticon's *Kentucky*Prologue

November 15, 2015

From 30,000 feet in the air, the Appalachian mountains appear like a wrinkled blanket laid over the land, or like rows of crimped dough. That afternoon, I was flying back to D.C. from the 2015 meeting of the American Musicological Society, held in Louisville, Kentucky. Hours earlier, I had given a paper on *Kentucky*, a 2012 black metal album dealing with the social and environmental costs of coal mining in Appalachia. From the plane, cloudless skies permitted miles and miles of sunlit visibility through my south-facing window. As we flew east, rolling farmlands gave way to lumps of hill, and finally, the wrinkled ridges of the mountains. The trees had dropped their leaves for the winter, giving the mountains a distinct dark brown hue when viewed from above. I had thought of reading during the flight, but the landscape extending below held me in thrall.

I put on some music, ²⁰³ and pressed my forehead to the windowpane. The mountains rolled on as I watched, edged here and there with slender roads unfurling toward tiny towns.

Until there, in the middle of the blanket, a piece was missing – just gone. And then another and another. Here and there, the dark brown of the November forest gave way to the dusty brown of the mountains' innards, black pools, false flatness and patches of green. Not far off, smoke rose from amidst the trees. I realized, then, that we were flying over open and reclaimed mountaintop removal coal mines, and the power plants that burned the coal. From above, I could see the entire process at a glimpse: the bare spot where the trees had been shorn from the mountain, the flattened contour where the mountaintop had been blasted away, the valley filled with the "overburden" removed from the mountaintop, the falsely terraced hillsides where the coal had been carved away, the coal sludge ponds perched atop the beheaded mountains – their black fluid dangerously close to spilling over the edge and running down in a river over whatever lay below – and sometimes, adjacent to the open areas, strange patches of uniformly flat green that signaled the reclamation of land post-mining. Wide dirt roads crisscrossed the devastation, but when I let my eye follow them, they never seemed to meet highways or towns, as if the mines were meant to be cordoned off from view.

Viewed from above, the environmental devastation wrought by mountaintop removal mining presented itself with splendid clarity: there were holes or terraced mesas where mountains had previously been. On the ground, the impression had been more broken, more tinged with the complexity of human lives, relationships and conflicted

²⁰³ Susanne Sundfør's 2015 album, *Ten Love Songs*, if you must know.

desires. As part of my research for the AMS paper, in late August of 2015 I had driven down into the southern coalfields of West Virginia to see mountaintop removal mining with my own eyes, and hear its sounds and those of some of the voices that live with the impacts of mining on a daily basis. The impetus for this research was *Kentucky*, a 2012 concept album that moves from the screaming, shrieking world of black metal through moments of bluegrass to revivals of 1930s labor rights songs, as it reflects on and critiques the history of exploitation – human and environmental – in central Appalachia. Before encountering this album, I was unaware of mountaintop removal mining, and though cognizant of Appalachia as an emblem of rural poverty in America, was only dimly aware of coal mining's legacy of labor exploitation. Growing up in northern Virginia, Appalachia had always been for me a place of great natural beauty; it was where I went hiking, camping and stargazing – a place of exploration and recreation.

Listening to *Kentucky* for the first few times, then, was a learning experience for me, and its impact was enormous. Until I looked them up, I couldn't understand the screamed lyrics, but the archival samples and covered labor songs spoke clearly of the suffering of coalfield residents and the social and environmental consequences of modern surface-mining practices. Investigating the artist's lyrics showed that the album traces a roughly chronological outline of suffering in Appalachia from the abuse of its Native American population in the nineteenth century to the present day, while continuously meditating on the beauty of the mountain landscape. My research took a dive into Appalachian coal mining – its history, techniques, and impact on the local economy. Previous research on the intersection between music and Appalachian coal culture, such as Travis Stimeling's 2012 article "Music, Place and Identity in the Central Appalachian

Mountaintop Removal Mining Debate," wove together the history and impact of mountaintop removal mining, local ideas of landscape and human-environment relations, and musical responses to mountaintop removal mining, both for and against, and their significance to the region's environmental debates. Chronologically and musically, *Kentucky* seemed to pick up right where Stimeling's article left off, building on the local tradition of musical responses to coal mining, while introducing the new sonic aspect of metal.

Kentucky stands at the intersection of numerous musical and cultural histories: protest music, environmentalist music, black metal, bluegrass, labor rights and environmental activism all coalesce into an album that moves freely between meditation and pointed critique. Untangling all these tributaries is worth the effort, however, as it reveals the complexity of articulating an environmentalist viewpoint that simultaneously shows sensitivity to the needs of historically exploited humans. In taking leave of black metal's tendency toward misanthropic fantasy, and grounding itself in social and historical realities, the album charts a radical new path for the genre that emphasizes the interconnectedness of landscape, labor and human life. In the first half of this chapter, I trace the work that *Kentucky* does in bringing environmental debates into the world of extreme metal, exploring how the sounds of metal amplify the anger of disenfranchised Appalachians while building on their long legacy of protest music. I begin by introducing the album and contextualizing it within ecocritical discourses of landscape, memory and indigeneity, as well as within the coal region's distinct socio-economic background. I then examine how the use of sounds – black metal, bluegrass, archival recordings and

²⁰⁴ Travis Stimeling, "Music, Place and Identity in the Central Appalachian Mountaintop Removal Mining Debate," *American Music* 30, No. 1 (2012): 1-29.

sound effects – create a musical work that presents the land and residents of southeastern Kentucky as an unbroken line of victimhood from the nineteenth century to the present day.

Introduction

Kentucky was released in 2012 by one-man black metal band Panopticon, blending black metal with bluegrass, ²⁰⁵ covers of coal miners' protest songs and samples from archival recordings, while reflecting on the history of social and environmental exploitation in central Appalachia. Focusing in particular on the history of eastern Kentucky, the album progresses from the oppression of Native Americans in the nineteenth century, to the exploitation of coal workers in the early part of the twentieth century, before settling on the environmental damage wrought in the last fifty years by mountaintop removal coal mining. Musicians with ties to the Central Appalachian Coal Region have long used their work to critique the area's protracted history of poverty, environmental destruction and political oppression. ²⁰⁶ Such music often reflects on the

²⁰⁵ Bluegrass is a subgenre of country music known for its virtuosic playing style and influences from jazz, and has its roots in the music of Appalachian settlers from the British Isles. It is customarily played on acoustic string instruments such as the fiddle, banjo, guitar, mandolin, upright bass and Dobro. Vocals typically feature a "high, lonesome" sound.

