SOUND, TECHNOLOGY, AND INTERPRETATION IN SUBCULTURES OF HEAVY MUSIC PRODUCTION

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This dissertation documents and theorizes cases of 'heavy' music production in terms of their unique technological dispositions. The project puts media and cultural studies into conversation with constructivist approaches to technology by looking at the material practices behind such styles as Punk, Hardcore, Metal, and Industrial. These genres have traditionally been studied as reception subcultures but have yet to be systematically treated as subcultures of production. I believe that this is a key area of study in the digital era as the lines between producers and consumers, artists and audiences, become hazier. In effect, above and beyond exploring these genres and subcultures, the aim is to conceive a mode of thinking appropriate to understanding aesthetic judgment vis-à-vis the evolving life of sound in a technologized, mass-mediated culture.

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1.0 INTRODUCTION

Media and cultural studies are entranced with music subcultures and the access that they promise to texts that are more authentic than mainstream, commercial culture. But what, exactly, are the material conditions for such work outside the mainstream? Furthermore, how do subcultural producers conceive of their authenticity within the moment of producing the kinds of texts that compel fans and those who study them? There has been an inordinate amount of attention given to people sometimes referred to within subcultures as 'scenesters', people who dress in the height of subcultural style, buy all the best, new albums, attend all the shows, and are otherwise nexuses of a local subculture's social network. In classic sociological terms, scenesters are 'early adopters'.

The bulk of my first-hand experience with subcultures is with their more behind-the-scenes aspects: playing with bands, booking venues, promoting concerts, making t-shirts, courting record labels, and, more than anything, *recording*. These activities are far from the most visible aspects of subcultural life, much of it is done in private, away from what would be recognized as 'the scene', but it is indisputable that there can be no scene without the constant labor that goes into producing it. Moreover, the most essential work behind a *music* subculture is the production of that music, and this I found to be

conspicuously absent from most subcultural studies. In the simplest sense, this dissertation seeks to represent the labor of people who take the step beyond being a consumer of subcultural music and become producers. Beyond these issues, however, this dissertation speaks to a larger, arguably more difficult matter, namely, how to conceptualize the art of recording.

It is now broadly accepted that recording studios are musical instruments, yet this claim remains largely unarticulated with concrete examples, and much less so with outstanding concerns stemming from the study of fan cultures, such as authenticity. In the following, the studio-instrument is explained through the example of recordists trying to communicate a 'heavy' aesthetic particular to their chosen genres. Heavy music, I believe, is ideal for coming to terms with the aesthetically productive aspects of recording because heaviness is so often conceived as a strategic violation of prevailing standards of record production. Furthermore, a significant amount of seminal literature in popular music studies deal with subcultures centered upon heavy music—e.g., Punk, Hardcore, Metal.[1] By articulating basic issues from subcultural studies with theories of sound recording technology, I hope the reader will have a better understanding of recording as an art as well as an idea of how some artists interpret the potentialities and limitations of recording within their efforts to critically 'read' and 'write' the sonic codes comprising their subculture's audible existence. Note, this dissertation is not concerned with a grand theory of heaviness as such, rather it addresses specific cases of creation and innovation

[1] In this dissertation, names of genres, sub-genres, and their fan cultures are capitalized for disambiguation from their other meanings. Consider the differences between "this metal is heavy" and "this Metal is heavy" or "he is a punk" and "he is a Punk." In the former, the difference is between a substance with certain physical/chemical properties that weighs a lot and a type of music with particular aesthetic attributes; in the latter, the difference is between a person of questionable character and a person who identifies with a particular subculture.

within music sharing a genealogy with the most transgressive branches of the Rock family tree. Nonetheless, a few words about the value of heaviness would be a good way to begin.

'Heavy' is an adjective most closely affiliated with Metal. Though historians cannot pinpoint the origin of the term 'heavy Metal', it is generally agreed that it was in use during the 1960s and became fairly systematized during the 1970s as a term denoting a type of rock music that was not simply hard, as in Hard Rock, but was somehow more extreme, it was not Rock but Metal, which is harder and, undeniably, *heavier*. This dissertation is primarily concerned with the legacy of this desire for heavier alternatives.

Generally, the key features of heavy music are prominent bass frequencies, high volume (typically conveyed by distortion), and dominant rhythmic elements. These features are subjective and certainly up for debate, but they are a fair summation of what is commonly understood when one describes music as sounding 'heavy'. Yet such a superficial understanding fails to get at what is at stake in the aesthetics of heaviness. To begin to grasp heaviness more fully, consider its opposite: lightness. There exist numerous studies of 'light' music, 'easy listening' music, and music so light and easy that it is barely noticeable, but virtually nothing about heaviness. Still, it is not too difficult to reverse-engineer the value of heaviness if one understands lightness as a problem.

To be sure, all music is light, or has an overwhelming tendency towards lightness; it is made of sound-waves weighing nothing, creating only fleeting objects of attention. Moreover, recorded music as such, no matter the content, is prone to becoming functional 'furniture' music, just a sonic dressing of easy sounds no more noticeable than the paint on the walls. In the most basic sense, compared to light music, heavy music is music that

is hard to ignore and harder to actually listen to. Extreme volume, bass, and percussion, not to mention the impertinent screaming which so often accompanies these elements, are simply good ways to ensure that the music stands-out, whether or not it is appealing. But why should music be outstanding in these ways? What is so objectionable about music that is easy to digest, comforting, relaxing, or simply non-objectionable to most people?

The short answer is that light music may be music but it is not *art*. Proponents of heaviness partake of this sensibility as do those composers of 'art music' considered to be 'avant-garde.' Art music certainly tends to be difficult insofar as the claim to art-status seems to stem from critiques of contemporary standards for composition, performance/exhibition, and instrumentation. And, without a doubt, fans of heavy music have a tendency to claim that the music they prefer is better music as such, better than lighter, more mainstream music that is easier for most people to listen to. By definition, the specter looming over music *sub*-cultures is the larger culture under which it exists, 'the mainstream', and any music that ascends to that level is, by virtue of that ascendancy, lighter than that below. Heavy music, the heaviest of the heavy, is therefore, in this logic, necessarily a subcultural phenomenon.

It could further be said that heavy music, unlike light, is (or at least purports to be) serious stuff; it deals directly with matters that light music does not. Lyrically, heavy songs are not about romance or dancing or otherwise having a good time, they are about suffering, struggle, death, despair, anger, or some other kind of unpleasantness. Sonically, heavy artists go to lengths to be audibly confrontational toward outsiders, like its art-music counterpart heavy music is often conceived as an immanent critique of more

popular strains. It is this aspect of heaviness that draws me to the cases of subcultural production addressed in this dissertation.

The types of music addressed here were chosen in part because of biases within the existing literature in popular music studies, and partly because of my own competencies and connections in spheres of subcultural music production. One may wonder about other, ostensibly heavy musics that do not appear in this dissertation. Gangsta Rap or Digital Hardcore, for example, undoubtedly qualify as heavy but do not appear herein. I had access to recordists in these genres, and I have some background in each both academically and technically, but, all the same, I feel I understand much less about these musics and their subcultures than about those I did choose to discuss.

The investigation of a single recording studio, its engineer, and some of its clients form the largest portion of this dissertation. This work describes the scene of production in terms of its material and social dimensions, and observes two cases of heavy music production occurring in the studio. Emphasizing the moment of production, the scope of analysis concerning this one site and its artists covers issues of genre with regard to the studio instrument but stops short of raising critical, evaluative questions of success and failure.

"The Bizarre Site of Traveling Speaker-Music" identifies the post-Marxist theoretical tradition through which I conceive recording studios as musical instruments. Observing the greater dissemination of the means of digital record production, this chapter raises the issue of expertise vis-à-vis the main activity of record engineering—listening—and the prime directive of studio recording—to make speaker-music that 'travels well'. While studio technologies, specifically reference monitors, are at the heart

of this piece, the conclusion is that it is not technology but technique that is at issue and, further, that the cornerstone technique is critical, comparative listening. In the end, it is argued that listening to speaker-music as such reveals an audible grammar of sound-mixing, which constitutes the aesthetic 'message' at stake in the encoding/decoding of a record. Illustrating these ideas through an introduction to the engineer and studio which figure in the case studies to follow, this introductory chapter makes the case that recording may be thought of in terms of 'aural literacy' defined as mastery of the 'phono-grammar' governing 'sociosentimental' sounds. These concepts are grounded in a brief explanation of the grammatical arrangement of a typical heavy mix.

In "Demonstrating D-Beat: A Study in Home Recording," I observe a Punk band trying—and failing—on their own to produce a demonstration recording. In the end, this group's frustrated attempt to record even a demo of themselves stands as a reminder that recording technologies may be as alienating to some as they are empowering to others. Additionally, this work extends consideration of the digital revolution mentioned in the introduction, noting first the learning curve independent recordists encounter when trying to go it alone and, second, the fact that recording is not just about 'high' technologies, it is also still bound to the 'low' tech of acoustics and, of course, critical listening.

Along with articulating the preferred recording aesthetics for this genre, this chapter explores what it means to make demonstration (demo) recordings as opposed to the 'real' records analyzed in later chapters. This recording project does not take place at the studio introduced previously but it serves as an example of the common but usually hidden work of amateur home recording. Also, because amateur home recording figures

in later chapters, it is worth devoting some time to the topic beforehand. Key concepts addressed in this chapter include "techoustemology" and "sociosentimentality."

The next chapter, "Rebirth of Hardcore Pride: (Re)Producing Subcultural Authenticity on Record," is couched within the study of youth in Hardcore subcultures, and seeks to extend that research from the study of fans to the study of artists by looking at subjects who see themselves as both. Through this case study, I show how finer issues of production are key to making an album with unmistakable Hardcore authenticity. This chapter also speaks to major issues in the study of popular music and technology—such as the role of the archive and ideas about the superiority of analog over digital recording—while also dealing with more common subjects such as timbre and mixing. One finds in this chapter a situation in which the band is divided within itself with regard to their hetero-normative, masculinist image that is somewhat at odds with the "positivity" they otherwise represent. Moreover, this study is unique insofar as it presents a case in which a 'youth' subculture is found not to be the sole property of youth but also a scene in which adults who grew up within the scene continue to be involved; the subjects of this study are adults who were trying to revive the sounds of their subculture from the days of their youth in the 1980s.

Following this, "The Pop Culture Massacre" looks at a case of Industrial music production. Described as a form of resistance to Rock traditions, Industrial is here conceived as a an effort to 'shock' listeners through the use of non-traditional instruments particularly, in this case, synthesizers, samplers, and home computers, and pushing the limits of good taste with their lyrics and artwork. The band has since tempered their

process while working at the studio and hoe, developing an interesting hybrid mode of production carried out partly at a home studio and partly in a professional one.

This work not only furthers scholarship on this under-studied music subculture, it examines emerging problems of digital music production, particularly the threat of new technologies to minimize innovation in Electro-Industrial music through improved plug-and-play functionality. Measuring the distance between Rock and Industrial, this work observes the lack of 'gesturality' figured by the sounds of non-traditional instruments (contributing to their shock-factor) and considers the problematic tendency of even shocking, 'experimental' sounds to become standardized as generic signifiers of electronic genres then sold to digital artists/consumers as pre-fabricated timbres (which mitigates their impact).

The final chapter, "Blacker than Death: On Making Metal Satanic," shifts the focus from the production of texts to the broader field of textual referents and their interpretation by listening publics. This historical examination of the evolution of a Satanic genre of Heavy Metal, known as Black Metal, shows how a new style emerged through the recrudescence of, what were previously interpreted as, 'bad' sounds and ideas. Reading the development of the Black genre as a lengthy, historical process involving publics within and without the Metal fold puts key concepts from the rest of the dissertation into action, primarily the notion of a sonic, sociosentimental grammar materially evidenced on record. Though Satanic music may seem like an exceptional case, it appears to be merely a more spectacular illustration of very basic principles for understanding the art of recording, in general, and the problems of recording music for subcultures in particular.

2.0 THE BIZARRE SITE OF TRAVELING SPEAKER MUSIC

The following explores key concepts in the cultural study of popular music through the example of a single production site, Slaughterhouse Recording Studio, and the artists working therein. Located in western Massachusetts' Pioneer Valley, far from the Boston metropolitan region, on the eastern border of the Berkshires, Slaughterhouse is part of a local music scene nationally renown for independent college rock as well as a strong tradition of local Hardcore and heavy Metal. Unlike most major music scenes, this one is decidedly non-urban and, therefore, geographically expansive and nebulous; though the centers of activity are the college towns of Amherst and Northampton, the idea of 'local' here spans the Interstate 91 corridor from southern Vermont to northern Connecticut.

Slaughterhouse came out of this scene and grew to service national artists in addition to those from the area. The studio is closely affiliated with Indie music thanks in part to the reputation of the former co-owner and engineer, Thom Monahan—known for his work with The Pernice Brothers, New Radiant Storm King, and The Lilys. Other notable engineers recording there at one time or another include Steve Albini, Steven Miller, and Bob Weston. Opened in the early 1990s in what was once an actual slaughterhouse in Hadley, MA, it is currently located in a renovated barn in

Westhampton, MA, owned and operated by former Slaughterhouse apprentice Mark Alan Miller, whose reputation for his work as one-man industrial band Out Out has bolstered the studio's profile in heavy music as well.[2]

The purpose of looking at this one studio, however, has less to do with its pedigree than with its mode of production—an entrepreneurial one—and the historical material circumstances affecting the studio and the way it operates at the dawn of the digital age. From an academic standpoint, my choice of a *production* site as a subject of study represents a turning of scholarly concerns from audiences to artists, a shift inspired by greater dissemination of the means of record production. Slaughterhouse thus serves as a concrete point of reference guiding the theoretical arguments to follow. Moreover, my study of this site also encompasses a key point in the studio's own development, a full-scale re-location and re-construction project that I was able to follow closely thanks to the co-operation of Miller as the new Slaughterhouse's designer, proprietor, and chief engineer.

I first met Miller in 1999 when I was with a band recording at Slaughterhouse's original location. Over the next five years, I recorded two more albums there, as well as doing other audio projects, logging several months' worth of time in the original studio. Upon learning that Miller had become sole owner and planned to build a completely new studio, I followed the process over the course of two years. What follows is a portion of this study pertaining to the work of professional studio-engineering in the present day and age of digital recording technologies. Below, I situate Slaughterhouse within an

[2] Research from Porcello suggests that this model of professionalization may be typical for Miller's generation of studio engineer's but is less common now that more universities are offering degree programs in recording. Notably, he also cases this phenomenon with the dominance of computer-based recording and the ending of the era of independently owned and operated studios with apprenticeship systems (Porcello 2004 735-737).

overview of the intellectual and material histories concerning recording studios. This is intended to explain both how it is that a studio may be thought of as a musical instrument as well as to get at the issue of playing that instrument well.

Fleshing-out theories of studio recording is all the more important in a time when studio technologies are converging with home computers, meaning that growing numbers of people are obtaining the means to make themselves heard on record. The lesson I aim to bring out is that engineers make mixes that, when good, *travel well*. This point emerges through a discussion of record engineering as an art of creating *traveling speaker-music* and, as such, is concerned with the mass communication of aesthetic codes, such as those conveying a sense of heaviness. While technical issues establish the core of this chapter, the conclusion is that it is *not technology but technique* that is at issue and, further, that the cornerstone technique is critical, comparative listening.

2.1 POST-MARXIST CULTURAL STUDIES OF POPULAR MUSIC

This is a transitional and, therefore, highly edifying moment in the histories of both recording technology and the cultural study of popular music New, digital technologies—home computers particularly—threaten the survival of recording studios as they have existed thus far. But the possibility of the death of the studio, worrisome from the perspective of professional engineers and studio owners, is much less so from within cultural theory. The potential of digital technology to weaken the culture industry's control over the means of production and distribution may be the academic media-studies dream-come-true in which popular culture becomes more populist and democratic as greater numbers of people are able to make their own culture and likewise

choose their cultural preferences from the products of other everyday folks doing creative work outside the culture industries.

The sensibility behind such ideas is encapsulated in Christopher Small's *Musicking*:

> Whatever the function [of music] may be, I am certain, first, that to take part in a music act is of central importance to our very humanness, as important as taking part in the act of speech, which it so resembles (but from which it also differs in important ways), and second, that everyone, every normally endowed human being, is born with the gift of music no less than with the gift of speech. If that is, then our present-day concert life, whether 'classical' or 'popular,' in which the 'talented' few are empowered to produce music for the 'untalented' majority, is based on a falsehood. (8)

Focusing on technology in music production, however, points to a long-standing material support for this falsehood, namely the inequitable distribution of the means of production. But as the material barriers to entry diminish, there seems to be less to divide the many from the few. The apparent potential of a folk revolution in mass culture, one using the very tools of that culture, looms large in studies of popular music and technology (Cunningham; During; Evens; Greene and Porcello; Jones; Lysloff and Gay; Meintjes; Rose; Theberge).