²⁰⁶ See, for example, Stimeling, "Music, Place and Identity," 1-29. Other non-mainstream bands have dealt with issues surrounding coal mining. Appalachian Terror Unit, for example, is a self-described "anarcho punk/crust" band based in Huntington, West Virginia. Their songs feature perspectives on a wide range of leftist issues, including environmentalism and bringing an end to coal mining, but also sexism, sexual assault, racism, police brutality and the war on drugs. Stylistically, their music remains in the punk idiom, with lyrics shouted, screamed or spoken. Unlike Panopticon, which has yet to perform live, Appalachian Terror Unit performs and tours regularly, often at events organized by activists. In the 1980s, the English industrial act Test Dept collaborated

effects of mining on local communities and the personal meaning found in encountering the mountain landscapes that locals consider home. Panopticon's album borrows much from this tradition in terms of both text and music, but adds the bracing new sonic dimension of black metal. While black metal's erstwhile and infamous themes of Satanism, fascism and ethnic Paganism can still be found in twenty-first century black metal, 207 albums like *Kentucky* turn the genre's capacity for raw musical wrath toward social and environmental criticism. Here, Austin Lunn (the multi-instrumentalist behind the band, and a Louisville native) channels black metal's energy of revilement, along with its longstanding interest in sublime landscapes, into a critique of corporate mining practices that damage the environment and oppress residents. While black metal may seem an unlikely venue for ecocriticism and promotion of labor rights, the buzzing and blasting of the black metal sound world has the strength to echo the chaotic din of the mining process itself, the music's capability for rage amplifying the anger of disenfranchised Appalachians.

Kentucky and Ecocriticism

Ecocritical readings of music can work toward untangling how music assists in building ideas of landscape, home, and place-based identity, thereby mediating

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with the South Wales Striking Miners Choir, resulting in the 1984 LP *Shoulder to Shoulder*. All profits from the recording supported the strike. Unlike 2012's *Kentucky*, however, *Shoulder to Shoulder* is concerned exclusively with labor rights; the environment is not on the radar. S. Alexander Reed discusses Test Dept's unflinchingly political approach to music-making. See: S. Alexander Reed, *Assimilate: A Critical History of Industrial Music* (New York: Oxford University Press, 2013), 148–150.

For an introduction to the importance of these themes to the formation of early black metal, see, for example: Kahn-Harris, *Extreme Metal*, 38–43.

understanding of our natural surroundings. *Kentucky*, as a product of both black metal and Appalachian music culture, particularly draws on ideas of geographic periphalization, place-based heritage, and the association of mountains with the divine. ²⁰⁸ Awe in the presence of natural beauty is a longstanding topic of black metal, with particularly strong links to the Norwegian scene's predilection for snowy forests and majestic fjords, an expression of National Romanticism that stretches back to the nineteenth century. Charles Rosen notes that the Romantic interest in nature was no longer simply about evoking or imitating natural beauty, but showing "the correspondence between the sensuous experience of Nature and the spiritual and intellectual workings of the mind."²⁰⁹ Rosen's statement addresses the tendency to think of the wilderness as something completely external to ourselves; yet, as historian Simon Schama reminds us, "it is our shaping perception that makes the difference between raw matter and landscape."²¹⁰ Romantic composers, the Norwegian black metal bands, and Appalachian musicians leading up to and including *Kentucky* have all looked to the meanings found by their communities in the "raw matter" of their natural surroundings. Sociologist Rebecca R. Scott finds that Appalachian culture takes pride in its sense of rootedness, with many residents embracing the place-based identity that Americans generally reject in favor of mobility.²¹¹ The desire

²⁰⁸ Stimeling, "Music, Place and Identity," 9. Simon Schama, *Landscape and Memory: The Shape of Nature Past and Future* (London: Harper Perennial, 1995), 413–421.

²⁰⁹ Charles Rosen, *The Romantic Generation* (Cambridge, Massachusetts: Harvard University Press, 1995), 129.

²¹⁰ Schama, Landscape and Memory, 10.

²¹¹ Rebecca R. Scott, *Removing Mountains: Extracting Nature and Identity in the Appalachian Coalfields* (Minneapolis: University of Minnesota Press, 2010), 127.

to live their entire lives in their birthplace indicates that their land forms a large part of who they are, and what they inherited from past generations, adding layers of nostalgia to their experience of the mountains.

The extent to which Lunn draws on local stories and music surrounding the history of coal mining in Kentucky firmly positions the album within a long tradition of Appalachian "place-based rhetoric that interrogates the essence of Appalachian identity and raises important questions about who has the right to speak on behalf of past, present and future coalfield residents." This rhetoric prizes indigeneity and the image of a community isolated and left behind by the rest of the nation, resulting in a unique cultural enclave with distinctive language, music and religion. **Rentucky* embraces this intersection of music, landscape and geographical and cultural marginalization in a way that moves beyond the National Romanticism of the Nordic and Cascadian black metal bands. Drawing on this lineage of ecologically concerned black metal, it goes a step further in allowing individual voices – rough, emotional and opinionated – to speak with the music, marring, illuminating and expanding his musical and lyrical ideas with their own.

Southeastern Kentucky: Poverty and Labor Issues

Kentucky deals with several events in the state's history that continue to impact the region to the present day. Harlan County, located in the depressed southeastern region of the state, was the site of a violent, decade-long struggle for labor organization, and the

²¹² Stimeling, "Music, Place and Identity," 20.

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²¹³ Scott, *Removing Mountains*, 33.

source of two of the labor songs *Kentucky* covers. Conditions for Harlan County miners began deteriorating in 1929, with the onset of the Great Depression, and the added difficulty imposed by wage cuts in 1931 culminated in a drive for unionization.²¹⁴ Proand anti-union members of the community grew harshly divided, and the Harlan County Coal Operators' Association effectively paid local sheriffs and their deputies to prevent unionization.²¹⁵ Between 1931 and 1939, eleven people were killed – six miners and five law enforcement officials, earning Harlan County the nickname "Bloody Harlan." Harlan County was the site of another coal mining labor dispute in 1973; this strike was documented in the film *Harlan County USA*, from which Lunn draws an extensive sample.²¹⁶

Harlan County and the surrounding area remain depressed today. According to 2010 census data, nearly one third of the residents of Harlan County live below the poverty line. In 2014, a *New York Times* analysis ranked several eastern Kentucky counties the most difficult places to live in the U.S.²¹⁷ Harlan County was ranked 3,112 out of 3,135 counties, with a median income of \$26,758, 13.2% unemployment, only 10.7% of the population having a college degree, and an obesity rate of 43%.²¹⁸

²¹⁴ John W. Hevener, *Which Side Are You On? The Harlan County Coal Miners*, 1931-39 (Chicago, IL: University of Illinois Press, 1978), 10–11.

²¹⁵ *Ibid.*, 176–177.

²¹⁶ *Ibid.*, 177.

²¹⁷ Alan Flippen, "Where Are the Hardest Places to Live in the U.S.?," *The New York Times*, June 26, 2014, accessed January 19, 2016, http://www.nytimes.com/2014/06/26/upshot/where-are-the-hardest-places-to-live-in-the-us.html? r=0.

²¹⁸ *Ibid*.

Mountaintop Removal Mining

Other portions of the album deal with so-called "Mountaintop Removal Mining" (MTR). MTR was developed in the 1960s as a cheaper, safer, higher-yield alternative to deep mining. Rather than tunneling into the mountains, MTR uses explosives to remove soil and rock – "overburden" – from the tops of mountains, relocating it into neighboring valleys, until the coal seam is exposed and can be excavated with draglines. This method of mining requires fewer workers, provides safer above-ground working conditions, and can move massive amounts of coal quickly, using some of the world's largest heavy machinery. Since 1977, MTR operations have been required to return the mined land to its "approximate original contour," which means placing the overburden back onto the mountain, re-grading the land, covering it with topsoil and planting vegetation. ²¹⁹ As companies are not required to maintain the land after the initial reclamation process, their process tends toward quick fixes that do not culminate in permanent re-vegetation, resulting in widespread erosion.²²⁰ Vast areas of land remain deforested, and valley fills have destroyed hundreds of miles of streams, resulting in lasting changes to the ecosystems they supported and the rivers into which they fed.²²¹ Beyond the environment

 $^{\rm 219}$ "Surface Mining Control and Reclamation Act of 1977," 1977, accessed January 19, 2016,

 $\frac{http://legcounsel.house.gov/Comps/Surface\%20Mining\%20Control\%20And\%20Reclamation\%20Act\%20Of\%201977.pdf, 65.$

²²⁰ Shirley Stewart Burns, *Bringing Down the Mountains: The Impact of Mountaintop Removal on Southern West Virginia Communities* (Morgantown, WV: University of West Virginia Press, 2007), 123.

²²¹ *Ibid.*, 126–128.

itself, residents of MTR areas live with the tremendous noise and home-damaging vibrations of blasting, layers of coal dust coating their property, and the fear of coal waste leaks.²²² Furthermore, one of the few reasons Appalachian residents have supported the coal industry is its promise of steady employment; MTR, however requires far fewer workers than underground mining, resulting in increasing coal yields but decreasing employment.²²³ Today, MTR operations produce around half of the coal mined in eastern Kentucky, with the remainder coming from underground mines.²²⁴

Unsurprisingly, energy companies generally try to keep mountaintop removal mines out of public view; armed guards are often posted at the entrance to mine access roads. The access roads themselves may be kept away from towns and major public roads, as was apparent when viewed from the air. In addition, anti-mountaintop-removal activists working in the region often face harassment from coal operators and their allies. The activists I spoke with had been threatened with guns, had their cars' brake lines cut and lug nuts loosened, and faced thousands of dollars in trespassing fines. Many of them had lost friends or relatives to cancers having a suspiciously high rate of incidence in mining areas. No one drinks the tap water. While I was visiting with them at their office, a passing driver dumped a load of garbage on their lot.

Initial encounters with mountaintop removal can elicit visceral reactions, particularly from individuals with strong ties to the area. When I asked Austin Lunn to

²²² *Ibid.*, 33–39.

²²³ *Ibid.*, 67–68.

²²⁴ "Kentucky Quarterly Coal Report," 2015, accessed January 19, 2016, http://energy.ky.gov/Coal%20Facts%20Library/Kentucky%20Quarterly%20Coal%20Report%20%28Q3-2015%29.pdf, 2.

describe his initial encounter with MTR, he said, "I remember the first time I saw mountaintop removal. I pulled over on the side of the road, got out of my truck and looked at it for a good twenty or thirty minutes. It was so gnarly I cried."²²⁵

Nevertheless, mountaintop removal mining, and coal mining more generally, remains a contentious issue in central Appalachia, and pro-coal sentiments run deep, sometimes even among those whose lives have been negatively impacted by the industry. Rebecca R. Scott provides a detailed account of the social, political, religious and economic forces that shape discourses around coal mining (both deep and surface) in Appalachia. Her work shows how the idea of "coal heritage" remains central to regional identity, even in the face of the industry's twenty-first century decline. Focusing particularly on music's role in the debate, Stimeling's 2012 article summarizes pro- and anti-coal sentiments as they emerge among central Appalachian residents, considering the religious, economic and social reasons that lead some residents to support MTR.

Kentucky: Sounds, Texts, Sentiments

The sounds and texts of *Kentucky* are brought together to form a narrative of unbroken oppression. The album takes a long, roughly chronological perspective of the history of exploitation and abuse of the local residents in the southeastern portion of the state, from the treatment of Native Americans in the early nineteenth century, to the strikes of the 1930s, and ending with issues of MTR. I begin with the labor songs Lunn

²²⁵ Austin Lunn, interview by author, email, October 7, 2015.

²²⁷ Stimeling, "Music, Place and Identity," 6–7 and 13–15.

²²⁶ Scott, Removing Mountains, 137-168.

covers – historical texts that ground the album – before turning to the sounds of black metal, archival samples and the lyrics Lunn screams.

Labor Songs

Lunn buttresses his album with the performance of three historical coal mining protest songs. Two of these originated in the Harlan County Mine Wars of the 1930s, while the third stems from the emergence of MTR. Together, these songs authenticate the album's interest in historical context. The first two use an acoustic, bluegrass-based sound to communicate pastness; he does not bring them into the black metal sound world of the present. The first of the protest songs, "Come all ye coal miners," was originally composed in the 1930s by Sarah Ogan Gunning, a coal miner's wife and communist sympathizer. The lyrics, which exhort the oppressed coal miners to join the union and "sink this capitalist system in the darkest pits of hell," frequently do not scan perfectly into her melody, giving the song a spontaneous and improvisatory quality. The song builds on Appalachian ideas of belonging to both the region and coal mining by birth ("I was born in old Kentucky, in a coal camp born and bred"), as well as on the image of the exploited, but brave and self-sacrificing coal miner ("Coal mining is the most dangerous work in our land today/ with plenty of dirty slaving work and very little pay"). The song nowhere suggests that mining itself should end, focusing instead on building up the wretchedness of the work and the stinginess of the employers.