The Marxist-humanist inspiration behind cultural studies is not far from the surface when it comes to the issue of technology. The notion that everyone should (be

able to) make music resonates with the problem of alienated labor described in *The German Ideology*:

> [A]s soon as the division of labour comes into being, each man has a particular, exclusive sphere of activity, which is forced upon him and from which he cannot escape. He is a hunter, a fisherman, a shepherd, or a critical critic, and must remain so if he does not want to lose his means of livelihood; while in communist society, where nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after dinner, just as I have a mind, without ever becoming hunter, fisherman, shepherd or critic. (53)

And to this list it might be added that one should be able to make music without becoming a musician. Later in *The German Ideology*, Marx and Engels turn to the matter of artistic talent, echoing their earlier statement on the division of labor:

> The exclusive concentration of artistic talent in particular individuals, and its suppression in the broad mass which is bound up with this, is a consequence of division of labour. If, even in certain social conditions, everyone was an excellent painter, that would not at all exclude the possibility of each of them being also an original painter, so that here too the difference between 'human' and 'unique' labour amounts to sheer nonsense. In any case, with a communist organization of society, there

> disappears the subordination of the artist to local and national narrowness, which arises entirely from division of labour, and also the subordination of the artist to some definite art, thanks to which he is exclusively a painter, sculptor, etc., the very name of his activity adequately expressing the narrowness of his professional development and his dependence on division of labour. In a communist society there are no painters but at most people who engage in painting among other activities. (109)

The only difference between this and Small's statement concerning music is that Marx and Engels envision a fully artistic way of being in which one would not be limited to any one branch of the arts.

For the greater part of the 20th century, however, the tools and skills required for cultural production, particularly sound recording, were scarce. The development of sound recording technologies and the specialization of record engineers have limited the production of popular music to the few, alienating the many who are left to be entertained. This falsehood Small notes, i.e., that the 'talented' few should entertain the 'untalented' majority, has a firm historical-material basis. But in the digital environment of the 21st century, in which the means of production are more accessible, the material conditions for the false distinction between special musical people and the ordinary folk they entertain may soon become immaterial. Yet the idea that recording technologies may be tools of mass empowerment, rather than alienation, is still taking shape.

2.1.1 Regarding Recording Studios as Musical Instruments

In the mid 1990s, the state of popular music scholarship was such that Angela McRobbie could observe: "a process of textualization has taken place in the cultural analysis of music" whereby "we find a reduction of a whole field of social activities, including the participation of fans, audiences, and young musicians in the production of musical culture, to that of musical texts" (181-182). In the interim, however, there has been a flood of interest in the production of popular music focusing primarily on cultures of production. The core revelation of such work is that recording studios are more than merely sites for reproduction, they are musical instruments in their own right (Anderson 2006; Doyle 2005; Evens 2005; Fikentscher 2003; Frith 1996; Gracyk 1996, Greene and Porcello 2005; Jones 1992; Malsky 2003; Massey 2000; Meintjes 2003; Neuenfeldt 2005; Porcello 2004; Rose 1994; Schmidt-Horning 2004; Theberge 1997, 2004; Toynbee 2004; Wallach 2005; Zak 2001). In light of this, record engineers—those who play the studio-instrument—have emerged as artistic collaborators, even *auteurs*. However, while the turn towards cultures of production has sharpened critical approaches to recording technologies, the question of aesthetic value lingers. If the studio is an instrument, what does it mean to play it well? What is a good record from an engineering standpoint? What are the criteria recordists use to judge their work, and how are these ideals evidenced in practice?

These questions can be hard to answer because one of the most irreducible facts about professional record engineering is that it is done in the context of a service industry. A professional recording studio is more than an instrument, it is also a business,

and almost necessarily so since building and maintaining a studio can be a massive and ongoing financial drain. This means that, in order for the professional recording industry to stay afloat, studios have to be in demand. But demand may be waning as the digital age puts more power in the hands of everyday people. The less rare the technology and the more widespread the knowledge to use it, the greater the threat to professional studios and their standards of practice.

Another aspect of this dilemma is that recording is *parasitic*. Engineers are both enabled and limited by the clients they rely on for the raw materials of their art and the sustainability of their profession. For most intents and purposes, it is an art without content.[3] This, notes Edward R. Kealy in one of the earlier and still most instructive pieces on the topic, "From Craft to Art: The Case of the Sound Mixer" (1979), is what makes it so hard to appreciate record engineering as an art, not merely a craft. After Kealy, with a few notable exceptions (Hennion 1990; Jones 1992) cultural studies of the 1980s and 1990s looked not to professional recording studios but rather innovations within youth subcultures, particularly those involved with sampling and turntablism, using the products of recording as the raw materials for new musical forms like Hip-Hop and Techno. Subcultural studies set the agenda for many scholarly approaches to music technologies, which is to say that studies in alternative or, more commonly, 'resistant' or 'transgressive' uses of sound technology flowered before studies concerned with the standards of practice supposed to be resisted or transgressed.[4] Still, research concerned with techniques of disc-jockeying in dance music subcultures offers key insights into

[3] An exception to this is noise music, particularly the genre known as Power Electronics, which is a case of musicians turning studio technologies upon themselves to reveal their content—electronic noises—repressed in normal studio operation.

[4] A similar observation is made by Theberge (2004), who finds that inattention to mixing technologies is astounding given the academic fervor for remixing.

creative uses of recording technology as well as the theoretical priorities that have been brought to bear upon the study of popular music production thus far. Sampling, mixing, and re-mixing are championed by enthusiastic exegetes of postmodern subcultures founded upon the appropriation of music from other artists, i.e., using the tools and texts of a dominant culture to produce a presumably more authentic (and therefore valuable) alternative to that culture (Fikentscher; Hebdidge; P. Miller; Rose).

2.1.2 DJ Lessons: (Re)Mixing, Technology, and Cultural Power

Dick Hebdige's *Cut'n'Mix* (1987) remains a touchstone in cultural studies, especially for those concerned with popular music and technology. Therein, he defines the stakes for subcultural production through the example of turntablism, i.e., mixing two (or more) records together "to undermine the official voices of authority" (145). This description suggests that records encode power insofar as they stand as definitive interpretations/manifestations of a work, the official voice of the (original) author. Of course, records are already mixes themselves, thus disc jockeys mix mixes with mixes to create new (re)mixes in ways that are not authorized by the original artists. Turntablism undermines authority not only by exploiting the expressive potential embedded in playback technologies but also by asserting the DJ's own tastes and interpretations with and against the work of others possessing greater cultural authority (i.e., recordists). Although this view of DJ culture as one of re-appropriation may now be outdated—as more DJs migrate over to studio production in order to produce open digital mixes and vinyl records made specifically for (re)mixing—the general observation that the culture

was at least inspired by creative re-appropriations of recordings not intended for turntablism suggests that traditional record engineering not only mixes elements, it *fixes* them, closing them, for the most part, from public intervention. There is a line of distinction in today's digital music subcultures that is telling here, namely the difference between 'open' and 'closed' mixes.

An *open* mix is not fixed. It is a collection of individual tracks, like bass drum, snare, hats, toms, shakers, and so on—often including generic bass-lines and melodic hooks—that work together to make a sonically and rhythmically coherent whole; but, because the elements are distributed as discreet digital audio files, the balance and processing of the mix remain open to the end-users' interpretations. A *closed* mix is fixed; in essence it is more like a vinyl record used in traditional turntablism; it is a single track with all the elements already mixed together, severely limiting the interpretive moves open to the end-user. So, given that re-mixers can subvert the authority of an original mix, whomever makes original mixes should be thought of as a de-facto agent of power, one who may subvert the authority of the artists they work with.

Take Kai Fikentscher's explanation of turntablism:

> In the context of deejaying, vinyl recordings are not merely played for dancing; rather they form the basis of creative individual musical expression. They are as indispensable to the deejay's musical instruments (turntables, mixers, equalizers) as strings are to violinists, harpists, and guitarists. (295)

Fikentscher defends against the idea that disc jockeying is a parasitic art with no content of its own by conceiving of records not as the life-granting host to the DJ's otherwise

empty practice but as the soft, manipulable material, the sounding element, like strings or a reed, which complete the turntablist's instrument. Fikentscher's description emphasizes his main point, the main point of most DJ theory following Hebdige, that DJs "used turntables, mixers, and amplifiers to create music that, although based on sounds created, arranged, and recorded by others, became ultimately 'theirs" (294). The ultimate power of disc jockeys to affect such an extreme diminution of authority over the recordings they use is expressed in the reduction of those original works to something like catgut. Furthermore, if the relatively low-tech tools of the DJ command such transgressive power, recording studios must be more powerful still. In this light, it is not recording engineers' ability to put sounds to disc that qualifies them as musical collaborators, it is their talent as *mixers* that is most compelling. Yet a mix is not just any arbitrary arrangement, it is made purposefully within a tradition of recorded music-making. To better conceptualize the engineer's product as an art work, it helps to understand a little about how this more creative role for the engineer has taken shape.

2.1.3 Engineer as Entrepreneurial Collaborator

It could be said that clients are to studio engineers as records are to turntablists: less like pre-existing content given a new form and more like the pliable element strung through the instrument's hardware, an element which relies on the greater apparatus in order to be heard yet, in turn, is the *sine-qua-non* for that apparatus to operate. Such a vision of the studio instrument highlights the ultimate power of engineers over the music's material existence on record. Moreover, aligning aesthetic authority with those capable of

(re)mixing recorded sounds speaks to the delicate balance of power between studio engineers and the artists they record as well as to the potential for a marked imbalance of power in favor of whomever controls the apparatus. DJs and engineers forefront techniques through which technologies of reproduction are themselves musically productive. Nonetheless, the comparison between DJs and engineers is very different once one considers that, in the studio, the original work of others is not so marginal as to be merely another material component of the instrument; studio artists work *with* the engineer who records and mixes them.

DJ theory shows that disc jockeys are artists, that turntables are instruments, and that mixing together different records constitutes a creative act. Noting that recording studios are also instruments of mixing, the notion can be generalized to say that mixes are musical creations of their own, therefore authorship may be located in the (re)mixer as an agent of cultural power—an author—above and beyond the artists supplying the raw materials for that work.[5] Yet in recording, unlike disc jockeying, raw materials are being made on the spot by those very artists whose aesthetic intentions are potentially impinged upon by the mixer. Theories of record engineering cannot support a solely technological understanding of the material it works with as part of its art. In the studio, the original material, the musicians themselves, are present at the point of creation and their vision guides the hand of the mediator whom they have hired.

Themes of transgression, resistance, re-appropriation, and so on are inappropriate for conceptualizing the strategies plied by engineers in studio recording wherein the power dynamic is not oppositional, rather collaborative; studio recording is a mode of co-

[5] This theory has legal implications with regard to copyrights and the matter of 'points'—percentage of profit—from the sales of commercial recordings. Cultural theories of popular music offer an argument for engineers as musical collaborators and, therefore, artists deserving authorship rights.

authorship. Still, as Kealy stresses, this is a historically specific development pioneered by entrepreneurial engineers outside major production studios. In this way, the history of the mainstream recording industry likewise exhibits a trend of technological dissemination and aesthetic contestation; regarding recording studios, power relations are most prominent in this broader, industrial relation, as opposed to the more textual contestation highlighted in the account of DJ theory. Moreover, the entrepreneurial contestation to the major label studios proved to be so successful that the idea of a recording industry, per se, is misleading. Today, the record industry is like the motion picture industry in which independent contractors carry out the majority of the creative work.

Will Straw compares the recording industry of the 1970s to the end of the golden age of Hollywood: "in both cases, one finds a high reliance on licensing agreements between major companies and smaller production outfits" (454). Theberge (2004) and Kealy find the pivotal moment to be around 1960, when the recording industry became more decentralized and more reliant on entrepreneurial engineers. This time is also the point at which it was broadly acknowledged that the popular appeal of a recording had more to do with the qualities of the recording as such rather than the presumably important qualities of the song it represents, such as composition or lyrics. Kealy explains the shift as the outcome of greater technological dissemination in the post-war era; it is the material precondition for the industry trend noted by Straw. As professional union engineers adopted newer technologies, the older gear went out on the aftermarket where entrepreneurs, with no specific training in electrical engineering or the extant

standards of recording, bought the equipment and opened their own recording studios which in turn jeopardized the position of union engineers in the industry.

These first entrepreneurial studios—which include Sam Phillip's Memphis Recording Service and Norman Petty's studio in Clovis, New Mexico—were the source of popular Rock, Blues, Country, and Jazz records. What makes these sites such enduring points of fascination is that the entrepreneurial engineers in charge of them had to invent their approach to representing this music on record, not only because they could not achieve high-fidelity concert hall realism with their second-hand studio setups but because the music being represented never existed in concert halls to begin with; recording studios became *the* original space for popular music. This is observable in acknowledging the quality of 'the Stax sound' or 'the Motown sound', cases in which it seems aesthetic value may be imputed on virtually any material run through the right place. At the same time, some engineers emerge as studio *auteurs*, like Phil Spector and Sir George Martin, who may be as powerful in the creation of compelling song-sounds as the places in which they work; these are recordists who go beyond being merely the animus behind the machines to bring their own sensibilities to bear upon the final product.

To be sure, these artists are often called 'producers', not engineers. The two, however, often go together. Miller compared the division of labor in recording to that of the film industry:

> On the simplest level, an engineer is the person who pushes buttons, pushes the faders, gets the sounds, plugs things in. And the producer is the person who oversees that the session is running smoothly, budgets are

> being adhered to, the necessary people to get the project done have been hired. Or the person who deals as liaison between the artists and the label. Or [laughs] and on, and on, and on. If you look at a similar allegory, it would be the film industry where the producers would be basically people who handled the money, and the director is someone who handled the creative side. It's similar, except the producers don't always *just* handle the money. They also handle arrangement, or repertoire choice—what songs are actually going to go on the record. Often times *the band* is the producer in that respect, or sometimes the band and the engineer *together* are the producers. (interview)

In the strictest division of labor, the engineer makes no judgments but rather executes the wishes of the producer. But Slaughterhouse is, in Kealy's classification, an *entrepreneurial* studio in which the working arrangement does not typically include a person designated as producer—even when the recording is contracted by a record label—rather the engineer collaborates with the clients. This expansion of the engineering role into production concerns—allying technics and aesthetics—is the most significant distinction between the entrepreneurial mode and the craft-union mode it succeeded.. Miller explained how this works at Slaughterhouse: "The band comes in with their songs rehearsed and chosen, and depending on how the relationship works out between the band and the engineer, the engineer might be able to voice opinions or help them make decisions. I mean, I do that *a lot*" (interview). Entrepreneurial engineering encompasses both technical expertise *and* the exercise of aesthetic judgment, which must be carried out vis-à-vis the interpersonal dynamics between band engineer. Yet

musicians able to acquire for themselves the technologies and expertise of the entrepreneurial studio engineer can reduce this division of labor even more. This Kealy terms an 'artisanal' mode of production wherein artist, producer, and engineer are one and the same.

Underlying these changing modes, Kealy finds advances in professional recording to affect industrial and aesthetic revolutions through the impact of *old* media rather than new. Technological changes in (what is considered at any given point to be) 'professional-grade' equipment feed an aftermarket consisting of yesterday's latest and greatest technologies, which means more people have access to the means of record production. This is an aspect of what Charles Acland has termed 'residual media'. New technologies do not just disappear when something newer appears, thus the world is becoming ever more filled with this material, technological residue. Moreover, the study of popular music production shows that, as the technological landscape changes, so do divisions of labor and the sounds of popular music. Looking at the history of recording and recording subcultures, the governing principle seems to be that greater technological dissemination presents a challenge to the official voices of popular music by enabling aesthetic innovations from outside the concerns of a dominant culture industry.

2.1.4 Home Computers: The People's Instrument?

The idea of a folk renaissance launched from within mass culture figures prominently in Jacques Attali's enormously influential *Noise: The Political Economy of Music*. Therein, Attali argues that music is always a social construction based on the exclusion of certain

sounds classified as 'noise' which, in turn, form the repository of new sounds from which musical innovations come. Noise is especially valuable for culture industries relying on the constant production of difference in order to turn a profit from otherwise equivalent commodities. This theory, however skeptical of the contemporary culture of corporate capitalism, points toward a light at the end of the tunnel, predicting an age of 'composition' in which the technologies of the music industry are used to triumph over corporate cultural hegemony. Attali is not overly specific about this coming age, though he seems sure that it will come through a repurposed technology associated with recording.

> Like representation and repetition, composition needs its own technology as a basis of support for the new form of value. While recording was intended as a reinforcement for representation, it created an economy of repetition. As with the preceding codes, the technology upon which composition is based was not conceived for that purpose. If representation is tied to printing (by which the score is produced), and repetition to recording (by which the record is produced), composition is tied to the instrument (by which music is produced). We may take this as a herald of considerable future progress, in the production and in the invention of new instruments. (144)

Samplers, turntablism, and other creative uses of records and recording technology suggest arenas in which new instruments, or new uses for old instruments, are developed. As for whether these new tools and practices evidence an age of Attalian composition, there is room for debate.