Lunn also covers "Which Side Are You On?" – a prominent pro-union song that played an important role in both the 1930s Harlan County Mine Wars and the 1970s Harlan County strikes. The song was originally written in 1931 by Florence Reece, a

union organizer, Communist sympathizer and coal miner's wife, and its text aligns

Appalachian masculinity with union membership, while the "gun thugs" – strike breakers

– are glossed as cowards:

They say in Harlan County, there are no neutrals there. You'll either be a union man, or a thug for J.H. Blair. Which side are you on? Oh, workers can you stand it? Oh, tell me how you can. Will you be a lousy scab, or will you be a man? Which side are you on?

Reece herself, then in her seventies, performed the song several times during the 1970s strikes. Lunn adds banjo and a bass drum to the song, but sings the opening lines ("Come all you poor workers, good news to you I'll tell/ of how that good old union has come in here to dwell") a capella, with crackling distortion used to suggest the sound that would come through a megaphone, echoing Reece's performances for crowds of strikers in the 1970s. (This clip can be heard here:

https://drive.google.com/open?id=0B8p_kK9owPgHa1VyRDB5Q194cFk.) The sound of these opening lines drifts over an imaginary crowd of gathered strikers, exhorting them to listen and gesturing at the song's history.

Lunn's performance of "Black Waters" moves toward black metal's murky sound world; the song deals with the social and environmental costs of MTR – problems that arose in the past, but continue in the present. Jean Ritchie, a Fulbright scholar and folk musician, originally composed "Black Waters" in 1967, when MTR was relatively new. (Listen to a short clip of Ritchie's original here:

https://drive.google.com/open?id=0B8p_kK9owPgHMTJoeUpGRDN6ZDg.) Instead of the straightforward bluegrass performance he used with the previous two, here, Lunn drowns his voice in reverb until the words, and sometimes even the tune, become

obscured. His backing music consists of blurry, ethereal synthesized chords – reminiscent of atmospheric black metal tracks – with a softly strumming guitar providing the only rhythmic differentiation. In addressing issues that are both historical and contemporary, he brings the sound of this song into the possible world of black metal, particularly its hazy, ambient side. This interpretive choice, which renders the song nearly unrecognizable, acknowledges the fact that in the nearly fifty years since Ritchie composed the song, its message has gone largely unheeded. The murky, muddy music becomes the black waters – coal sludge running right over and through Ritchie's words of lament and warning.

"Black Waters" builds on a nostalgic sense of home, framed primarily in terms of the "clear waters" that were, and the "black waters" that exist as a result of mining. It equates the destruction of the mountains' contours with destruction of the memories inscribed in them:

In the coming of the springtime we planted our corn. In the end of the springtime we buried our son. In the summer comes a nice man who says everything's fine my employer just requires a way to his mine. Then they tore down the mountain and covered my corn and the grave on the hillside a mile deeper down. And the man stands and talks with his hat in his hands while the poisoned black waters rise over my land. Sad scenes of destruction on every hand. Black waters, black waters run down through my land.

(Listen to this passage of Panopticon's version of "Black Waters" here:

https://drive.google.com/open?id=0B8p_kK9owPgHc1VBTmVSQmtIRms.) The disposal of overburden into the valley results not only in the destruction of the year's corn crop, but also the erasure of a family gravesite. Arguably, the son remains buried

destruction of the family's sense of rootedness, and therefore, sense of self. By performing the songs of workers' rights advocates such as Gunning and Reece, Lunn sets his project apart from black metal's history of fascist tendencies.²²⁸ Furthermore, by embracing the music of these three women (Gunning, Reece and Ritchie), and performing it in his own (male) voice, he adopts a feminine perspective on the damages of mining, reinforcing oft-suppressed voices and articulating feminine suffering, while simultaneously reminding listeners of the vital role women have played in shaping Appalachian coal culture. 229 While the album broadly expresses concern for the environmental damages caused by coal mining, Lunn never suggests outright that all mining ought to be stopped; he seems more concerned with the human stories of oppression and greed, and with today's miners and mountain residents having safety and fair wages. As he said to me, "[Kentucky] isn't anti-miner in any way; it's a criticism of the practices that not only disregard the environment, but also limit the jobs available to the community...the album is about the preservation of our environment but also the consequences of a very human agenda on that environment." ²³⁰ The performance of these songs also allows Lunn to demonstrate his understanding of history, using words from the past to shore up his own opinions and prove the authenticity of his contribution to the region's legacy of musical protest.

there, but the re-contouring of the hillside becomes a re-contouring of memory and a

²²⁸ See, for example: Kahn-Harris, *Extreme Metal*; and Moynihan and Søderlind, *Lords of Chaos*.

²²⁹ Lunn makes minor changes to the lyrics of "Come All Ye Coal Miners," turning "I am a coal miner's wife" to "I am a coal miner's son," so that the opening and closing lines make more sense in a male voice.

²³⁰ Austin Lunn, interview by author, email, October 7, 2015.

Sounds: Mining, Nature, Metal

Kentucky anchors these protest songs with lengthy tracks that combine the sounds of black metal, bluegrass, archival samples and sound effects to address the environmental and human costs of the coal industry. Several of Lunn's lyrics demonstrate a particular interest in sound – the sounds of heavy machinery, insects and weather, and even the sound of the Big Bang. In "Black Soot and Red Blood," Lunn's text juxtaposes the strident sounds of mining with the sound of a brood of cicadas. ("Tonight the disharmonic symphony of the cicadas plagues my ears/ Drifting off to the mind-numbing hum of grinding gears"). The roar of a brood of periodical cicadas (Magicicada) can be deafening, dominating the outdoor soundscape for the summer weeks they spend above ground. Collectively, their droning buzz ebbs and dissipates, like the strident whir of a circular saw speeding up and slowing down, and as Lunn suggests, like the roar of a distant, tireless machine. The cicada has long been a symbol of insouciance in Western culture, an insect that improvidently spends the summer singing while the ant prudently gathers food for the winter (this moral tale appears as early as Aesop's Fables, ca. 600 BCE). The buzzing body of the cicada is glossed here as equivalent to the machinery of mining; they drone on, without concern for the future or the long-term consequences of their actions. Here, cicadas and machinery both participate in the local soundscape, signaling a preference for momentary advantage over long-term prosperity, an image of the cheapness of life and landscape in the coalfields.

In "Killing the Giants as They Sleep," on the other hand, the lyrics juxtapose the sounds of mining with the act of creation/the Big Bang. ("You hack at the mountain and

scrape away for your simple need what was formed by silent gods on the day the void first burst with sound.") Here, the colossal sound of nature coming into being is a good at which mining slowly chips away. While the suggestion that the Appalachians are as old as the universe is a gross exaggeration (they are estimated to be a few hundred million years old), Lunn here draws on the cult of the past, which, as cultural geographer Yi-Fu Tuan says, "calls for illusion rather than authenticity...a mood of time-soaked melancholy;"231 what is old should be preserved as a support to human emotion and identity. This passage further gestures at the impossibility of fully comprehending the mountains' timescale of existence in human terms, effectively de-centering human temporality, if only for a moment. At other points in the song, industrial sounds suppress, interrupt and destroy the sounds of nature, which are depicted as a source of human comfort. ("We wept as we passed through the mountains clothed in July clouds, under the restraint of power lines, their fury bursting through the summer haze as ethereal music filled the air...soot-grinding gears halt serenity." Listen to this passage here: https://drive.google.com/open?id=0B8p_kK9owPgHM3ZJLWhDSV8xRGs.) The lyrical, soaring melodies of this song, occurring alternately in the guitars and tin whistle, float above the screams and blast beats that fill in the texture, gesturing at the emotions that the presence of the mountains trigger in Lunn. This song in particular foregrounds environmental concerns, setting aside the issues of labor rights to focus on the mountains themselves – namely, their beauty and "timelessness" – and framing their destruction as an injustice.

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²³¹ Yi-Fu Tuan, *Space and Place: The Perspective of Experience* (Minneapolis, MN: University of Minnesota, 1977), 194–195.

Interwoven with his music and lyrics, archival recordings fill the album with the voices of coal miners, their family members and the coal operators with whom they are locked in struggle. The voices are blended into the songs with sound effects suggesting that they are of the past, that they are the evidence supporting the musical rage. The samples come from a variety of sources, including documentaries such as *Harlan County USA*, courtroom proceedings, and interviews Lunn conducted with friends affected by the coal industry.²³² Together, these voices provide gritty details, both in the grains of the voices that speak and the content of their stories, and provide a rhetorical and historical framework for Lunn's more poetic lyrics, allowing him to frame present anger in terms of past events.

"Black Soot and Red Blood" includes a lengthy sample from the 1976 documentary *Harlan County USA*, in which a retired miner describes the Harlan County Mine Wars of the 1930s. (The film mainly covers the strikes of the 1970s, but uses the 1930s strikes to provide framing and context.) The unnamed miner's voice is gravelly with age, and though he speaks with energy, each breath is audible as a wheeze, perhaps a consequence of his years in the mines. (Listen to this passage here: https://drive.google.com/open?id=0B8p_kK9owPgHalBUQIZLMUI0Y1U.) Behind his voice and the acoustic guitars, one hears the gentle whirring of an early film reel – a signal that we have entered the world of old images, an era that flickers, both visually and aurally. The man tells his version of events, which focuses on the abuses suffered by the miners and the realization that if they "stuck to their organization and stuck together in solidarity [they] could defeat [the coal companies]," (1:30 in the clip) but also includes

²³² Austin Lunn, interview by author, email, October 7, 2015.

the mention of the retaliatory violence dealt by the unionists; Lunn, however, chooses to make this portion of the story difficult to hear by bringing distorted electric guitars back in over it (2:07 in the clip) – the man's voice fades into the background, and we are brought gradually back into the sound world of black metal – the sound of present anger. By obscuring the latter part of the man's story, Lunn simplifies history and clarifies his allegiances.

Other samples in the album present arguments, struggles and protests. The ending of "Black Soot and Red Blood" fades into a crowd chanting, "Strike! Strike!" with intermittent screams of rage and/or pain in the background. (Listen to this passage here: https://drive.google.com/open?id=0B8p_kK9owPgHamROMHV4NXFmWWM.) At this moment, all that remains of the music is a single high-pitched screeching, distorted guitar tone that gradually dies down, allowing the human screams to emerge more clearly.

There is an argument (begins at 0:31 in clip), and sounds of a scuffle, and then the voice of an elderly woman says, "I'm ready to die. Are you?" (0:40) There is the beep of a recording device being shut off (0:42), and then a few seconds of the "silence" of empty tape — a faint fuzz that evolves into the "megaphone" introduction to "Come all ye coal miners." Again, sounds of outdated sound reproduction technology are used to historicize the samples, taking us in and out of the "present" of the black metal sound.

Lunn brings only one of his samples fully into the black metal sound world.

Toward the end of "Killing the Giants as They Sleep," a blast beat ushers in a particularly cacophonous moment. (Listen to this passage here:

https://drive.google.com/open?id=0B8p_kK9owPgHdjhvcXkxT0oxeGM.) Several recordings are mixed together, all dealing with problems wrought by MTR: an accusation

that the coal companies think it's acceptable to destroy the landscape because the residents are "hillbillies" (0:15), a discussion of water quality problems (0:28-1:02), and a protestation that "We're not overburden. We're citizens in a democracy" (1:32). A shricking fiddle comes in on top of the slew of angry voices, carving out jagged atonal riffs barely reminiscent of the bluegrass it played before. In the background, Lunn is screaming the remainder of his lyrics: "Poison the earth, poison the stream, killing the weary giants as they sleep, blackened waters, sand and soot-grinding gears halt serenity." By bringing this cacophony of fiddle, angry voices, his own lyrics and the texture of a black metal blast beat all together, Lunn reminds his listeners that the issues addressed by this album are not only of the past, but also the present; MTR is happening right now in Kentucky. The benefit of hindsight does not yet exist, and the multiplicity of conflicting voices and desires represent the region's current reality.

The Problem of Bluegrass

Lunn uses the sounds of bluegrass on *Kentucky* to unify the album geographically, historically and emotionally. He stretches the historical unity too far, however, resulting in a racialized erasure of Appalachia's former Native American inhabitants, an erasure prevalent in White Appalachian discourses of place-based identity. The album's second track, "Bodies Under the Falls," is an outlier on the album as it deals not with coal mining, but with the abuse of the region's Native American population in the nineteenth century, positing that the history of human greed and sorrow in Kentucky predates coal mining. While its lyrics present the role of landscape in building memories, its music equates Native American loss of land with the losses experienced by White residents. The

song tells the apocryphal story of the Massacre at Ywahoo Falls (alternate/current spelling: Yahoo Falls), a legend holding that in 1810, White settlers trapped and massacred hundreds of Cherokee at Yahoo Falls. The event remains part of Cherokee oral history, but no physical evidence has been found supporting its occurrence. Lunn's lyrics suggest that the landscape is the sole remaining witness to the murders, and that the waterfall "forever weeps" for the loss of life:

The blood stained soil, their ancestral forest

Where only trees now know of the horrors seen here.