Attali's teleological vision of history is questionable, if not also popular among theorists of culture and technology envisioning an end of history brought on by new media technologies. Lisa Gitelman identifies this type of thinking as a common assumption:

> Today, the imagination of that end point in the United States remains uncritically replete with confidence in liberal democracy, and has been most uniquely characterized by the cheerful expectation that digital media are all converging toward some harmonious combination or global 'synergy,' if not also toward some perfect reconciliation of 'man' and machine. (3)

Gitelman finds that ideas such as these belie a determinist, rather than social-constructivist, understanding of technology. Still, it is hard to disagree with the Marxist-humanist vision of popular culture: when anyone who *wants* to make music *can* make music, and anyone who might like to hear it can do so, then there is a truly *popular* culture—a culture of and for the people—which is more just and equitable for the fact that it can accommodate every conceivable taste regardless of whether or not it corresponds to a profitable market segment. This would be an Attalian age of composition. Such an time would be one in which the aesthetic value of popular music may be separated from its commercial value. For this, there is currently no tool with more potential than the computer.

But to suppose that computers are somehow outside or at the end of history is fallacious. Furthermore, in the history of recording, it appears that the greatest impact of new technology has less to do with the new itself and more to do with its residual effects. Further still, as I will later explain, when it comes to music, computers are well bound

with the protocols of 'old' media, and are therefore not quite so prone to suddenly sparking an epochal cultural revolution.

There is no denying, however, that home computers today have the power to, more or less, perform all of the functions of recording studios, turntables, and samplers, not to mention synthesizers. More crucial, perhaps, unlike those devices home computers are in the hands of people who do not necessarily desire this functionality though they have it to discover. To be sure, computers are not yet as common as radios, telephones, and televisions, but they are unquestionably more common than ever before and the perpetual shedding of last-year's models is fueling an aftermarket. Furthermore, coupled with the internet, computers also offer greater access to the means of distribution and promotion (although corporate interests are currently trying to take a greater share of the bandwidth by commercializing it). Home computers do seem to have the greatest potential to be involved in a revolution of Attalian proportions.

Some artist/producers like Trent Reznor of Nine Inch Nails are noticing the production power now in the hands of their fans , and are exploring new, digital modalities of popular music. Since the release of the 2005 single "The Hand that Feeds," Reznor has offered open access to the individual tracks comprising that song—an open mix—so that anyone who chooses may render their own version.[6] As announced on the band's website that year, the idea is a reaction to the new production capabilities of home computers, particularly Apple's Garageband digital audio workstation, now a standard

[6] Reznor continues to be at the leading-edge of innovative digital hype. In addition to providing free access to similar open mix files for the "Survivalism" (2007) single, Reznor has introduced an online "scavenger hunt" through cryptic web-sites comprising a dystopian online environment made to promote/enhance the new album, and even brick-and-mortar tactics such as leaving USB drives containing unreleased singles in the restrooms at concerts. Reznor's claim is that this is more than marketing but also part of the product, an experiment with new forms of entertainment.

part of their iLife software package (i.e., not a program one has to buy in addition to a computer but software that everyone who purchases an Apple computer is given):

> After spending some quality time sitting in hotel rooms on a press tour, it dawned on me that the technology now exists and is already in the hands of some of you. I got to work experimenting and came up with something I think you'll enjoy. What I'm giving you in this file is the actual multi-track audio session for "the hand that feeds" in GarageBand format. This is the entire thing bounced over from the actual Pro Tools session we recorded it into. I imported and converted the tracks into AppleLoop format so the size would be reasonable and the tempo flexible. (Reznor online)

Professional recordists are acutely aware of the tenuous position they are in due to the ongoing digitalization of the cultural ecosystem, and Reznor shows at least one way for artists to embrace this developing situation.

The promise is there, with computers, that more people will discover that they want to pursue recording projects, and some of the masses may cross over to the side of the 'talented few'. The somewhat simplified graphic interfaces offered by computer software are undoubtedly more user-friendly than hardware technologies often are (although, on the other hand, there are those who find software recording far from friendly—mostly people who learned to record using hardware often find digital point-and-click recording far from intuitive). Either way, in expanding upon the idea of studios as instruments, it should be recognized that, now, people are learning *software* instruments. There remains much to be said about this development, though my present

case turns upon a different matter, one central to recording in any environment with media new or old.

Both the idea of a folk recording revolution and the prediction of a death of the studio come from a deterministic, teleological theory of history, over-estimating the role of technology at the expense of understanding technique. And the technique that is most relevant is one of the most low-tech: listening. The greater part of artful engineering is not in the technical skills concerned with operating the apparatus of recording, whether it be hardware or software, but in the ability to *listen* to whatever instrument one happens to use. It is this skill that unifies the technical and the aesthetic, and it is this which will be the most significant mark of distinction between recordists as the technologies become more available and easier to use.

2.2 LISTENING TO SPEAKER-MUSIC

Listening to speakers is the cornerstone of engineering. Good engineering is mostly a matter of being able to judge what the speakers reveal. Careful monitoring—closely listening to special 'reference monitors'—is necessary to hear what is truly there on the record. It may now be easier for anyone to put sounds to disc, but the ability to ensure that the content intended to be coded on that disc is retained across all conceivable playback environments is another matter entirely. Albin Zak explains the problem:

> The experience of creating a mix that sounds great in the studio and terrible on all other systems is a common one for inexperienced recordists. A successful mix is one that travels well, rather than one that is perfectly

> tailored to a particular listening environment. Given that sonic particularity is one of the fundamental concepts of record production, this presents something of a paradox. But it also removes the idea of particularity from the realm of abstract theory and illustrates the practical limits of the concept. Recordists must continually face the challenge of making a very specifically configured work with the criterion that it have a general effectiveness in myriad circumstances. (117)

Furthermore, this is not solely a technical enterprise, it is a matter of understanding the expressive language of recording, an aesthetic code that close listening reveals.

Stuart Hall's encoding/decoding model of communication gets at the fundamentals of this dilemma. His theory marks five linked but distinctive moments of mass communication that are equivalent to moments in the mass production of commodities: production, circulation, distribution, consumption, and reproduction.

> The 'object' of these practices is meanings and messages in the form of sign-vehicles of a specific kind organized, like any form of communication or language, through the operation of codes within the syntagmatic chain of a discourse. The apparatuses, relations and practices of production thus issue, at a certain moment (the moment of 'production/circulation') in the form of symbolic vehicles constituted within the rules of 'language.' It is in this discursive form that the circulation of the 'product' takes place. (Hall 1993 508)

Through this theory, engineers may be seen as professional encoders involved with a process of asynchronous mass communication, agents hired to ensure that their clients'

ideas are successfully transmitted. Mixing, therefore, must be regarded as an exacting process governed by a musical code.

Yet Hall's theory was developed through the study of television news; it is tailored for explaining the televisual communication of political ideologies whereas my challenge is to understand the sonic rhetoric of popular song-sounds found on the surface of record-objects. This aesthetic code includes features such as timbre, dynamics, stereo placement, effects processing, even the sound of the medium itself (as in the choice of analog or digital forats). The encoding/decoding process, in my work, is more about materiality than is Hall's, which stresses ideology. What remains consistent between Hall's analysis and my own, however, is the awareness of a fundamental asymmetry between encoding and decoding along with a focus on how those on one or the other side cope with that imbalance in the process of communication.

In engineering parlance, good mixes 'travel well'. That is, an engineer has created a good mix when it retains its aesthetic identity across the widest possible playback scenarios; this is an ideal of mass communications in general. One hires a professional to make a recording that stands up to multiple decodings; it should still sound right, if not the same, whether it is played from a CD, an MP3, or vinyl, whether it is heard through the radio, headphones, at home, in the car, etc. To encode musical sounds for all conceivable scenarios requires skilled listening to and manipulation through studio *monitoring systems*.[7] Attention to monitoring emphasizes the root of

[7] This is not strictly the role of the recording or mixing engineer. There is another type of engineer, a *mastering* engineer, who neither mixes nor records but makes *master* versions of albums, creating a unified sound among all tracks of a record and optimizing the overall sound for playback. Mastering studios are also likely to be affected by further dissemination of digital audio technologies. As the cultural study of recording expands, I believe mastering studios and engineers should receive more careful attention; at this time, they barely register on the academic radar. Many entrepreneurial engineers, however, master their

'studio' in *studium*, a place of study. Studios are sites specially designed to evaluate sound under the most favorable (i.e., least biased) conditions. No monitoring scheme can be entirely neutral, however, and so it falls upon the ears of engineers to know their instruments well enough to handle whatever insurmountable bias remains.

2.2.1 Getting to Know Speaker-Music

Like many if not most in his line, Slaughterhouse's owner/operator began by engineering his own music before becoming a professional for hire; he has been on both sides of the fence. Concerning the home recording boom, Miller explained what remain of the differences between professional studio engineering and home recording. One difference is listening experience. The other is the material circumstances of that experience, the listening environment. He offers a litany of questions for people choosing between recording themselves at home and hiring a professional.

> [Y]ou can have a home studio and know it pretty well, but *do you* spend forty or fifty hours a week, or more, *in that studio* listening to things? Do you *know* what that room *really* sounds like? Do you know how that stuff *translates to the outside world*? Have you heard recordings done in your room *over and over and over and over* again on other systems in the outside world? *Do you know* how to make things translate like that? Even the best home studios usually fall short in one area or another regarding

own recordings, which Miller does from time to time though he always recommends using a mastering specialist. Nonetheless, Jeff Lipton of Peerless Mastering, one of Slaughterhouse's preferred mastering engineer's, lists Miller's output alongside Paul Kolderie's on a short list of Peerless clients whose mixes are nearly perfect even prior to mastering.

> *monitoring*. Either the room's acoustics in which you're monitoring in are *bizarre*, which they mostly are, even the best-tuned rooms, sometimes, are bizarre. You know, do you know what's going on with your speakers? Do you even have *good* speakers? Are you mixing on headphones because your speakers *suck*? You know, that's probably the number one thing that people just don't get enough of in home recording is actual, sheer experience. And somebody who does it full time, just by default, has that aspect, that advantage. And *that's* not even tooting my own horn yet, that's just sort of the reality of: How often do you do it and how well do you know your monitoring system? How good is your monitoring system? How good is your monitoring *environment*? How good is your *recording* environment, if you're doing acoustic open-microphone stuff as opposed to electronic music where you can just plug it in? The toot-my-own-horn department is, yes, sheer experience, and I've also always had a natural affinity for sound. (interview)

In this account, engineering comes down to *translation* between the *environments* of recording and playback, the sources and destinations of recording. No (foreseeable) changes of media, of the technologies *between* these environments, can alter electro-acoustic reality. John Klepko's technical study of control room acoustics and monitoring similarly finds:

> It is certain that in the field of professional audio the ways in which sound is recorded/reproduced will be ever-evolving as the technology is in a constant state of flux. However, the laws of physics cannot be changed so

> that the room acoustics will always be a constant problem that the engineer of the future will have to deal with, regardless of whatever 'current' technology is employed. (1)

Acoustic reality is thought of as a constant 'problem' for the makers of record-objects, the full integrity of which is always compromised upon playback. Even on the consumer-end, there is a subculture of listeners, "audiophiles," who are keenly aware of this technical-aesthetic conundrum and, as Marc Perlman describes, go to great lengths to 'tweak' their systems in order to hear as much as they can, all at once, of the record-object's mercurial presence.

Miller, by his own accounting, does not suppose a studio is anything other than a 'bizarre' listening environment. Rather, he says that it is an engineer's job to know one's instrument intimately, to listen through and work with the bizarreness of one's own instrument so that the final product contains no unwanted distortions. There is a technological dimension to this, of course. Studio monitoring speakers are unlike the speakers on home stereos in that the latter are made to sound *good* while the former are made to sound *true*. Though all speakers are biased, makers of studio monitors support claims to 'true' sound by offering a wider and flatter frequency response than home stereos, which sound good, rather than true, due to features such as built-in equalization and compression effects. So one piece of monitoring wisdom to come from this is the understanding that, if one made a recording that sounded on true speakers the way it would on a good home-stereo system, it would turn out to be a mess upon playback outside the studio; a record that will sound good on consumer playback systems, one

which travels well, is not necessarily one that sounds great on studio monitors. This raises some issues on the topic of home computers and their potential.

In purely financial terms, in addition to the investment of time needed to gain experience interpreting the feedback from monitoring systems, the need for true listening creates the added expense of obtaining these systems, and just one set of studio monitors can cost more than a professional-grade digital audio workstation for a home computer. If one wants to do more than record at home but actually—*truly*—hear the product of that recording, then the price of entry goes up. Yet computer-based recording does offer a special advantage when it comes to monitoring. Unlike previous recording systems, computers can provide graphic displays of the sound waves on each track, which makes it possible to perform a variety of precise edits referencing only a *visual* monitor (i.e., a computer screen).

A study of visual analysis software used in vocal training showed that singing lessons could be enhanced by the addition of spectrographic feedback. However, it was also found that the visual feedback the system provided still required audile interpretation from the teacher so that, ultimately, "visual feedback software cannot be a replacement for the listening skills of the teacher, although it can help the teacher monitor what is happening during the student's vocal performance" (Howard et al 31-32). The conclusion also contains a brief but suggestive recommendation for "[i]nvestigating the applicability of new signal processing algorithms for this application, such as human hearing modeling" (Howard et al 33). The trouble with spectrographic feedback is that it represents only the empirical features of sound waves and not the way these waves interact with human ears to create the vocal affects singers strive to create. Overall, it

was observed that the instructor's understandings and applications of the visual analysis system were "not always correct in their scientific justifications" (Howard et al 31). Nevertheless, teachers found useful ways of reading the diagrams within the context of their singing lessons, as one explains: "it doesn't matter whether the student understands why thick or thin bands appear on the spectrogram, but I can direct what I want him to achieve, e.g., I want more wiggles" (Howard et al 31).

Visual feedback is only meaningful in the context of critical listening within which asking a singer for something like 'wiggles' comes to makes sense; out of all the visual noise of a vocal spectrogram, the wiggly lines become correlated with sounds the instructor identifies as good singing. It is reasonable to believe that visual analysis may similarly prove to be helpful in the training of recordists. Harris Berger and Cornelia Fales' use of spectrography to analyze the frequencies of typical heavy Metal guitar timbres hints at what such a program might concern itself with. In the end, however, a well-groomed spectrograph is still only a reference of the record-object, and must be considered as such (i.e., as just one avenue for knowing the thing on disc). Moreover, it is of another sensorial register entirely; it is visual whereas the artwork under creation is to be manifest sonically.[8] All recorded music is experienced through speakers, and it is through speakers that record-objects become knowable as music.

[8] However, some artists, including Nine Inch Nails, Aphex Twin, Venetian Snares, and Plaid, do encode graphic information in their music, which creates pictures when the sound is viewed as a spectrograph. Note, however, that these are all electronic artists; the sound of a picturesque spectrograph is synthetic and noisy, varying from random pink noise to more patterned dialup-modem-esque tones far from the range of allowable sounds for most other music genres.

2.2.2 Monitoring Techniques

Studio monitors are specialized for recording with broader and less-biased frequency response. They are mostly designed for 'near-field' listening, meaning that they are not intended to project sound out into a room, like a home stereo. Instead, they are made to produce a clear stereo-image just a few feet in front of them.[9] The purpose is to eliminate, or at least reduce, room tone', or the effect of sound propagating through space, a major contributor to bizarreness—the true sound of a record does not include the room it is heard in. While all sound-waves are fundamentally dependent upon space—or, more accurately, a certain atmosphere—in order for them to exist as sound, the record-form makes it possible, and mass-culture makes it necessary, for the object of recording to be separable from the conditions of its reception.

Klepko's explanation of the problem from an acoustic design perspective reveals: "All in all, it is not certain whether there are any 'optimal' dimension ratios [for a room's architecture], but only that there exist 'bad' ratios" (22). Here, again, note that the record-object, the work under creation and evaluation, is conceived as always and already straining against the conditions of its reception. Peter Manning's account of the problems encountered by electronic music composers, a slightly different breed of studio musician, explains that the challenge of live 'performances' of electronic music goes beyond failure to meet the concert audience's expectations of *seeing* living musicians playing instruments:

[9] Klepko cautions that 'near-field' is a misnomer used in the marketing of studio monitors. In acoustical terms, the near-field is located more immediately in front of the speakers where the sound is image is distorted because it has not yet matured, or propagated a sufficient distance from the electro-magnetic speaker cones to develop into the waves that are supposed to be transmitted into the air. In acoustical terms, 'near-field' studio listening is practiced in what is actually the closer end of the far-field.