Forgotten.

A nation left to weep, like spilling water over the falls.

The water passes over stone, falling so far below

Sorrow fills the air where tribal souls sleep beneath the cliffs, where Ywahoo falls forever weeps.

Here, the landscape itself *is* the memory, the trace of what humans have forgotten or will not acknowledge.

Lunn's use of bluegrass in the song aligns the plight of the Native Americans with that of the coal miner. In the middle of the track (4:50-6:46, full track is 10:28 long), the black metal texture drops out, ushering in an interlude of banjo, mandolin, drums and a mournful Dobro (lap steel guitar) melody; a song that seems to side squarely with the rights and lives of the Cherokee is filled with bluegrass music – the music of the White settlers' descendants. (Listen to a clip here:

https://drive.google.com/open?id=0B8p_kK9owPgHQmRRVFNOVHpJWHc.) Rebecca R. Scott notes that anti-mining residents of Appalachia sometimes compare their situation to that of the former Native American population, saying that they know how it feels to lose one's land.²³³ Lunn's conflation of White and Native American suffering allows him

²³³ Scott, Removing Mountains, 213–214.

to construct Appalachians as victims in a continuous colonial history, choosing to ignore the issues of race and the erasure of pre-European inhabitants that such a claim presents. The claim that the sorrows of Appalachian Kentucky predate coal mining has a rhetorical power, as it disconnects the pain from mining culture and pins it on the place itself; Appalachia becomes a place of tragedy, of "time-soaked melancholy," and its residents can build a shared identity on these visions of the past. The landscape becomes both witness and victim, linking human generations through its relative permanence.

When I asked Lunn about the musical choices being made here, he noted that at the time of the alleged massacre, bluegrass did not yet exist as a genre, and that he felt that the story had been "absorbed into the lore of Kentucky." It seems that his inclusion of the story of this massacre, in his own view, indeed attempts to unite the history of oppression and loss in Appalachia under a single banner.

The Question of Impact

One of the colloquial charges leveled against metal music's political potential is that screamed lyrics inhibit the transmission of messages. In a 2012 interview, Lunn addressed this issue while discussing the role of the samples on *Kentucky*:

I think [the samples] are important because this is a generation that hardly buys albums and thus misses out on the liner notes. So I include samples so people will still understand what I am trying to say, because they certainly won't understand my screaming like I'm having my ass beat by a staircase.²³⁵

²³⁴ Austin Lunn, interview by author, email, October 7, 2015.

²³⁵ Doomsday Device, "Interview: Panopticon," *Isolation Grind*, June 8, 2012, accessed January 19, 2016, https://isolationgrind.com/2012/06/08/interview-panopticon/.

Here, Lunn assumes that many listeners won't bother to look up his screamed lyrics, and suggests that the samples and archival recordings do most of the work of clarifying and asserting his message. While the samples certainly carry much of the load of formulating the album's message, it is important to remember the shaping role of the particular musical context that surrounds them. It is the music of *Kentucky* that does much of the place-making work, work which grounds the message. As Mark Pedelty asserts, "Place' is space made meaningful...Physical space becomes place through cultural mediation." On *Kentucky*, Lunn draws on the cultural history of central Appalachia as place, mediating the archival samples through the music. The "message" of *Kentucky* is not contained solely in the samples, with the music as frame, but is the product of the entire listening process.

As a work of environmental activism, *Kentucky* focuses primarily on the need to bring an end to mountaintop removal mining. This position is filtered through regional history such that it becomes simply the most recent episode in a long line of exploitative incidents suffered by the region and its residents. While Botanist's apocalyptic focus on the demise of all human civilization lacks the specificity needed to make any kind of practical activist decision, Lunn's focus on a particular region, history and issue demonstrates a way of biting off a relatively digestible chunk of an enormous global problem. This tactic begins the process of seeing environmental disaster as a web of interconnected, interdependent problems, relationships, and histories. Music's ability to deftly weave together place, time and human emotion, as *Kentucky* aptly demonstrates,

²³⁶ Mark Pedelty, *Ecomusicology: Rock, Folk and the Environment* (Philadelphia: Temple University Press, 2012), 20.

makes it a prime candidate for developing a working understanding of various environmental issues.

More research would be needed to know how the album affected those who heard it. The album certainly generated interest amongst the North American metal community, receiving largely positive reviews from major metal blogs and webzines (e.g. *Metal Injection* and *Invisible Oranges*). It sold 1800 physical copies, and an untallied number of digital copies, with a 1500 copy repress due in 2016.²³⁷ As Panopticon has never performed live, it does not have the kind of reputation as a protest band that punk acts like Appalachian Terror Unit have acquired. Nevertheless, the anti-MTR activists I spoke with in West Virginia were familiar with the album, and cited it as an important artistic contribution to the coal debate. As for me, hearing *Kentucky* proved vital to educating me about the environmental issues facing central Appalachia.

Conclusion

Kentucky demonstrates how the sound of black metal, whether or not infused with bluegrass, contributes to environmental debates and the issues surrounding Appalachian coal mining. Much of the music that precedes Kentucky in the mining debate foregrounds its intentions through textual clarity, and black metal's predilection for incomprehensibly screamed lyrics destabilizes this tradition and foregrounds noisiness – the noisiness of mining and of protest. Black metal is capable of a raw sonic wrath that borders on the sublime – a sound so massive and chaotic it defies comprehension. The sounds of black metal eerily reflect the sounds of mining – blasting, grinding, hammering – and the

²³⁷ Austin Lunn, interview by author, email, January 20, 2016.

loudness capacity of its electricity-driven sound resonates with the vibrations that damage homes near MTR sites. Its sound is grossly unnatural, reliant on electricity and effects, its amplification echoing the staggering size of the world's largest front-end loaders, draglines and dump trucks – machines capable of digging and hauling hundreds of thousands of tons of coal per day, machines which are commonplace in surface mining. Superficially, it is ironic that an electricity-based (i.e. possibly coal-powered) music would become a voice for environmental issues. Indeed, Lunn remarked that destructive mining practices are "partially my fault. I am a consumer – I am part of the demand. I used electricity to record the album that criticizes those very practices."²³⁸ But as MTR continues to wreak havoc on humans, animals and landscape in the Appalachian region, black metal amplifies the rhetoric of local texts and bluegrass music in an effort to confront the onward march of blasting and drag-lining. The sounds of extreme metal speak the language of industry, and this, along with black metal's ethos of glorified marginalization, is what Kentucky contributes to an already rich musical history. Beyond this, the album also demonstrates a possibility for black metal that tends toward a generous humanism, seeking to understand how people process their sense of home, work and nature. In the context of black metal's sordid history, *Kentucky* is a humanist outlier, channeling a message of deep sorrow, but with a strain of hope for both the Appalachian mountain landscape and the people who reside there.

²³⁸ Austin Lunn, interview by author, email, October 7, 2015.

Postlude

In a time when "climate change" is a household term – whether treated as ongoing disaster or conspiracy theory – simply "raising awareness" is no longer a sufficient reason for environmental activism. The extent to which music can discernably impact environmental discourse remains a thorny problem, difficult to measure and intertwined with discussions about the music-meaning nexus. If, however, as Aaron Allen asserts, the solution to the problems that climate science describes lies in the study of human cultureabout-nature, it is a problem worth pursuing.²³⁹ Botanist's revenge fantasy invokes ecocriticism's apocalyptic mode, insisting on (human) death and destruction as the way forward, and thereby disturbing and disrupting ingrained assumptions that tomorrow will be more or less like today. *Kentucky*'s stance of lament and reflection invokes ecocriticism's nostalgic mode, using strains of bluegrass and workers right's songs to ground the listener in Appalachian history. Lunn, however, also moves beyond the comfort of nostalgia, explicating the region's history of pain and suffering, and offering this history as a lesson for the future: listen, or the landscape you are nostalgic for will be blasted to smithereens.

Divergent in their approaches to ecocriticism, Panopticon and Botanist are nevertheless thematically linked by time, pressure and heat – the process that turns deceased plant matter into the coal that currently fuels 39% of the U.S. electric grid. The bituminous coal that is mined in Appalachia is 100-300 million years old, having been formed in the Pennsylvanian epoch of the Carboniferous period. In the vast "coal swamp forests" of this time, most of the planet's existing coal supplies began their

²³⁹ Allen, "Prospects and Problems," 414.

metamorphosis. Submerged in bogs before decay set in, the plants turned to peat, and the formation of mountains such as the Appalachians provided the heat and pressure needed to convert the peat to lignite, then sub-bituminous coal, and finally the bituminous coal so coveted today for its high carbon content. (With additional time and pressure, the bituminous coal becomes anthracite – pockets of which are mined in Pennsylvania.) The timescale involved in these processes outstrips human temporalities; three hundred million years is so long as to be effectively ungraspable.

Dipping back into Botanist's fantastical world, the act of coal mining becomes a desecration of burial grounds; the botanical world knows no peace in life or death. The hallowed suspension of time that Appalachians find in their landscape grasps at these geological temporalities, and Panopticon's album contemplates how mining interrupts and reshapes them. Together, these bands articulate the uneasiness and instability of the human-nature relationship, one warning of the potential consequences, and the other lamenting damage done while pleading for a better future.

Epilogue

April 24, 2016

The sun is setting as hundreds of black-clad fans wait outside Royale nightclub in Boston, the line to get in stretching all the way to the end of the block. Most people are here to see Behemoth, a well-established black metal band from Poland whose most recent album *The Satanist* (2014) centers on Satanic themes, with lyrics often inverting and parodying Christian prayers or Bible verses. I, however, am here primarily to hear Myrkur, the opening act.²⁴⁰

By the time I get inside, it's time for the show to start. As with many opening acts, Myrkur must perform in the limited space remaining after the main act has put their setup on stage. Behemoth's drumset and other set pieces are on a riser taking up the back half of the stage, covered in black drapes. As the house music shuts off, signaling that the show is about to begin, Myrkur's musicians crowd onto the front portion of the stage, with the drumset in the stage right corner, keyboard stage left and vocal mic stage center. In the audience, a small group of us press forward to the foot of the stage; many others hang back around the venue's bars. A few shouts and scattered applause ring out, and Myrkur begins the set with "Nordlys," ("Northern Lights") a melancholic, ambient piece for keyboard and vocalise, before bursting into "Den lille piges død," ("The little girl's death"), bringing the rest of the band to life in the crushing familiarity of black metal's tremolo picking and blasting drums.

This is a performance I have waited to hear for a long time – a one-woman black metal band brought to life on the stage. While one-man-bands have been a staple of the

²⁴⁰ Myrkur is Icelandic for "darkness."

black metal world since the days of Bathory and Burzum, (and continue to proliferate in the twenty-first century with acts like Panopticon and Botanist – bands I discussed in Chapter 3), it is only recently that one-woman bands have begun to receive significant attention. To date, Myrkur is the most commercially successful one-woman black metal band, and the first ever to embark on a massive world tour. Like most one-person black metal bands, she tours with session musicians; in her case, a guitarist, bassist and drummer are with her onstage. The woman behind the band – Danish musician Amalie Bruun – switches between keyboard and guitar throughout the set, in addition to having two vocal microphones, one set up with heavy reverb for singing, and another with distortion for screaming and growling. Drawing heavily on black metal's ambient – or as fans sometimes call it, "atmospheric" – side, and making space for sung vocals in a Romantic-goth style, Bruun's music explores potential femininities of black metal.

That night, Myrkur performed for forty-five minutes, focusing on songs from her 2015 album *M*. As I watched her, I felt, for the first time in all my years of attending metal concerts, as if I was watching someone very much like myself; I empathized with her as a performer, knowing from my own experience what it feels like to switch back and forth between growled vocals and soprano singing, and the different energies those activities summon.²⁴¹ I also felt her vulnerability as a performer, newly thrust into the harsh lights of an international tour and still allowing her on-stage persona to coalesce, as she projected an utterly human mixture of confidence, nervousness, excitement and what-

Other notable extreme metal performances by women I have seen include Angela Gossow in 2011, then-vocalist for Swedish death metal band Arch Enemy, and Alissa White-Gluz in 2014, current vocalist for Arch Enemy. Nevertheless, Myrkur's performance marked the first extreme metal performance I have seen in which a female performer is also the band's sole songwriter and a multi-instrumentalist who plays several roles within the performance.

do-I-do-with-my-arms-when-I'm-singing (and not simultaneously playing guitar or keyboard).