> Experience has shown that the vista of a platform empty except for an arrangement of loudspeakers does not encourage a heightened concentration on the aural dimension unless considerable thought has been given to the diffusion of the material as part of the compositional process. Without a visual aspect, the projection of sound has to be handled with special care and any material shortcomings in this respect will only serve to heighten any feelings of detachment or alienation. (359)

Clearly makers of popular music must also take the utmost care to craft the sounds of speaker-music, sounds heard without a visual crutch that might otherwise take up the aesthetic slack. The difference between 'art' music and 'popular' music, on this point, is that electronic art music does not have to sound good everywhere and anywhere, rather only in controlled moments of exhibition. Even so, as Manning points out, the troubles of acoustic reality beset even the electronic art music exhibitor:

> The laws of acoustics give rise to a further difficulty, for the diffusion of sounds in large acoustic spaces leads to significant alterations in the perceived images. Many a composer, having realized a work in the confines of a studio, has discovered too late that large-scale projection removes subtleties of texture and dynamics, while spatial effects often assume dramatic proportions. (359)

Speaker-music of any sort requires engineering because the life of the composition is absolutely inseparable from its exhibition. Moreover, finding that acoustic reality is given to being so inhospitable to *singular* exhibitions of speaker-music, the goal of *mass-producing* good speaker-music seems wholly beyond reach. However, engineers of

popular music practice reference monitoring in such a way as to, in effect, bracket-off the record-object from the wider world of acoustic space, focusing instead on just the surface of speakers. All the same, this work must still be conducted within the unique acoustic realities of the studio in question.

Because no room is optimal, speaker placement is key or, rather, striking the most advantageous relationship between listener, speaker, and room is a necessity. The near-field effect that engineers rely on for crafting a mix is dependent upon correct placement of the monitoring speakers, and a primary measure of correctness is the impression from the listening position of the engineer seated at the mixing board. Proper monitor placement is governed by the relationship between the two speakers and the ears of the engineer in the control room. The engineer's power over a recording is therefore secured in part by the fact that only the person seated at the control desk can *truly* hear, thus understand and manipulate, what the speakers reveal. Moreover, merely any other who takes the control position cannot usurp power. As Miller has stated, aside from having good monitors and placing them correctly, the intimate knowledge required for good engineering comes from practiced listening, which is always listening through *speakers*, and good engineers *know* their speakers.

Yamaha's model NS-10 studio reference monitors have been a mainstay of the professional recording industry.[10] They are both loved and hated for their clear but sharp sound. The well-known 'tissue-paper mod' (i.e., stuffing wads of tissue paper in the tweeters to make them less piercing in the near-field) highlights the bizarreness of these speakers as well as the fact that some engineers modify their instruments to make them

[10] Whether this continues to be the case remains to be seen. In 2001, the Yamaha Corporation announced they would no longer be able to produce the NS-10 series because the wood pulp needed to make the enclosures is no longer available.

somewhat less bizarre or, more accurately, just bizarre in a way more suitable to the user. At any rate, listening to music on NS-10s is hardly a pleasant listening experience but, as it is often said of them, if a mix sounds decent through these difficult monitors, then it will sound great through most any other system. As useful as they are, however, professional engineers tend to employ multiple monitoring systems, as each reveals different aspects of the record-object. Slaughterhouse uses NS-10s (sans tissue) alongside two other sets of reference speakers, Electro-Voice MS-802s and Fisher PH405s.

Whereas the NS-10s are placed just to the back of the mixing desk, the bigger Electro-Voice speakers are spaced farther apart and mounted near the ceiling above. These are more like *mid*-field monitors with greater bass and less treble response than the near-fields. As opposed to the NS-10s, these speakers are good for letting clients listen to mixes because, for one, they project the sonic image beyond the engineer's seat to where clients usually sit and, for another, they have, what might be descried as, a 'warmer' sound that comes closer to what people are used to hearing from high-end home stereos.

Placed next to the NS-10s, the Fisher PH405 speakers are actually not intended as studio monitors at all, and Miller only cites their make and model as a joke. They happen to come from the boom-box he had as a teenager. In the world of professional gear, these speakers are junk. Still, they are useful junk. The flimsy plastic casing and mid-to-high range bias happens to make them a decent predictor of how a recording will sound through computer speakers which, for better or worse, are now common playback systems. More importantly, Miller has had these listening instruments for so long that he

knows them better and trusts them more than any other reference he has. He knows how good records sound on them, and that is what makes them valuable.

When it comes to technology and technological changes affecting popular music recording, one cannot overemphasize the role of speakers. Although the engineer's art has been cast as one of *mixing*, which suggests the mixing console is the quintessential engineer's instrument, focusing on the console alone would neglect the arguably more important technology through which work with that console is referenced. It is telling to find that, when engineer's travel to work in other studios, they are likely to bring their own set of reference monitors in order to guide their work on someone else's mixer in an unfamiliar studio environment, allowing them to better identify and work with new bizarreness by inserting their own, intimately known factor into the unfamiliar equation. Klepko observes:

> The main advantage of using near field monitors aside from minimizing the effect of the room, is that they can be a portable 'reference' that the engineer can bring along to any unfamiliar recording studio. Of recent, small, self-powered monitors have begun to gain popularity as this setup can further avoid any 'reference' doubts by being able to bring the power amplifier along with the loudspeaker all in one package. (11)

Reference monitors are the instrumental instrument. In principle, anyone can make a good record with anything, so long as one has good ears and a known referencing system. The aim of such knowledge is to establish a *neutral* position from which to make aesthetic judgments regarding work that must travel among countless bizarre sights.

Mastering engineer Jeff Lipton describes the advantage of recording in a well-tuned room with trusted monitors:

> You're optimizing the [recorded] material for zero, meaning the room's not bass-heavy—so you're not cutting bass—the room's not bass light—so you're not adding too much bass. You're adding *just the right amount* of bass, you're adding *just the right amount* of high-end. So when it's played in a boomy environment, like a car, it adds the same amount of bass to it that it would add to any other professional CD, and if you're playing it in a high-end-y environment, you'll add the same amount of high-end or, if you're playing it in a bass-light environment, it'll sound as bass-light as any other CD, or… You're in a room you can trust, and the decisions you make are *neutral* and neutrality is good. (interview)

When speakers, room, and listener are at their best, the end product is a more objective record-object, an optimum zero. Record engineers aim to produce what Walter Benjamin identified as the pinnacle of reproductive achievement, "the orchid in the land of technology," the impression of an "equipment-free" reality (233). A professional sounding CD sounds neutral, and neutrality is good, but neutrality is not what recording tends toward; it is always pulling more towards the bizarre than the normal, and engineers must take care to maintain a level course if their work is to travel well.

2.2.3 Forces of Circulation and Reception in the Moment of Production

In practice, all three of the Slaughterhouse monitoring systems work together to index the recorded work, which the engineer manipulates—*mixes*—until arriving at one version that sounds right on each of the reference monitors; although the manifestations of the finished work will inevitably vary, the multiple monitoring technique is aimed at assuring that variances in sonic decoding will not compromise the sonic-image intended to be conveyed. In Hall's terms:

> What are called 'distortions' or 'misunderstandings' arise precisely from the *lack of equivalence* between the two sides in the communicative exchange. Once again, this defines the 'relative autonomy', but 'determinateness', of the entry and exit of the message in its discursive moments. (1993 510)

Multiple monitoring technique shows that the object of recording is problematic because it has to be made to withstand the inevitable distortions and misunderstandings of one-to-many communications. Extending the comparison with Hall's theory, this is an example of how moments of circulation and reception are "incorporated, via a number of skewed and structured 'feedbacks', into the production process itself" (1993, 509). Good recordings anticipate the plurality of decoding, the relative autonomy of records, by anticipating common distortions encountered in circulation and reception. Monitoring techniques are a means of structuring feedback from decoding into determinate judgments of the production process. Consider the common problem of bass-lines.

Bass-lines are key to rhythmic and melodic functions in most pop music. But, because they are traditionally 'low' in the mix, encoding them is a subtle art requiring acute technical awareness. Bass, by definition, is low in frequency, which means that it resides near the cut-off point of many reproduction systems. It is also generally low in volume, i.e., quieter in the mix than the other instruments. Bass-lines are thus always at risk of extinction. This is one reason for consumer playback systems to build-in bass-boosting effects. But this solution on the end of decoding is an awkward conservation effort at best. Bass-boosting only amplifies the lowest end of what the system can represent, (over)compensating for the fact that it cannot represent true, lower bass frequencies.

Studio monitoring helps strengthen the integrity of bass-line encoding by enabling recordists to craft their recordings through feedback systems (i.e., speakers) linking the private sphere of the studio to the public world in which studio recordings are heard. Further, information from these systems are integrated into production judgments. And, like the televisual encoding of the news, the aim of this encoding is the production of (some measure of) agreement about the thing being communicated. If a bass-line is deemed crucial to the musical message intended to be decoded, great care must be taken at the site of production to fix this feature in the mix so as to persist even in the relatively autonomous moments of its decoding. At studios such as Slaughterhouse, using different sets of reference monitors allow engineers to construct mixes conveying bass information even in the absence of true bass frequencies.

The Fisher boom-box speakers at Slaughterhouse are virtually incapable of reproducing bass frequencies, an extreme but not uncommon condition, and thus serve to

represent a most dire playback scenario. If a bass-line is to be heard in such a situation, it will have little to do with the translation of bass *frequencies*. The problem may be surmounted by the encoding of more bass *information* in the form of harmonic and inharmonic frequencies embedded in the bass instrument's timbre. Recognizing that no non-synthesized sound is a pure tone, and thus always contains many layers of frequencies, one way that engineers manage to convey bass-lines in the absence of bass response is to accentuate the upper frequencies of the bass instrument's timbre which, though not truly low frequency-wise, correspond to the rhythmic and melodic work that the bass is doing within the song. Still, the accentuation of these frequencies to preserve the musical code on small speakers like the Fishers must not upset the balance of the mix played through other systems. And so the engineer, along with the clients, goes back and forth from one set of monitors to another, often taking demonstration mixes out into the everyday world, going from one bizarre site to the next, *playing the studio-instrument* until it is agreed that there is an acceptable, relatively consistent sonic identity across all observable instances.

Multiple monitoring is intended to enhance recordists' ability to perceive sounds on record, to *study* them as if through sonic microscopes, so that their recordings may be received without any unintentional impurities escaping from a bizarre-but-controllable studio environment into even more bizarre, and ultimately uncontrollable, playback environments. Monitors reveal and control for anticipated impurities of circulation and reception. They also help to treat impurities from within, including extraneous noises from the apparatus (e.g., digital clipping, 60 cycle hum) to unwanted performance artifacts (e.g., creaking pedal, coughing bassist) to more nebulous areas like 'balance' of

different instruments, frequencies, and/or effects, not to mention tasks concerned with evaluating and editing performances.

As Jonathan Sterne argues,

> although *technique* and *technology* are terms that clearly bleed into one another, the distinction is crucial for the history of sound. *Technique* connotes practice, virtuosity, and the possibility of failure and accident, as in a musician's technique with a musical instrument. (2002, 93)

This is to say that it is possible for one to be a virtuoso listener, and this is precisely what one must consider in order to comprehend the art of traveling speaker-music. Examining the central role of monitors and monitoring environments draws attention to one intractable fact of engineering: all recorded music is *speaker-music*, and good music travels from one set of speakers to another while retaining the qualities its creators deemed essential. But the technical description of this technique, to this point, fails to do justice to the challenges of putting it into practice for aesthetic affect. To understand recording studios as *musical* instruments, more needs to be said about speakers and aesthetic judgment.

2.2.4 Show and Tell: Why Talk When You Can Listen?

Miller's junky, old speakers became valuable reference monitors due to how much listening he had done through them, not just monitoring his own work but listening in on the work of other recordists, and learning, even through bad speakers, about how good music sounds. However, one must not lose sight of the fact that engineers are working

towards their clients' goals, and clients expect that a professional can make *them* sound good. In a sense, studios sell good sound. For entrepreneurial engineers, the call to not only identify but also manifest sonic values presents a daily communications challenge, which their audile techniques address.

Sterne's cultural history of sound reproduction technologies identifies "a relatively stable set of practical orientations toward sound and listening," which define modern techniques of listening. Studio listening perfectly illustrates these modern techniques.[11] In addition to providing a site in which listening may be so practiced as to become a kind of virtuosic technique, the studio environment is geared toward the discovery, examination, and propagation of sonic codes. Sterne explains: "On the basis of their sonic character, sounds become signs—they come to mean certain things. Technical notions of listening depend on the establishment of a code for what is heard but exist without an effective metalanguage" (94). Modern techniques of listening should be regarded, in part, as an answer to the trouble of talking (or writing) about sound. Sterne concludes that, "[b]ecause of the difficulties involved in constructing a metalanguage of sound, audile technique would come to stress listening practice and practical knowledge through listening, rather than formal and abstract descriptions of sounds" (94). Without a doubt, as Sterne notes, sound engineers are one of the rare groups of people with a relatively formalized language of sound. Regardless, such expert discourse is often of no use when communicating with clients. In those instances when words fail, tactical listening steps in.

[11] Sterne actually elaborates on six different features of the modern disposition; I identify only the two most relevant here. To be sure, however, studio listening techniques also conform to the other four features of modern listening.

An engineer has to know well enough whether the results coming through the monitors are meeting the artistic 'vision' of those for whom the recording is done. Studio monitors are more intimately known, hence better used, by their engineers, but the service nature of the work means that clients must be in on it too if there is to be any common ground. For this, studio monitors are used to reference recorded sounds made *outside* the studio as well. That is, clients play for their engineer examples of *other* records exemplifying certain aesthetic values. This way, everyone in the session has a better, more concrete idea of the sounds to be sought. This is a typical opening activity for a collaborative recording project.

At Slaughterhouse, on top of a cabinet next to the mixing desk, are piles of CD-Rs that clients have brought in for, what Miller calls, "show and tell," i.e., listening with clients to the records say exemplifies their ideal sound and, moreover, doing so on the studio-instrument's monitors through which clients and engineer alike will have to judge their music in the making. Listening to familiar, inspirational records on the studio system is a way for clients to set a critical baseline for their own judgments by establishing auditory relationships between the record-objects of their everyday listening and the more clinical environment of the recording studio where their own work is being produced. Rather than simply *telling* the engineer about a metaphoric vision of 'chunky' guitars or a 'snappy' snare, for example, clients *show* the engineer what they have in mind through empirical examples.

Studio show-and-tell may be accused of compromising authenticity by avowing the standards of the status-quo. Or it could be read as an intuitive solution to one of the toughest problems in musical work of any kind (i.e., talking about it). Records are a

means of communicating aesthetic ideas between artists and audiences as well as among recordists, a way for people to circumvent the trouble of using words. For professional engineers, show-and-tell should be regarded as a savvy form of communication focused on the material vehicles of musical meaning.

Thomas Porcello argues that the highly refined production values of contemporary popular music bring with them a need for better codified talk about music.

> With the development throughout the 20th century of increasingly sophisticated means for isolating, recording, and reproducing sound, making music in a recording studio presently centers on the crafting not only of perfect musical performances, but also of complex sonic timbres and textures. As attention to sound for its own sake has become deeply embedded in studio work, so has the need for engineering professionals to be able to discuss it in finely detailed ways. (2004, 733-744)

Building on Andrew Goodwin's theory of "professional vision," Porcello crafts a theory of record engineering as "professional audition." The thrust is that "a relevant object of auditory knowledge emerges through interplay between a domain of targeted listening and a set of discursive practices played out in the context of specific sound-engineering activities" (Porcello 2004, 744). This is precisely what I have observed with regard to reference monitoring. However, whereas Porcello's observation leads him to study the way recording schools train engineers to talk about sound, the same notion, here, focuses on the concerted, group listening at the base of that talk. Good speaker-music tends to follow the paths of records that have traveled well before. Using records as references in

the creation of new works affirms the record as the most relevant object of auditory knowledge; mastering that knowledge is part of learning to 'speak' record-language well.

Still, what I describe as innocently learning to speak the language of records also smacks of the more distasteful side of mass culture, namely the conservative tendency to reproduce successful formulas *ad nauseam*. But casting the issue in terms of sonic communication highlights the fact that, in communicating anything, one is never free from a preceding language that others have made. Listening to good speaker-music in order to become better at recording is no different from listening to good speeches in order to become better at oratory. Furthermore, it must not be forgotten that studios are *thoroughly* bizarre sites, and that recordists never fully suppress that bizarreness. If one is worried about mass cultural homogenization, this is a good thing. Moreover, it appears that new technologies are emerging to facilitate the development of the audile techniques needed for studio recording and mixing.

For example, Sound.org—a subsidiary of the Waves digital audio company—is now offering an OpenMix program through which users will have access to all of the mix elements of professional, commercially released songs. They view this as an educational tool for *showing* amateurs what a professional mix is made of, not only on the surface, which is all that monitoring reveals, but actually within the intricacies of a mix through their OpenMix system, which gives users full access to a digital mix as it stands in the final state of the track's official release.

> With OpenMix™, the artist, publisher, or licensee provides access to a recorded performance and all of the elements needed to create the final mix. At the same time, they're able to retain whatever level of control they

> desire over access to individual tracks, premixes, stems, groups, automation, settings, etc. OpenMix™ uses customized audio workstation sessions that include tracks, mixing, and automation, as well as the necessary processing modules and settings to recreate the final mix. This is all delivered on DVD, along with instructions and documentation. (online)

Given the education to be had from close-listening, the added dimension, somewhere between open and closed, promised by new innovations like this should be even more helpful to aspirants still learning how to listen critically and make adjustments accordingly.

2.3 QUESTIONS OF AURA: RECORDING AS REPRESENTING

Style is a thorny issue for recordists, whose job has traditionally been conceived as transparent mediation between performers and audiences; good records hide their artifice. Miller got defensive when asked if he has a style: "I hope not!" Yet this is carefully qualified. Miller explained that he is not set upon imposing his own tastes on other people's music, though he sees how stylistic features arise from the specificities of the working situation.

> I'm not going to *impose* any beliefs on what a record should sound like from a subjective point of view or from a preferential point of view. I *am* going to impose by default a certain sound on work that I do because of the sound of the *equipment* I use, *how* I use it, what my *experience* brings

> to the table, what my own *abilities* bring to the table. You know, just because I've got a pretty wide spectrum of ability doesn't mean that somebody can play me a record and I can mimic that sound with the instruments that they're bringing me on the equipment that I have with my knowledge and experience. It's just not going to happen. It's not the same *band*, it's not the same *studio*, it's not the same *engineer*, it's not the same *anything*. (interview)

The studio is thus bizarre through and through, from the listening environment, to the equipment, to the engineers and even clients, it is always and already a strange site. A more refined statement, one pointing towards the positive valence of bizarreness, would be to say that recording studios are instruments of *specificity*. The significance of this insight is best seen with regard to its implications for the Benjaminian hypothesis concerning reproduction and the loss of aura. Studios, as instruments of specificity, unavoidably produce works that are, in every instance, unique testimonies to the histories each has experienced.

Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction" is one of the most widely cited pieces in the study of popular music and technology. However, acknowledging recording studios as musical instruments, the notion of recording as a *re*-production of music is totally off the mark. The project of theorizing recording studios as musical instruments is at odds with the fundamental presupposition of Benjamin's essay. Antoine Hennion and Bruno Latour, in a no-holds-barred critique, "How to Make Mistakes on So Many Things at Once—And Become Famous for It," decimate Benjamin's argument by demonstrating its inept treatment of *technique*:

"The real touchstone of Benjamin's essay is technique itself. The argument is barely presented as such, but he takes for granted, as an obvious statement, that the main function of technique is to reproduce mechanically an original" (93). Driving the point home, they continue:

> The history of art, which Benjamin briskly sums up in two pages to support his argument, actually offers material evidence to make several general points that lead to a conclusion exactly the opposite of Benjamin's own. The first is that technique is identical to mechanical reproduction. Second, there is no such thing as an original that can be copied afterward. Finally, there is no reason to believe that multiplication is an impoverishment—unless, of course, you have accepted this hypothesis as a solid empirical fact from the outset. (93)

Furthermore, it should be noted that Hennion and Latour take music recording as a case in point: "Every sound engineer knows that his techniques produce music; they do not *re-produce* anything. Technique has always been the means of producing art; it is not a modern perversion of some prior, disembodied creativity" (94). In terms of the observations I have made regarding Slaughterhouse as a site for the encoding and decoding of traveling speaker-music, one of the most illuminating techniques is that which turns upon listening to *other* recordings. Using the recordings of others as referents for attuning one's own judgments shows that the point of reference for recording—its standard of judgment—is not a reality prior to representation but *the field of representation itself*. Furthermore, the outcome of such practice is neither a copy of a

musical performance nor a faithful reworking of other records but a wholly original sonic text bearing all the marks of its specific, or bizarre, history.

2.3.1 Records are not Recordings

Theodore Gracyk launches his theory of Rock music from the basic idea, now shared by most if not all who theorize recording, that "*[s]pecific* sounds are as central to the music as are specific colors in painting" (61). Yet he pushes the point in order to inquire as to how, in an age of such specificity, one should go about the business of interpreting recorded music. Gracyk ventures where few theorists of popular music dare, admitting that Rock music is often, by most measures, not very good at all. Taking The Ramones' "I Wanna Sniff Some Glue" and The Kingsmen's "Louie Louie" as examples, Gracyk argues that the appeal of such hits is virtually inexplicable if one analyzes compositional structure, performance, or lyrics. Although it is not impossible to redeem popular music using traditional musicological or literary categories, Gracyk seeks to re-orient attention to the immanent features of records as such. The most significant phenomenon of recorded music, he argues, is *repetition*, which has a major impact on the way music is listened to and, therefore, in the way it is created. Moreover, the kind of repetition enabled by recording is unlike repetitions used in live music because, in Gracyk's terms, records offer *literal* repetitions, in which each singular moment of recorded sound has its own unique, elemental identity within the whole of the work.

> No longer attuned to the question of how long a guitar will hold a note, we are free to savor and anticipate qualities and details that are simply too

> ephemeral to be relevant in live performance. When records are the medium, every aspect is available for our discrimination and thus for its interpretive potential. (Gracyk 55)

There are sonic details of recordings, like those from The Ramones or The Kingsmen, that make them appealing in spite of whatever musical shortcomings they may otherwise exhibit, and recordists are keen to identify what the components of that appeal might be. This is why monitors and monitoring techniques are central to studio work: they help mine the full interpretive potential of a record by enabling listeners to focus on even the 'ephemeral' sounds of the work and, through that effort, it comes to pass that *there is no such thing as an ephemeral sound on record*. Each and every detail of the record-object is subject to interpretation, hence each and every detail must be studied.

Gracyk makes the case that records are "autographic" works. Meaning that recordings are not second-order works derived from prior originals. Of course, Gracyk sees a causal relationship between music performance and the music that winds up on record, but he finds in the recording process significant aesthetic intentions with far more impact on the final outcome. From this viewpoint, musical performance is less the original cause of a recording and more the *subject* which is *represented* on record; therefore, engineers are less like documentary filmmakers and more like figure painters when it comes to their subjects. Professional engineers work to render flattering portraits of the clients who hire them.

As for the Benjaminian hypothesis regarding aura, the notion that records are not recordings but representations (i.e., works unto themselves) suggests that recording does nothing to diminish the aura of an original because the record itself *is* the original. Aura,

in this formulation, has not withered it has only *re-located*. Furthermore, adding to this the observation that every recording is, by virtue of the conditions of its production and reception, a radically specific text, it may be that aura has not only re-located, it has also *multiplied*.

2.3.2 Aura Transferal

Zak's *Poetics of Rock* addresses Benjamin's concern for the (dis)appearance of aura in mass-culture, concluding:

> [A]uthenticity does not rely on the presence of a unique instance but on a unique arrangement of elements. All instances of the work are equally original as far as the audience—from the amateur to the connoisseur—is concerned. The permeation of the artistic process by machinery creates a new set of terms that affect both artists and audience—both production and reception. The presence of the artwork 'designed for reproducibility' is experienced by perhaps millions of people around the world, and the work's aura lies not in a unique physical existence but in the space it makes for itself in the collective consciousness of cultural discourse and the witness that it bears to all that went into its making. For therein lies its transmissible 'testimony to the history it has experienced.' (19-20)

In this analysis, auratic effect depends firstly upon a work's originality and, secondly, upon the sense of distance an original work impresses upon its audience. Zak thus launches a two-pronged argument, one aimed at establishing a claim to originality

through recognizing a recording's 'unique arrangement of elements', the other aimed at the multiplication of that singular arrangement across 'millions' of receptors.

In looking at techniques of studio monitoring under the rubric of encoding/decoding, recording is seen to concern itself with making a single code suitable for mass circulation and reception. With Zak's argument, one can square Hall's theory with the particularities of *aesthetic* codes, showing, first, that each encoding is an original work and, second, that the work of musical encoding is nothing short of the creation of an aura. Aura transferal, Zak explains, is what recordists commonly refer to as "studio magic" (20). With every record carrying its own aura, the soundscape of popular music has to be regarded as a textual field of ever-increasing richness and complexity rather than one of mass-reproduction and homogeneity. The technologies of mass culture thus can not help but propagate new codes, fueling originality rather than threatening it.

Zak's critique preserves an interesting aspect of Benjamin's theory, namely that aura is not the direct efflux of an original but, instead, the distance one *feels* from that original. Benjamin pins aura to the *illusion* of distance from the original, no matter how close it may be:

> The essentially distant object is the unapproachable one. Unapproachability is indeed a major quality of the cult image. True to its nature, it remains 'distant, however close it may be.' The closeness which one may gain from its subject matter does not impair the distance which it retains in its appearance. (243)

The persistent illusion of distance even under intense scrutiny is clearly recognizable when examining techniques of studio monitoring; for all the close-listening through

specialized monitoring devices, the record-object itself is only ever a thing that is *referenced*, never fully approachable. There is a technical and phenomenal distance between listeners and records that supports an auratic relationship between the two. Records appear to have a unique physical existence outside the purview of its audience, including its makers. As the theme of traveling speaker-music reveals, distance is an absolute feature of the record-object which, due to the particularities of each and every playback situation, is always partially concealed from encoders as well as decoders; even in the intimate setting of the recording studio in which original works are made, the full presence of the record-object is never entirely revealed.

With the help of Hall's encoding/decoding model and the example of studio monitoring, one sees how readership and authorship coincide in the studio. Moreover, through Gracyk and Zak, it becomes evident that the kind of encoding done in recording is a specific arrangement of surface elements creating, at one and the same time, a unique, stable, original text as well as a text that is radically divided among its myriad manifestations as decoded speaker-music. These tendencies are always co-present in the record form. As Maria Rosa Menocal explains, there are two countervailing tendencies in Western culture: originality and variation.

> [T]he dynamic issue within Western culture is always the struggle between an aesthetics (and ethics—for it is, indeed, a highly ethical question) that values variation—and thus has no conscious belief in the supreme value of 'authenticity,' no historiography of 'origins'—and its opposite, an aesthetics that values fixed forms, worships authenticity, and cultivates the search for origins as the ultimate intellectual and

> philosophical quest. This conflict, moreover, is both internal and external: it is not merely one powerful, consistent set of beliefs and believers pitted against another (even if it often looks that way from the outside) although, in any given historical moment, one vision of cultural value may be largely triumphant. The conflict is always, at a minimum, latent within either vision, even within any given individual in either mode: in a culture of variation the attractions of classicization are never very far; conversely, in classicizing moments the seductive allure of variation is often just barely repressed. (292)

Although, in theory, originals are only ever variations on other originals and every variation is in itself an original, cultural practices evidence particular ethical/aesthetic standards through which these matters may be sorted out. Studio recording is clearly on the side of the original whereas DJ cultures are on the side of variation, though each has its own means of sorting out what counts as an original or a variation and how to figure the relative value of one or the other.[12]

2.3.3 Toward a Phonogrammatic Understanding

Yet if aura could be anywhere, then it may just as well be nowhere. Is the transferal and multiplication of aura across the field of recorded texts just a more upbeat take on the

[12] Now that DJ pioneer Grandmaster Flash is officially in the Rock and Roll Hall of Fame, it is undeniable that classical ideas of authorship and originality have firmly rooted in Hip-Hop's culture of variation. Conversely, Rock music finds ways to reconcile its approach to authenticity even when it comes to variations. Menocal argues this by way of example, positing Jimmy Hendrix's version of "All Along the Watchtower," a cover of a Bob Dylan song, is effectively the *original* version of that song.

disappearance of aura? Even Benjamin suggests aura is not something that ever exists/existed in actuality, rather it comes from anxieties about art within a mass culture:

> Precisely because authenticity is not reproducible, the intensive penetration of certain (mechanical) processes of reproduction was instrumental in differentiating and grading authenticity. […] To be sure, at the time of its origin a medieval picture of the Madonna could not yet be said to be 'authentic.' It became 'authentic' only during the succeeding centuries and perhaps most strikingly so during the last one. (243)

Therefore, although it is possible, as I have shown, to recoup the concept, it is somewhat of a red herring.

Hennion and Latour argue that 'aura' fails to get at what is actually at stake in the age of mechanical reproduction, namely "the birth of the author and a new extension of readership" (95). Auratic thinking distracts from issues of technique, mystifying them as 'studio magic' whereas what ought to be the forefront of attention is the way cultural spaces are formed with and through technologies of reproduction and, playing upon the inherent possibilities for both originality and variation, come to their own understandings of texts, authors, and authenticity, their own traditions of encoding and decoding. Further, this applies not only to scholars and artists but also to anyone remotely concerned with today's popular culture.

Following the idea that records are the primary texts of popular music, Gracyk argues that anyone failing to understand recording as a representational art working within a refined language of sonic nuances

> can only respond at an unsophisticated level, confined to its most basic features and obvious meanings. The work is reduced to its descriptive, narrative, or expressive elements. More complex meanings arise only as one relates it to a larger class of associated works and to the range of choices available in the medium. Without denigrating the response of less sophisticated members of the audience, if they treat recordings as transparent transmissions of performances that happen to be recorded, there is that much less room for encoding and disseminating meanings. (1996, 45)

Gracyk sees music journalism in particular as a counterproductive force in this regard because it tends to perpetuate the mistaken notion that what matters about popular music is the stories behind the performers, which is somehow transubstantiated into aura on record. A more illuminating, less mystifying discourse on popular music would address the impact of the music itself as the result of carefully arranged sonic elements.

Any person who has ever used the 'seek' feature on a radio understands sonic coding intuitively. The seek button cycles through the strongest signals in the air; usually, in cars especially, it can be set on automatic to stop on every available station for a second or two, until the user stops it on a sound he or she is looking for. The fact that people know, within seconds or milliseconds—without hearing so much as a full melodic phrase or rhythmic pattern or vocal line—whether or not they want to stop and listen to a song on the radio is a testament to the power and appeal of sonic textures. Another, digital-age example is the Music Genome Project, which has reinvented the seek feature for internet radio.

Using a sonic genealogical system of their own design, the Music Genome Project's Pandora internet radio helps users create audio streams tailored for their individual tastes. Listeners begin by identifying a song or artist they already enjoy, then the Pandora system uses that as a genotype for the selections it plays, and, as each song plays, users can flag the song as good or bad. As this listener feedback accumulates, the streaming music becomes more acutely focused on the idiosyncratic tastes of its user/listener. More to the point, the music genome is built upon a purely sonic classification system: "It's not about what a band looks like, or what genre they supposedly belong to, or about who buys their records - it's about what each individual song sounds like" (Westergren online). These examples from radio listening show how sonic codes operate on the side of decoding, they also draw attention to the fickle reception environment recordists are faced with.

Record engineers must take into account their client's intentions as well as their audience's expectations. Antoine Hennion's study of recording studios finds that the "fundamental task [of music recording] resides in *the permanent and organized quest for what holds meaning for the public*" (185). Hennion describes things that hold public meaning as 'sociosentimental'. In music, sociosentimental codes

> include key phrases, sounds, images, attitudes, gestures, and signs, infralinguistic categories which are all the more difficult to pin down insofar as they escape definition by the official language, and are not autonomous but inseparable from the social context within which a given group attributes a special significance to them. (186)

Above, I described how recordists learn these kinds of codes form listening to records,

but sonic codes are not solely gleaned from music recording—film sound, for example, is a major contributor to the sociosentimental vernacular (Anderson; Chanan; Doyle). Surely, movies and other popular culture (e.g., video games, sporting events) affect sonic sociosentimentality. Hennion's theory further shows another way in which decoding is accounted for during encoding. Recordists listen not only for sounds that please them as artists, they do so for the purpose of redeploying those sounds in order to sociosentimentally affect their listeners.

Yet without the audience present in the studio, the quest for evocative codes, which perhaps even those affected do not even recognize as such, shows music engineering to be more an art of interpretation than a science of recording. The studio instrument is truly a *phono-graphic* tool, a means of sound-writing, and this writing is not merely a passive transcription of an external reality but a carefully constructed representation of its own: a *phono-gram*. Moreover, this sound-writing is carried out within traditional rules for sonic representation: *phono-grammar*.

Joshua Hecht's "Discriminating Aesthetic Components of Sound Recordings" identifies five basic aesthetic categories: frequency (timbre and pitch), dynamics (volume), lateral placement and movement (left-right placement in stereo field), depth placement and movement (ambience), and, a meta-category, aesthetic balance (relations between elements in these categories). These aesthetic features seem to be what communicate most clearly to listeners, therefore, Hecht states, it is from these which categories for understanding the art of recording should come. Arguing for the necessity of aesthetic, not solely *technical*, training as part of audio engineering curricula, Hecht observes that music recording

> involves a synthesis of technical as well as artistic or creative abilities, with the most crucial elements, to most listeners being creativity or other aesthetic considerations. If fact, except as a matter of knowledge of the craft by other recording industry professionals and music recording or audio engineering students, the technical components of audio production are of only minor concern to consumers of sound recordings. (15)

Hecht's five categories therefore articulate the common ground between the technical work of encoding and the aesthetic experiences of decoders. Furthermore, Hecht is not inventing these categories, rather he has gleaned them from the practices of professional engineers. Miller's more technical explanation of the so-called 'three-dimensions' of sonic representation helps flesh-out some of Hecht's categories, showing how they work together to create textual features linked to psychoacoustic impressions amounting to three-dimensional sonic 'images'.