Around me, the audience contained a mixture of established Myrkur fans and perplexed and/or amazed Behemoth fans; I got the impression a lot of people had no idea who she was. I shared a brief exchange with the woman standing next to me, who asked me who was performing. She added, "That girl can sing," and went on to make a number of other positive comments to me over the course of Myrkur's set. Off to my left, however, a group of men talked loudly with each other throughout the set. During quieter, more ambient moments, or in the brief gaps between songs, they would yell things like, "Pass the blunt!" or "Can we get some weed over here?" I have no idea if this was some sort of inside joke among their group, or meant as a comment about the musical experience. The woman next to me was of the opinion that they should "shut the hell up," letting me know that my noticing them was not due to some kind of ethnographic sensitivity – they were disturbing her experience as well. I'll never know exactly what those meant by yelling – in a way that was meant for others to hear – during Myrkur's performance. My inclination is to interpret it as a deliberate disturbance; I suspect that they did not know or did not like her music, and wanted others to be aware of their distaste for it. It is not uncommon for opening acts to be met with indifference. In my experience, however, when audience members don't care for the opener, they don't spend the entire set up by the stage. Instead, they hang out in the back or near the bar, where it's easier to hold a conversation, or go outside to smoke. While I cannot prove that their actions were deliberately meant as a disturbance, or that it had anything to do with

the performer's gender, I can say that I had never previously experienced behavior like this at an extreme metal concert.

At the end of the set, the session musicians left the stage, leaving Bruun alone at her keyboard. She closed her performance with a voice and keyboard cover of Bathory's "Song to Hall Up High," from the 1990 album *Hammerheart*. Bathory – named, of course, for the infamous Hungarian countess – is widely considered part of Nordic black metal's foundational history, and Myrkur's performance of their music positions her within this history. Her decision to perform it solo not only reflects the voice and acoustic guitar instrumentation of Bathory's original, but also reminded the audience that the entire performance was *hers*.

As more women make inroads into this historically masculinist genre, gender will become an increasingly important lens through which to examine extreme metal music and culture. While many fans see extreme metal culture as strictly meritocratic, justly rewarding musicians on the basis of talent alone, the storm of media controversy surrounding the release of Myrkur's debut album in August 2015 suggests otherwise. The album was heavily promoted by Relapse records, and received generally positive reviews in publications as mainstream as *Pitchfork*. Nevertheless, the "authenticity" of Myrkur's music was hotly debated. Predominantly male black metal fans seized on Relapse's promotion of the album, Bruun's history of performing in a synth-pop band, and the involvement of Kristoffer Rygg – known for his work in Norwegian metal bands Ulver and Arcturus – in the album's production as evidence that *M* was "manufactured" – that is to say, inauthentic, with these listeners positioning themselves as the primary

²⁴² Grayson Haver Curren, Review of *M*, *Pitchfork*, August 31, 2015, accessed May 5, 2016, http://pitchfork.com/reviews/albums/20833-m/.

arbiters of authenticity. The controversy peaked in early January of 2016, when Bruun announced that she had shut down private messaging on Myrkur's Facebook page because she had grown weary of receiving death threats. She went on to further specify that the threatening messages came predominantly from American men. Myrkur's fans were by turns mystified, angered and supportive. Her detractors saw the announcement and shutdown as yet another play for undeserved attention.²⁴³

The vitriol Myrkur has faced following her success as an merging black metal performer provides a compelling example of how the extreme metal community's veneer of meritocracy ruptures when faced with increasing diversity among the genre's musicians and fans. Though far from the only example of the challenges women and other underrepresented minorities have faced in the extreme metal community, Myrkur's reception provides a compelling site for studying the intersections of gender and authenticity in contemporary black metal.

While I am inspired to have been handed this new research material just as this project reaches its conclusion, that night, I was altogether content to finally hear a one-woman black metal band performing in front of me, and to soak up the wonder and enthusiasm of those similarly struck by the occasion.

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The chapters of this dissertation have spanned far-flung listening experiences and musical practices, from central Appalachia to Finland, all somehow united toward an exploration of what scholarly practices might have to offer extreme metal, and what

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²⁴³ See, for example, many of the comments on this op-ed: Kim Kelly, "Of Course Crybaby Metal Fans are Sending Death Threats to Myrkur," *Noisey*, January 7, 2016, accessed May 5, 2016, http://noisey.vice.com/blog/myrkur-facebook-threats.

extreme metal might have to offer scholarship. Throughout the process, I have stressed the importance of sonic experience, and endeavored to keep the spirit of extreme metal's vital appeal alive in my writing.

As the broad range of the chapters illustrates, the possible angles from which to approach an analysis of extreme metal are many and widely divergent. Opening with a longitudinal glimpse of Finland's *Tuska* festival provides a sense of the ways in which metal music and culture is growing and expanding, particularly in its Western context, while exploring the stability gained and reckless abandon lost as this process of institutionalization unfolds. Following this broad contextualization, the dissertation delves into more specific instantiations of extreme metal listening, beginning with a dissection of the loudness that is so essential to hearing and comprehending this music. Sunn O)))'s performances distill this essential loudness into a seemingly formless bonerattling wall of multi-sensory sound, demanding that the analyst pause to consider the nature and significance of embodied experiences of extreme loudness. In other performances, the overwhelming loudness and groove of the music – and even the anticipation of that experience – leads listeners to mosh, literally throwing their bodies into the happening of the music. The subsequent exploration of the practice of "beginning in the middle" in Meshuggah's *obZen* seeks to unite seemingly disparate sites of listening pleasure: the pleasure of moshing and feeling the groove, and the pleasure of exploring rhythmic complexity for its own sake. The final chapter picks up some of the threads of extreme metal's continued political evolution, probing black metal's ecocritical potential. While Botanist takes a fantastical approach, and Panopticon roots his critique in a

specific local issue, both use black metal's tendency to disrupt musical norms to point to the ruptured relationship between humans and their environment.

Extreme metal challenges music theory to grapple with what is lost in the act of analysis, and to find better ways of tackling the liveliness of musical experience – an issue by no means exclusive to extreme metal. The demands of approaching such an insistently loud, distorted musical practice press the theorist to develop language that expands analytical practice toward greater inclusion of embodied experiences as essential to analytical paradigms, and to detect how multiple sites of listening pleasure converge and intertwine.

Throughout all of its changes and evolutions, whether driven by cultural or geographical shifts, changes in audio technology, shifting political attitudes or the whims of the market, sound has remained central to any understanding of extreme metal music. The screamed vocals, the down-tuned guitars, the double-bass drumming, the distortion, the unbearable loudness, the frenetic speed or languorous slowness – these are the extremes that make extreme metal, the surprisingly subtle variations of which are easily heard and discussed by fans. These are the sounds around which extreme metal unites its audiences and musicians, and which compelled me to write about them.

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