> The three dimensions of sound, as most people seem to agree on them, when you're talking about stereo recording, are: *spectral* information, sort of top-to-bottom—you know, treble to bass: top to bottom—and everything in between; frequency response essentially, or frequency *bandwidth*. And then there's *width* information, which is left to right *panning,* effectively, or left to right *placement*, and panning and placement are two different things. Panning is where a mono source is placed *in* the stereo field as to appear between the speakers in a particular place. Whereas *stereo* placement…if you record an instrument or an ensemble or something *in stereo*, there might be placement within the stereo field that

> is represented in the stereo playback. But both of them are basically *width* information. And then there's *depth* information, which is the ambience, or perceived distance of the listeners from the source. Ambience probably being the biggest cue where people hear something as being farther away because of the…the more reverberant or ambient something sounds, the further away the brain thinks it is. But there's also other cues that have to do with actual *spectral* cues, the first top-to-bottom information, can be used to also convey depth information. Sounds that are further away, typically, are lacking in bass and treble compared to the same sound closer up. So if you take two sounds and alter the equalization of one where it has less bass and treble, even at the same volume the ear is going to hear that other one as being slightly farther away, and that's just the way sound propagates in air over distance. The human brain interprets that as depth as well. But those three principle things are things that are generally agreed upon as what makes up a *stereo* mix. (interview)

This coordination of technical and psychoacoustic features illustrate how the field of sonic representation is conceived of, talked about, and crafted by studio engineers. While the classifications do not align perfectly—Miller subsumes the role of dynamics under the operation of spatial codes—the gist is that these categories of aesthetic distinction, the basic elements of phonogrammatic representation, are used to define a three dimensional space— up, down, left, right, front and back—sometimes called the 'sound box'. In Hecht's system, 'aesthetic balance' refers simply to the relationships between sonic elements within the three-dimensional sound-box—louder, quieter, closer, farther, and so

on. Yet, in practice, balance is tied to the larger issue of sociosentimentality: the aim is not just to achieve a *technically* well-balanced mix—one which does not distort upon playback—but one that is also *evocative* in some way.

Hecht tested professional engineers and engineering students in order to compare their ability to *identify* the elements of a mix corresponding to each of these categories, finding, not surprisingly, that professionals were more capable than aspirants. More interesting is Hecht's method, which placed a particular emphasis on the ability to identify these features *quickly* because, he explains, the mark of distinction between professional engineers and aspirants is the speed with which they recognize and manipulate sounds along these lines. Hecht, essentially, was testing for *phonogrammatic fluency*, i.e., the ability to 'read' sonic representations. Radio listeners, though they may not be aware of the phonogrammatic traditions and strategies that give voice to their favorite music, seem to be, as evidenced by radio listening, at least *functional* in their aural illiteracy. Yet, as Hecht finds, even fully competent, phonogrammatically literate, listeners may lack greater aesthetic understanding.

> [I]t should be observed that the ability to discriminate the parameters of aesthetic components of sound recordings is not the same as having an aesthetic sense or aesthetic awareness of sound recordings, but it is a necessary prerequisite step to developing aesthetic awareness. (79)

Being able to identify the elements of a code, even being able to represent things in that code oneself, is, as Hecht acknowledges, not the same as being able to understand and apply that code to achieve an effect greater than the sum of those identifiable parts (i.e., an encoding which is more than intelligible but also sociosentimentally resonant).

2.3.4 In Your Face: Heaviness as Phonogrammar

Mastering phonogrammar is imperative for anyone who wants to be heard in an increasingly clamorous popular culture. With only fractions of a section to grab an ear, the power of good engineering over good composition or performance should be more obvious than ever. Furthermore, closely listening for empirical differences between recordings and between monitoring systems is the cornerstone of this exacting art of sonic specificity. All recording techniques are ultimately learned and practiced through listening, as it is work intended to be listened to. It is a *monovalent* art, and the determining valence is the surface of the record as manifest through speakers. The ongoing quest for sociosentimental significance is carried out across this terrain yielding remarkably precise sonic codes to those who listen for them.

There are a number of texts exploring traditions of coding 'light' music such as easy-listening, ambient, and classical (e.g., Anderson; Doyle; Gorbman; Lanza; Symes; Toop). The sum of this work suggests that the sociosentimental resonances of light musical codes come from the audible shapes and textures of the natural world as well as from media texts , particularly commercial film, radio, and television. 'Heavy' music has yet to be explored with such detail. In later chapters, I discuss further the phonogrammatic elements of heavy music, including Punk, Hardcore, Metal, and Industrial, refining issues in the study of popular music and technology by putting them at the service of a fuller articulation of the aesthetics of heaviness. Therefore, it would help to understand, at this early stage, the way heaviness, in general, is conveyed through

a general phonogrammatic arrangement. Describing how the three-dimensions of a mix are organized for aesthetic impact, Miller explained the fundamentals of conveying a heavy sound:

> It's partially the choice of actual *sounds* that the musicians use. It has to do with spectral issues. It has to do with depth cues. And it has to do, to some degree with width issues. So we'll look at spectral issues. Heavy generally has a certain presence in not just *low* end but also an aggressiveness in presence range, in treble or upper midrange, so things sound thick and aggressive—the subjective terms that could be applied. Spatially—I should say, *depth-wise*—heavy music tends to live *mostly close*. That is, heavier sounds seem to be closer to the listener than not, and then things that are further away from the listener tend to stand out as special effects. At least in my experience of heavy music, typically there are very, very few ambience cues. The ambience cues that are there tend to be tight and small, so it seems like you're in a small space, which again conveys being close to the performers. The term "in-your-*fac*" gets used a lot. Where, if everything was sort of bathed in reverb, it's not going to be in your face because it's *over there*, it's far away, non-threatening. Heavy is up here [puts hand in face] and in-your-face and threatening. And width cues, if something appears to be very wide coming out a stereo image, that *can* add to aggression. So you tend to find guitars that occupy the *full* stereo width and the drums tend to be *right up the middle* to be sort of central and focused and pinpointed in-your-face, and the vocals tend to

> live there as well, but the guitars kind of envelope everything, and that's a common thing. You find that there's usually, for the most part during a piece of heavy music, there's going to be guitars in both speakers and they're *loud*, and the drums are *sharp* and aggressive and in the center, and everything is kind of dry unless you're going for a special effect, an echo, a reverb, or whatever that then says, "Wow, I'm over here" [waving hand off to one side] and "I'm [clapping hands in front of his face] back up into your face again." But those are not rules, those are just observations, and that sort of is what I work with when I mix something that's heavy: it's dry, it's in your face, it's wide, it's deep, it's big. (interview)

Balance is not just about the relationship between elements within a mix, it is also about the relationship of the work at hand to the work of others. What makes music sound heavy is more than the way it occupies the sound box—up front and big—it is also the way other recordings do *not* typically exhibit such extremes of volume, proximity, width, and overall size that heavy music does—it is heavy because it is as big as can be within the field of representation. Moreover, having something so massive 'in your face' sounds 'aggressive'.

While part of it is on the bands identifying with a heavy aesthetic to provide the source material (e.g., an aggressive vocal timbre is necessary for the aggressive effect, a softer voice would be read as romantic crooning) it is left to the engineer to know how best to represent that image and convey that heavy affect phonogrammatically (e.g., the sound of screaming off in the distance, may be a vague sign of distress or of impending

danger; the sound of screaming right into a person's ears has a more unmistakably urgent or hostile connotation). Moreover, coming around again to the theme of traveling speaker-music, engineers must create a code which is intelligible to a mass of listeners. This is, to be sure, a vague concept requiring further elaboration. Later, I will present a study covering two differing projects created at the new Slaughterhouse: one a classic, entirely analog production, the other a cutting-edge digital project.

2.4 CONCLUSION: THE EAR, NOT THE GEAR

The approach to popular music I have described and exemplified above is a materialist and constructivist approach typical of communication scholarship. As Tim Anderson explains: "The expert contribution of mass media scholarship *exists* in the identification of the material aspects involved in the process of communication" (186). Clearly, it is unlike other approaches to popular music, such as musicological analyses or audience ethnographies. To come to terms with music in its material and social dimensions, Anderson explains,

> [t]he trick is to understand that, although sound is ephemeral, it is also always a material process. As fleeting and momentary as sound may be, we should never let the processes that go into its production elude us. For it is through these processes that we ultimately experience and produce our musical culture. And it is through understanding these processes that we ultimately begin to understand who we are and why we sound the way we sound. (187-188)

In this brief look at Slaughterhouse Recording Studio and its owner/chief engineer, part of understanding why things sound the way they do involves accounting for the historical, material contingencies of record production, the bizarre forces at play in the studio and the potentialities and limitations of discourse via the record-form. However, the challenge for communication theory is the conceptualization of *aesthetic* communication. When form and content are one, as in recording, it is difficult to conceive of anything like a 'message'.

The phonogrammatic perspective I have brought to bear on the issue of speaker-music casts the encoding/decoding model as a matter of translation geared toward preserving the integrity of sonic codes against the inevitable glitches of decoding. What is intended to be understood is an aural image, a codified play of sonic identity and difference constituting no more nor less than the objective, material support for and expression of musical tastes. As far as this introduction to traveling speaker-music goes, the lesson is best summarized by an engineering adage: "It's the ear, not the gear."

This statement is usually used to deflate the hype surrounding new technologies, a reminder that the means may change but the aim stays the same. It would be foolish to think it possible to make great records by simply buying the latest gear; one must know how to use it, which means being able to fully examine, therefore control, the results. There is, of course, an inescapable technical dimension to this. Recording absolutely depends on gear, so there is an inherent limit to the ear-not-gear principle. Studio monitoring technology and techniques represent overdetermined instances of good listening and good technology in a mutually sustaining relationship.

In *Tape Op* magazine, the diminishing distinctions between amateur and professional recordists are a perennial topic, likely because its staff and readership consists of both and many in between. A recent interview asks engineer Jonathan Kreinik, point-blank, "Are studios dying?" Kreinik's response is typical of the ear-not-gear mentality:

> As long as you're perceptive, there's no reason you can't make the record you wanna make on any device capable of recording audio. It may be a pain the ass, but you can do it. So in a way I'd love it if studios died, but I think in the end they never really will. If big studios die, then small personal studios will just absorb their gear and be studios. I think places like [my studio] will be harder to find—places that are more set up as creative spaces and hang outs and nerve centers. (Massey 57)

Here, the ear-not-gear principle is aimed at the life and death of the studio; studios and all their high-tech gear are ultimately props for what really matters, perceptive listening. New and better gear does not a good engineer make, it simply makes ear-work less of a pain. Still, monitoring appears to be a pain that will not go away, it is absolutely necessary in order to produce speaker-music that travels well.

The point is that it does not matter what went on behind the speakers, what matters is what comes out, and what comes out will be good if it was engineered by skilled listeners. Yet, if one thing should be clear by now, it is that recording technology offers no kind of studio magic that spins straw into gold, turning any source material into pleasing song-sounds with the flip of a switch. The aural literacy and sociosentimental

sensibility of engineers is what a professional studio offers. What studios sell, aesthetic value, is not gear-related but ear-related.

However, while the speaker component is unavoidable, the imperative to travel well is not. The demand for music to travel is inextricable from the imperative to produce music for mass distribution. Hence studio monitoring is not an unmotivated technique. Techniques are never unmotivated, therefore Gitelman argues for the term 'protocol'. The protocols of monitoring owe to the technical and aesthetic demands of a commercial music industry. Though the industry is highly de-centralized, protocols such as those surrounding reference monitors make it *sound* as if it were more coherent than it actually is.

Nonetheless, if there is one thing that the history of music recording bears out is the principle that empowering more music producers will yield more unique sounds. It also shows that sonic innovations are likely to become part of generic, phonogrammatic codes (e.g., the basics for Rock and Hip-Hop codes were both derived from the popular successes of amateur music made outside the protocols of what, once, was considered good practice). So, while it is true that the need for recorded music to travel well is related to the needs of commercial capitalism to create products for mass audiences, it is also the case that it is derived from the technical aspects of communicating sonic ideas. Monitoring is a means of making recordings more intelligible by providing a ground for critical, comparative listening.

Soon, if not already, anyone with a good ear can produce their own sonic representations through new media, residual media or, more likely, a bizarre mélange. With more user-generated content flooding the digital networks, protocols will no doubt

change as will codes. Yet this social-constructivist position does not sit easily with the Marxist telos that would celebrate, even demand, amateurism over professionalism. It is hard to deny the sentiment that everyone should be able to make music, that music does not have to be the magical product of a special class of people called 'musicians' or 'engineers', as the case may be. The alienation of everyday people from the production of their culture is indeed lamentable.

However, the vision of the digital era as empowering each and every individual to operate as his or her own production center, un-alienating audiences by providing them the means of self-representation, makes for a fine political sentiment but a strange musical one. An era of Attalian composition evidenced by the multiplication of individual voices through an explosion of digital artisans with no need for entrepreneurial collaborators could also be a very anti-social production scene. Kreinik suggests this in his guess as to the future, wherein studios, understood as *social* places, are fewer. What is at risk of extinction is neither the techniques nor technologies of recording, those are quickly spreading. If anything is endangered, it is the social aspects of professional studio recording. With more recordists using home studios, the work of recording promises to become even more socially isolating than it already is. Surely, this can be a good thing insofar as it has the potential to yield more authentic works, i.e., music created outside the protocols of traditional recording.[13] Yet just because something is technically possible does not mean it is also desirable.

Although records are the primary medium for popular music, it is not necessarily the primary activity, or interest, of the subjects represented on record. Put simply,

[13] This too is more promising in theory than practice because protocols are also embedded in the design of technologies to begin with (Gitelman; Pinch and Trocco; Latour; Theberge 1997).

recording can be a tiresome and boring activity compared to playing with a live ensemble. Even as others obtain the means to record, entrepreneurial engineers survive as collaborative artists for hire by clients who do not have the inclination to do it for themselves. This means that, above and beyond their technologies, studios must also be understood as social spaces designed specifically for collaborative music-making.

3.0 DEMONSTRATING D-BEAT: A STUDY IN HOME RECORDING

This chapter examines the case of a band making a demonstration recording. The purpose of such a study is to illuminate the work of home recording with regard to theoretical issues in the study of popular music, aesthetics, and technology. As Steve Jones notes in the opening of *Rock Formation*, "One of the most difficult problems to overcome is the reconciliation of popular music, aesthetics, and recording" (xiii). Reconciling these three spheres can be as much a problem for artists as it is for scholars. Towards that end, the case presented herein articulates the aesthetics of 'authentic' Punk with academic discourses by explaining the 'techoustemology' behind one band's do-it-yourself (DIY) recording effort. Far from being a celebration of technology's potential for empowering amateurs, however, this chapter looks at what may be considered a failure insofar as the project never went beyond the effort to record basic drum tracks. In that light, I present a measured consideration of what it means to succeed with regard to aesthetic values.

3.1 PRODUCTION VALUES AND THE STUDY OF POPULAR MUSIC

Demonstration—or 'demo'—recording is not the sole purview of amateurs, it is of use to recordists of all types. Along with working-through musical ideas and documenting songs prior to making an official release, demos, these days, are essential for bands who want to take advantage of promotion and distribution through online communities like MySpace and Garageband, which are, if not a substitute, at least a beneficial para-site to live, local, brick-and-mortar scenes**.** More to the point of the aesthetics/technology tension, however, demonstration recording is a way for artists to shape their sonic image in an acoustic mirror.

Albin Zak references Bruce Springsteen's *Nebraska* to show that a 'demo' may just as well become something more than a sonic blueprint for something else yet to come. And, as Theodore Gracyk's work suggests, turning a demo into an official release requires only that it be 'stipulated' as such. Other artists, including Metallica, Nirvana, and Emperor have released albums of demonstration recordings either on their own merits or as a behind-the-scenes look at the maturation of the band's signature sound. Nevertheless, it may also be, as in the case I present, a decidedly non-sublime moment in a band's development leaving few, if any, historical artifacts.

Zak argues that recording technology is especially enabling: "Most recordists have a wealth of anecdotes about how they have broken the rules of physics and thereby achieved a successful artistic result" (127). A critical examination of demonstration recording, however, may show that stories of such magical triumph may be widely reported but are more exceptional than Zak lets on. Susan Schmidt Horning is probably

more accurate in her description of the history of music technology: "Increasingly, the tools of recording engineers, as well as musicians, offered more and more options toward control and creative freedom, but the complexity of the tools could also frustrate the user, ultimately limiting creativity" (725). Success stories have the potential to become part of pop music mythology because of the hard truth that, the rest of the time, the laws of physics are unbreakable and artistic ideas are difficult to realize. Demonstration recording is a sphere of practice in which recordists typically first participate before creating a work for public release. For each of the demonstration recordings that wind up stipulated as good enough for release there are undoubtedly countless more that never reach fruition, never mind distribution. In either case, as a common first-step in the education of recordists as well as the making of albums, it is a natural place to begin understanding production values with regard to the points of (ir)resolution between music, aesthetics, and recording.

Recently, several scholars have made headway on issues of sound technology and aesthetics by studying cultures of production. For example, Paul Greene and Thomas Porcello's anthology of recording studies, *Wired for Sound*, brings together a range of scholarship attending to the production of various styles of music from around the world. By way of describing the overarching theme of the collection, the editors coin the word 'techoustemology', which is a perfect term to explain the scholarly trend I seek to explain and work with herein. Green and Porcello's neologism melds 'technology', 'epistemology', and 'acoustics' in order to express efforts "to foreground the implication of forms of technological mediation on individuals' knowledge and interpretations of,

sensations in, and consequent actions upon their acoustic environments as grounded in the specific times and places of the production and reception of sound" (270).

Work in this vein points to the importance of informing cultural theory with practices evidenced in situated events. Moreover, the scope of such work should include studies of recordists operating outside of mainstream commercial culture. Lawrence Grossberg argues that, in critical-analytic discourse, "the field of popular music is often reduced to its commercial face, to recorded (professional) music. This ignores the density of musical practices in daily life. It ignores all the music made outside of the vector of commodity production (for example, local bands and parties)" (45). With this in mind, the following study aims to represent one such aspect of musical practice in daily life: demonstration recording.

3.1.1 Cobra in the Kitchen

On a weekend in the West End of Pittsburgh, I met with Wrath Cobra, a local 'D-Beat' Punk band attempting to record their first demo. They had played live a number of times around the city, plus they had written enough songs and there was enough of an audience to warrant a recording of some sort. In this five-piece band, the two guitarists had made multi-track recordings in professional scenarios before, but drummer, bassist, and vocalist were totally new to the process. Although each player has a say in the project, the direction of the recording fell mostly upon the guitarists because they were the most 'record conscious'.[14] The decision to try recording a demo on their own rather than

[14] Gracyk couches his discussion of 'record consciousness' in the distinction between 'the two media', i.e., performing and recording. Those who are record-conscious, as he explains, have a medium-specific

hiring a professional was not simply a matter of money. The band could afford to spend a weekend in a studio recording their music but they chose to make a demo at home for at least two reasons: First, for all of them, but especially the less experienced players, to practice isolated multi-tracking, a different style of playing compared to ensemble performance. Second, the do-it-yourself (D.I.Y.) ethos is a hallmark of the Punk subculture, as is the sound that comes from such efforts. Effectively, then, their home recording is cost-effective and convenient, as well as stylistically fitting because the D-Beat aesthetic is associated with low-budget and amateur recording.

For this project, Wrath Cobra recorded where they could play as loud as they wanted—high volume is required for generating their preferred timbres—the same room in which they practice, in the kitchen of a row house where their drummer, Jon, lives. It can be hard to find a place to make loud music, especially in a densely populated urban environment, and some bands have to rent sound-proofed rehearsal studios just to practice because they can not play in their homes without disturbing the peace. Simply having a place to make unrestrained noise is a major asset. Acoustically, however, the kitchen may be as much a curse as a blessing. It is a very 'live' room with lots of reflective surfaces, low ceilings and right angles due to the appliances and cabinetry; it would be a challenge to separate a sound's source from its reflection in this room. Whatever the Wrath Cobra sound was imagined to be, inevitably, on this recording, it would be partly decided by the acoustics of the kitchen. The band is not unaware of this issue, and one of their foremost questions was whether recording in this room would be acceptable by the standards of their genre, D-Beat Punk.

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understanding of allowable sounds and the principles for their structuring. Albin Zak, who applies Gracyk's philosophy though not his rhetoric, suggests further that recordists' understanding of allowable sounds and their attendant principles are genre specific.

As the name suggests, D-Beat is most readily recognized by a standard drum beat—with the snare hitting not on the usual backbeats, two and four, but on the off-beats, so the overall feel is of a rushed, almost off-time rock beat somewhat reminiscent of polka because of its 2/4 feel. The 'D' in 'D-Beat' comes from Discharge, an English band of the late 70s/early 80s at the threshold of Punk and Metal, less melodic and much faster than mainstream Punk of the time, such as The Clash or Sex Pistols, as well as less professional-sounding on record. D-Beat can thus be called a 'canonical culture'. Jason Toynbee explains 'canonical cultures' as "music scenes that produce a corpus and normative style retrospectively, from music which has ceased to circulate in its original context" (125). Reading, or listening to, the canon is a primary subcultural activity; more interesting than this fact alone is how the interpretation of a canon affects the production of new work.

Drum patterns typical of D-Beat often appear in heavy Metal but that alone does not make for D-Beat music. There are definitely other genre identifiers—e.g., a barking vocal timbre, anti-war/pro-anarchist lyrics—but the drums are the sine-qua-non of the style, and a lo-fi, D.I.Y. sound doubly serves to authenticate it by sonically referencing a genealogical connection to the style's founders. It runs the risk of being a less authentic kind of Punk, by D-Beat standards, if it is 'over-produced'. Just as Discharge represented an alternative to mainstream Punk of its day, D-Beat may be thought of as an alternative to the current trend of pop-Punk, such as Green Day and My Chemical Romance. Yet Wrath Cobra are neither simple reactionaries nor slavish imitators, e.g., their propensity for 'classic Metal' twin-guitar riffing—reminiscent of Iron Maiden, Judas Priest, and Megadeth—is a departure from the standard D-Beat style but a clever proposition which

promises to make the most of the D-Beat's crossover appeal in the Punk and Metal underground.

The premier aesthetic issue to be addressed in this demonstration process stems from the challenge of presenting such an innovation in their style of *recording* as well as their style of playing. Given the fine genre lines the band walks, their hypothesis concerning over-production, here, is that professionally recorded drums may sound 'too good', sounding more Metal than Punk which, when combined with the more-Metal-than-Punk guitar, could jeopardize their ideal self-image as authentic D-Beat Punks. Essentially, home recording was a good idea for Wrath Cobra because an amateur aesthetic may be exactly the sound they are looking to create/discover. It is interesting to note that, though their songs have been written and performed publicly, on the verge of recording the band still has to wonder what the 'Wrath Cobra sound' is supposed to be. This question, brought to the demonstration recording session, sets imagination upon reality and vice-versa.

3.1.2 A Microphonics of the Drum Kit

A drum kit is both one instrument and many instruments at the same time. It is played by a single musician, and in that sense is a unitary voice tied to a single performance. Yet it is also a modular instrument, pieced together from a number of distinct units, each having their own acoustic properties, their own little sub-voices that join to make the drummer's voice. Recording a drum kit means devising a way to represent a spatially and sonically expansive set of instruments as unified. This does not mean that each part of the kit

needs equal representation but the resulting voice does need to manage the identity of the drummer in question along with specific genre norms and the technical expectations of good recording. As such, recording drums can be one of the most trying tasks for any engineer, amateur or professional. It is also typically the first item of business when making a rock recording because it is the timepiece and backdrop for the main action. Given the considerable difficulty of tracking drums, it is not unreasonable for a recording project to suffer a failure to launch, so to speak, due to complications in this first stage.

A drum kit may be comprised of as many instruments as a drummer can gather within arms' and legs' reach. For the most part, however, there will be no more than one snare, one hi-hat, and one kick drum—occasionally two, but a doubled pedal is more common than double drums. Other common elements, like toms and cymbals, are used in batteries; some drummers go so far as to surround themselves with 'cages' so that they can mount as many instruments as physically possibly, from the tiniest of toms and tinniest of cymbals to full-on kettle drums and gongs. Beyond cymbals and toms, nearly anything else that can be hit with a stick or kicked with a pedal is a candidate for inclusion in the drum kit—e.g., tambourines, cowbells, woodblocks, chimes, even empty propane tanks. Obviously, the acoustic possibilities of a drum set are quite expansive: high-pitched and low, quiet and loud, banging, clanging, smashing, crashing, pounding, choked and resounding.

However, this extraordinarily polyphonic voice is hard to localize. More so than a mouth or an amplifier, the location of the source of a drummer's voice is a matter of interpretation. Drum kits take up lots of space, so getting the best perspective on them, representing their 'good side' one could say, can take some serious sonic wrangling. Jon,

the Cobra's drummer, has a relatively bare-bones kit: kick, snare, hats, two toms—rack and floor—two crashes and a ride cymbal. Still, there are several timbral families present even in this minimalist setup and potentially lots of decisions to make about how to get them from the air and into the box. This is where the fine art of microphony comes into play, at least theoretically.

Microphones are to recordists as lenses are to cinematographers. Understanding that there is no such thing as transparent mediation, the job of sound engineers as well as cinematographers is to find the device whose particular translucence taints the subject in some desired fashion. Creative engineering requires reconciling the distortions of reality inherently produced by recording media with the ideal sound imagined by the recordist(s). Debate over which microphone is best suited for this or that purpose can, and does, go on forever among recordists of all stripes.

The full cache of microphones offers dynamic, condenser, and ribbon configurations, unipolar and bipolar wiring, uni-directional and omni-directional foci, single units and stereo pairs, not to mention new and vintage. Almost mythical tales are told of magical-seeming microphones, existing in limited numbers, made in far-away places long ago, imparting divine powers on those few mortals lucky enough to wield them today. In the algebraic formulae of a sound-signal's path, there is virtually no end to the values that may be plugged-in for this first variable. Nonetheless, though the minds of recordists may be capable of infinite calculations of technical possibilities and of reifying particular technologies, their hands are stuck in reality. In the end, for home recordists most of all, the alchemical recipe is simply a matter of what is at hand.

Wrath Cobra's microphone collection was a decent sample of what home recordists can be expected to have: all consumer-grade gear, nothing high-end but some things good enough to get passable results. At the top of the heap were three Shure brand microphones, an SM-57, intended for recording instruments, and two SM-58s, typically used for vocals. These microphones are neither exotic nor expensive, nor are they terribly expressive in and of themselves. All the same, they are the workhorses of the recording industry, available and affordable pieces of the professional world. All microphones 'color' the sound but the ubiquity of these particular models in both professional and amateur applications—the frequent appearance of these microphonic tints—make the sounds of these microphones somewhat comparable to neutral shades, producing something like a sonic off-white.

In addition to these Shure models, the band found four microphones that appeared to be of lower quality—though no one was sure. Actually, nobody could account for how they were acquired, when they were last used, or whether they still functioned, the gear was seemingly spawned from the reserve of miscellaneous items accumulated in the basement of their rehearsal space. Through trial and error, these mystery microphones were eliminated: one did not work and two others added an electrical buzz to the signal—coloration is unavoidable, accepted and expected, but the intrusion of electrical noise counted as contamination in this case. The fourth microphone, an indeterminable model from the A.K.G. company, was found to work well; at least it had a noise-free signal. Given what was working, the drums were recorded with these four microphones.

3.1.3 Four-Tracking: Drum Tone as Genre-Object

To track the drums, Wrath Cobra used a four-track mini-disc recorder, a digital version of a tried-and-true amateur's device but a generation behind computer-based digital audio workstations (DAWs). Basically, a four-track machine is a recorder with four inputs capable of recording four different sources to four independent tracks that can be mixed together into a unified whole. There was a time, to be sure, when such a thing would have been beyond a professional's wildest dreams, but today's professional studios can typically handle much more (twenty-four tracks can be expected and, with the current generation of digital technology, is generally upwards of forty-eight). The relative disadvantages of working with only four tracks will soon be clear. For the moment, the point is simply that four is the maximum number of microphones that the band can plug into their recorder.[15] Yet four is the magic number for aesthetic reasons as well, and it is precisely why the band turned to a mini-disc recorder instead of a personal computer.

Wrath Cobra did have access to a laptop DAW, so the fact that they turned to an arguably inferior, or at least slightly outdated, piece of digital technology such as the mini-disc has everything to do with matching aesthetic desire and technological limits. Technically, although DAWs can process as many audio tracks as the computer's speed and memory will allow—definitely more than four—this does not necessarily mean that it can accept as many inputs. Wrath Cobra, lacking a computer audio interface with more than two inputs, turned to the mini-disc for the two extra inputs it can handle. Eventually, after transferring tracks from the mini-disc to a laptop, the band would be

[15] This is not entirely true. A sub-mixer might have been used, and the band did have one, but with only four microphones such expansion would serve no purpose.

able to take advantage of what home computers offer (e.g., automated mixing and digital signal processing) but, because the drum sound they wanted required more than two microphones, the four-track mini-disc was needed.[16] With four functioning microphones and a four-input recorder, the initial technical hurdles were surmounted and drum recording could begin as soon as they figured out where the microphones should go.

For a problem so potentially open-ended, the general schema came with almost no discussion: one went inside the kick, another above the snare but under the hats, and the others were placed on the left and right sides of the kit, just above the cymbals. This is presumably the setup they had in mind all along when looking to have four microphones. It is a traditional four-track recording setup, part of the band's 'tacit knowledge', placing them at least one rung higher on the ladder from absolute novice to professional engineer. Tacit knowledge, Schmidt-Horning explains, is "the unarticulated, implicit knowledge gained from practical experience" (707). Further, she cites microphone techniques as an example of this way of knowing: "Indeed, microphoning is a good example of tacit knowledge in action as it is very hard to formalize, and those who possess the skill have acquired it in practice" (710). So, to answer the question of why this arrangement was used by Wrath Cobra, it can simply be said that, though amateurs, they already happened to know something about traditional techniques for recording drums with a four-track.

In effect, this microphonic perspective captures the drum set as a whole, from left to right, in addition to emphasizing key aesthetic elements, i.e., kick and snare. Placing microphones in extreme proximity to drum elements, as they had with kick and snare,

[16] Here, again, the band might have used a sub-mixer to sum all four microphones into a simple stereo image but this would limit the options available in the final mix. More experienced engineers might be able to dial-in a usable sound in the initial sub-mix going to disc, trusting it will work with all the other instruments in the final mix, but amateurs might want to keep their options open as much as possible.

provides a tight close-up of those instruments while the left and right microphones, set off to either side and elevated above the drums, take a long, panoramic shot of the action. Recording a broad image of this drum scene along with close-ups of the central players within it will permit the kick and snare to be better defined against the sound of the kit as a whole in the final mix. Insisting on four tracks shows that, even though Wrath Cobra wanted a low-fidelity drum sound, they still wanted a certain degree of definition when it came to the drums. Because of the foundational role of kick/snare patterns in most rock music, and D-Beat Punk in particular, lo-fi, in this case, was to go no 'lower' than four tracks of drums. Yet while the standard four-track method may suggest roughly where each of the microphones should go—i.e., kick, snare, over-left, and over-right—microphony is truly a 'micro' process in which the smallest spatial adjustments—e.g., turned more toward the beater than the shell, thrust all the way in or poking only partway through the kick's mouth—can make noticeable differences in the sound recorded, and these placement issues get multiplied by the additional question of which type of microphone to use in each position.

Yet the difficulty of having amateur ears was also compounded by the constraints of monitoring the recorded sound. In Wrath Cobra's ad-hoc kitchen studio, unlike a professional one, there was no control room, which meant that there could be no 'live', synchronous monitoring of the recorded sounds. Without an acoustic barrier to divide the sound of the drums in the room from the sound of the drums being recorded, assessing the relationship between the two required temporal separation. Monitoring the sound in this project, hearing what is really being recorded, meant first tracking a performance, then listening back, adjusting, re-tracking, listening again, and so on until a satisfactory

sound was achieved. The setup that seemed to please everyone was to put the 57 inside the kick drum, a 58 between the snare and hats, the AKG on the low-tom side of the room and the other 58 on the snare side of the room. Since all of the microphones, regardless of brand, were uni-directional condensers, meaning their functional components are very similar, the biggest differences—heard on scratch tracks—seemed to come from where the microphones were placed less than which was used.

In this session, comparing microphones and fine-tuning their placement was a task everyone present—both guitarists, the drummer, and myself—was called to do. Without an expert engineer on site, the next best thing was a consensus of amateurs. Part of this effort involved using recordings from other D-Beat bands as a reference. To better discern the kind of drum sound they wanted, the band made many 'scratch' recordings—takes intended only for utility, not to be part of the final product, essentially pre-demonstration recordings—and compared the results to albums by bands they admire, including, of course, the originals, Discharge, as well as newer bands working in a self-conscious D-Beat style, including Sweden's Wolfbrigade and Canada's Inepsy. Frith has also noted such a strategy:

> imitation becomes, paradoxically, the source of individual creativity: without the master there to tell you what to do (as in the conservatory) it's up to the would-be musicians to put together what's heard and what's done, to come up with their own way of doing things (which, given the disparities of home and studio technology, is likely to be quite novel. At the same time, though, this means that in most popular music genres music-making emerges from obsessive music listening; a certain sort of

> 'fandom' is thus built into the process—which is why when bands come together and fall apart, they do so (as we've seen) in the name of their various musical models, by reference to their record collections. (55)

Comparative listening to favorites from their record collection helped settle Wrath Cobra's microphonic issues by offering a point of reference from outside the project at hand, orienting this home session towards the world of those already commercially available. Coordinating Wrath Cobra's ideal sonic image with the potentialities and limitations of their technological circumstances was a process informed by careful aural comparison of their results with those, ostensibly 'successful', sounds of their inspirations.

Based on listening to key recordings in their genre, roomy, more natural-sounding drums were found to be key to the sonic-image they were after, invoking a sonic genealogy with recognized D-Beat artists. There are, to be sure, D-Beat bands that do not have this drum tone, it is not absolutely definitive of the genre, but it is nonetheless an object of its aesthetic practice in the same way that 'thick, buzzy' guitars operate in Toynbee's analysis of hardcore music. These genre-objects are, Toynbee explains, "held tenuously in place as a generic signifier by the competing imperatives of returning to and moving on from the one sound" (107). In the same spirit of 'returning to and moving beyond' there was, for Wrath Cobra, the question of whether the sound of the drums produced in this recording scheme would fit the image of innovation they had in mind—will it 'fit' with the classic Metal guitar style in a way that sounds 'D-Beat' or will it just sound like Metal with a 'bad' drum tone?

In the end, this question remained to be settled at a later date as this demonstration recording ran aground on another point of contact between music, technology and aesthetics. It should not go without noting, however, that timbre, in this case, was identified as a key element in the communication of genre identity.[17] In addition to timbre, however, is 'feel'.[18] For Wrath Cobra's ideal sound, a live feel is thought to be as crucial as particular timbres are.

3.2 LIVENESS ON RECORD

Multi-tracking is an art apart from ensemble performance and, as noted above, it is not a practice Wrath Cobra was accustomed to. For Wrath Cobra, there is room for more tracks on a DAW—media space—but there are no more than four inputs—means of interfacing with media space—and the drums are using all of them. This requires the drummer to record his part first, and then the rest of the band will have to overdub theirs. This is not abnormal though it does present some challenges that, in this case, poisoned the well.

It should not go with without saying that the whole band could more easily have recorded all together in front of a single microphone if their intention was to do nothing more than document their compositions. Going through the trouble of multi-tracking

[17] Harris Berger and Cornelia Fales' contribution to *Wired For Sound* is a study of the perceptions of heaviness in metal guitar timbres. Their findings show that heavy metal genres are defined at least as much by their codified use of distortion and equalization as by the style of playing. This study in D-Beat supports generalizing this idea to other genres as well as other instruments. Following Berger and Fales method, however, would call for spectrographic analysis in addition to the qualitative descriptions I present here.

[18] On the subject of 'feel' I follow Charles Keil's theory of 'participatory discrepancies', which may be summarized as pleasurable deviations from norms of proper pitch and rhythm. Keil argues that such deviations are essential for musical expression across the board though the nature and amount of deviation are matters of genre.

shows an effort on their part to use the recording apparatus as a tool of composition itself in an effort to get the right sound for their music, as described above, in addition to examining their work from a new perspective, one from outside their usual experience of the music through the immediacy of performance. The piecemeal multi-tracking Wrath Cobra engaged in meant that decisions they were accustomed to making in the moment, as a group performing live, had to be decided upon up front. For example, before beginning to do a drum track there had to be conversations about exactly how many times to repeat a particular section like the introduction or breakdown, somewhat improvisational parts of the composition in which the band spontaneously varied the song's structure. This demo project presented them with an occasion to discuss how it should 'really' be done. Isolating the drum performance from the rest of the band also allowed the other band members to have some say in the way the drums were being played, noting, for instance, places where kick patterns or drum fills could better match guitar hits or bass runs. Some suggestions the drummer welcomed, others he was dead set against. The bigger challenge, however, came from the limits their recording apparatus placed on performance.

3.2.1 Managing Multi-Track Isolation

A professional studio would likely have multiple rooms and enough channels to isolate more than one performer at once as well as recording each to separate tracks. For Wrath Cobra, however, there was only one room and four inputs. Nothing aside from drums could be recorded, and nothing aside from drums could be permitted to make a sound.

The least technologically complicated way to handle this would be for the drummer to memorize all of the songs and play them without any accompaniment. However, a few attempts to record the drum parts without any accompaniment revealed that such would not yield usable takes because John could not keep track of the song's structure without the cues he was used to receiving from the rest of the ensemble. So that the drummer could have some accompaniment, Steve, one of the guitarists used an amplifier-modeler, a hardware signal processor that digitally mimics the tone of a speaker in a room but has no speakers itself. Using two sets of headphones to hear this signal allowed Steve to play guitar in the same room as John, the drummer, while making only a negligible amount of sound—from picking un-amplified electric guitar strings—that wound up masked by the much louder drums. The guitar signal was not recorded in this configuration, it served only as a live reference to guide the drummer through the flow of each song.

The headphone accompaniment helped, but nonetheless made for an unfamiliar scenario. Headphone accompaniment is only indexically similar to playing in a room filled with the physically powerful vibrations of live, loud music. Compared to regular, live playing, this is a difficult, more alienated and less embodied, mode of performance. It might be standard operating procedure for a studio musician but Wrath Cobra's drummer had never recorded before; he was not accustomed to playing without cues from the rest of the band. The rest of the first day of recording was spent practicing this new, isolated mode of performing.

On day two, the band intended to actually record. After doing a number of takes of one song, however, the band realized that the composition presented a problem for their recording method. There were eight bars in the middle where the drums were

supposed to stop playing as a guitarist played alone. Because the guitar was acting as a reference but not being recorded, it was not a problem, when tracking, for the drummer to know when to resume playing but, when it came time to record guitars, there would be only blank space with no rhythmic guide at all for the overdubbing guitarist. The probability of anyone playing guitar for eight bars without a reliable metric reference then hitting in sync with the recorded drums when they resume is virtually zero. Although they had the foresight to begin each song with a count-off—marking the tempo with four stick-clicks so that everyone else would know what tempo to start at when overdubbing—the actual tempo inevitably varied, as human clocks do, throughout the song. Blindly coordinating the timing of guitarist and drummer, they realized, would have been an exercise in futility. The first idea was to have the drummer click his sticks or hats in steady quarter notes across the silent passage, and then digitally remove those clicks later, after the guitars have been recorded.

But this, too, was rejected because the drummer was supposed to play a fill leading into and out of the guitar break. To immediately come out of a fill, start clicking, then back into a fill would require, in effect, that the drummer learn to play the song a different way, on the spot, before recording can go on. The other issue was that it might not be so easy to edit out the clicks later because they also wanted the crash cymbals to ring out. It may turn out to be possible to remove the clicking without also unnaturally truncating the crash's decay. So, should the part be changed to choke the cymbal? Maybe remove the fills or the break altogether? Learning new parts or changing the song to fit this unanticipated technological limitation were deemed unacceptable, largely because they wanted to get on with recording and not waste time going back to the

drawing board so long as they had gone through the trouble of getting this far in setting-up a studio in the kitchen. So they began to consider using a 'click track'. Again, this raised technical and aesthetic issues.

A click track is a track on the recorder dedicated to playing-back a metronomic ticking sound, providing an audible clock used to synchronize performers to one constant, objective, rhythmic reference; this track is later eliminated in the final mix. Technically, this means that Wrath Cobra would have to sacrifice one of their four drum tracks to the click—not to mention finding a device to produce the click sound itself. Using a click would affect the recorded drum image. Because the kick and snare channels are crucial to obtaining the right perspective, the logical choice was to sacrifice one of the overhead microphone channels—meaning the drums would be in less robust stereo.[19] There is still more compromise imposed by a click track.

3.2.2 Something is not Clicking

Playing to a machinated beat can bring the music closer to sounding inhuman, unnatural, and over-produced by Wrath Cobra's D-Beat standards. For other genres, like Death Metal and Industrial, machine-like precision is indispensable. For this kind of Punk, however, a more human feel is valued. Moreover, Wrath Cobra find aesthetic value in what might seem 'sloppy' to those whose ideal is metronomic precision; instead of maintaining a steady tempo throughout the song, for example, the fast parts are a little faster, the slow parts are a little slower, some pauses are dragged out a little longer while

[19] Thanks to multi-tracking, this does not mean the drums will be in mono; a mild stereo effect can come from panning the separate tracks slightly apart—e.g., with the kick center, and snare and overhead slightly off to opposite sides. Digital ambience effects could also be used to widen the sound.

others conclude more suddenly than expected.[20] The music, the band explains, is supposed to feel 'spontaneous', 'explosive', 'unpredictable', and 'frantic'. Technically, it is not outside the realm of all possibility to program a custom click track to map these kinds of subtleties but it would take a considerable amount of effort calling for labor of a different kind, arguably much less fun than playing music. If anyone finds such a preamble to the possibility of record-making enjoyable, that person is probably a sound engineer already.

But this was a group trying to record a demo at home in their spare time, not a convention of sound engineers. A full weekend experimenting with D.I.Y. recording was a major time commitment for them and, at the end of two days with not so much as one drum track finished, and nearly everyone's patience, knowledge, and ability stretched to the limit, they made the calculated decision to abandon the project. As a band, they still had to rehearse, to write new songs, and to play shows. Plus, naturally, as individuals, they had jobs, friends, families, and other interests outside the band. The demonstration recording ceased when it became clear that, to get the results they wanted, the project would require more practice, more technical tinkering, more time, and even new equipment.

As of this writing, more than a year after observing this first attempt at self-recording, Wrath Cobra has produced one demo recording with results satisfying enough for them to post it on their web page. After confronting their techoustemological limits in the effort described above, one of the guitarists decided to purchase an eight-input interface for his laptop D.A.W. which enabled the band to record together as a group

without worrying about how to get 'clean', isolated tracks of every instrument. After experimenting in the kitchen with this new interface, the band eventually struck upon an approach that satisfactorily demonstrated the sound they were after.

3.3 CONCLUSION: SUCCESS AND FAILURE IN THE DEMONSTRATION MODE OF RECORDING

Demos represent the navel of techoustemology located on the threshold of the private, amateur world of home music-production and the world of professional production for a mass-market. Putting this production into a wider context could be done with reference to the1960s, the decade in which the record industry noticeably shifted its philosophy from an aesthetic of realism to a constructivist one in which production values, the 'song-sound', became central.[21] Given the prominence of aesthetic discourse in professional music recording since this time, any understanding of popular music is incomplete without an account of production values.[22] Jason Toynbee notes that early amateur experiments in recording aesthetics were co-opted and codified in the 1960s with the rise of record company's infatuation with 'big production'. Punk aesthetics developed as part of a sub-cultural reaction to this music industry trend yet, as found in my study, it is not merely an anti-aesthetic set against mainstream music but also a well-developed tradition in its own right concerned as much with its own production values as with those of dominant, commercial popular culture.

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[21] This fact is supported by historical studies of the record industry including those by Edward Kealy Jason Toynbee, and Susan Schmidt-Horning.

[22] This is put forth in Laing's critique of Hebdige's foundational work on punk subculture, as well as in Frith's account of the intellectual history of popular music studies, which, he argues, has been dominated by neo-Marxist critiques.

As Allen Moore's *Rock: The Primary Text* argues, "[t]here is perhaps one primary legacy of the Punk movement to which subsequent rock styles are indebted. This legacy can best be described in terms of Punk's great measure of self-reflexivity, a concern both with the processes of rock and with its own place in rock's stylistic history" (139). Wrath Cobra's effort to produce genuine yet nonetheless innovative D-Beat is plainly in accordance with this trend. Moreover, just as Moore's work shows that Punk is more musically sophisticated in its construction of difference than its own rhetoric suggests, witnessing the process of a Punk demonstration recording shows that it is also techoustemologically sophisticated, even in its demonstration recording practices which are guided by a vision of success gleaned from comparative listening.

The deceptively simple lesson of Antoine Hennion's three-year study of recording studios is that 'success' is the ultimate goal.[23] Though success is the overwhelming preoccupation of the recording industry, it is, Hennion notes, a difficult concept to theorize.[24] Success is, of course, a matter of judgment, and one can succeed to greater or lesser degrees and in different ways. However, the fundamental activity of 'producing success' entails "the "fundamental task [of record-making] resides in *the permanent and organized quest for what holds meaning for the public*" (185). The conspicuous lack of an audience in the studio brings Hennion to concentrate on the role of that absent Other, the public, and its influence on aesthetic judgments made during record production. Hennion describes those things with public meaning as 'sociosentimental',

[23] "At the heart of the frenetic activity of the record industry and of all the conflicting opinion to which this activity gives rise lies one common goal: popular success." (185)
[24] "What does the achievement of success involve in actual fact? Economic, sociological, and musicological analyses tend to evade this issue rather than explain it. Can the ability to achieve success be attributed to a more or less innate sixth sense? Does it reside in the superiority of bribery, through massive 'plugging,' through a dulling of the senses, or through conformism, as the ritual claims of the press would have it? Is it a by-product of profit, of standardization, of alienation, or of the prevailing ideology, as Marxists argue?" (185).

> they include key phrases, sounds, images, attitudes, gestures, and signs, infralinguistic categories which are all the more difficult to pin down insofar as they escape definition by the official language, and are not autonomous but inseparable from the social context within which a given group attributes a special significance to them. (186)

Tapping sociosentimentality, as far as record production goes, can be understood, in the broadest terms, as a matter of generic imitation and innovation, practices that are enabled as well as frustrated by recording technology.

Considering production values, in these terms, means success for Wrath Cobra's recording would have been to make a recording with sociosentimental resonance for listeners familiar with the field of texts found in the canon of their subculture. The measure of success and failure, in this sense, should be one appropriate to the desire to represent their work as one type of music, i.e., D-Beat, and not another, e.g., heavy Metal or mainstream Punk. To the extent that they did this, which was small considering that they never got through drum tracking, it was minimally successful. Nonetheless, Schmidt-Horning cites trial-and-error as a key to attaining tacit knowledge, and this case of demonstration recording can be seen as an example of recordists use demonstration recording as a trial by which to advance their tacit knowledge. It could be observed that they began with an understanding of basic four-track drum recording and expanded that knowledge to include an understanding of what it takes to build a multi-track recording from layers of isolated, overdubbed performances. For one weekend of sessions not to lead to a record is no shock, and the band did not believe it was realistic to finish an album in two days. Though they hoped to get farther than they did, their intention was

more exploratory than anything else, to see how D.I.Y. recording works for them, to educate themselves as recordists.

The up-front, trial-and-error nature is of the demo mode of production is what sets it apart from the making records intended for commercial release. As nothing more than exploration and education, the project did not fail: it expanded the band's record consciousness as well as sharpened their imagination of what they want their sonic image to be. It led them to have an improved understanding of the relationships between their music and their recording apparatus, as well as the engineering and performance techniques required to bridge the two. Through this, they also have a better sense of what new recording equipment or a professional recording studio may offer them. Even if they ultimately decide never again to do it themselves, and choose either to hire a professional or just never record anything, their choice will be better informed. In these ways, they received a decent return on their investment and the venture was a success. Regardless, for a recording project not to end with a record has to count as a failure in the larger scope of things. Moreover, it is imperative not to whitewash this fact simply because it was an amateur demonstration recording of minor aspirations.

Simon Frith observes, "Rock history has always been about musicians finding their own voices in the process of trying *unsuccessfully* to sound like someone else" (6). What Frith has in mind, however, is a romantic kind of successful failure, as if good rock musicians are so overwhelmingly authentic that their true voices cannot help but defy even the voice-bearer's own inauthentic tendencies to imitate prior successes. Frith is certainly right in one sense, namely that much innovation has actually come from the frustration of a more conservative impulse to reproduce old ideas. The canonical culture

of D-Beat itself is a good example of such a phenomenon—in point of fact, the music that calls itself D-Beat, which represents itself almost as a fundamentalist movement, is, like fundamentalist movements often are, not a revival of something that once actually existed but, instead, a wholly new movement that has derived its warrant from earlier texts.[25] In Frith's paradigm, D-Beat may be said to have evolved into its own genre despite the drive to faithfully reproduce the particular style of one especially revered band.

Nevertheless, the case I have presented should be used to temper romantic theories of rock success, such as Frith's, which elide failures that, rather than succeeding despite missing the mark, simply miss. Wrath Cobra's admission of defeat in their first attempt to record themselves was plainly a case of unsuccessfully sounding like someone in addition to being unsuccessful at finding their own voice. It should be plain to see that artists who are unsuccessful at making any recording at all leave no readily observable marks on history. Still, it seems reasonable to believe that failure, just plain failure, is far more prevalent than the annals of rock can ever attest to. Like Albin Zak's celebration of outstanding technological triumphs, marveling at successful failures is justified because of the ubiquity of failures that simply fail.

History, which Frith appeals to for evidence of the successful-failure as Rock-musician archetype, cannot be expected to tell a story of abject failures. All the same, there are likely countless experiences of defeat, of 'getting it wrong' that are elided by the record-form, which conceals the conditions of its production in its presentation of the 'right' version. Theodore Gracyk's ontological account of recorded music truly takes this

[25] Deena Weinstein's work on heavy metal also identifies fundamentalism as a feature of 'chaotic' metal genres.

dynamic to heart, arguing that one has to consider recordings to be authoritative instantiations of a musical work because the fact of recording is such that it could always have been otherwise. The work of demo recording is where those other options are exercised and discarded on the long road to becoming a finished product.

Hennion's study of professional recordists reveals, what he describes as, the 'hidden side of current social life'. In observing work in recording studios, Hennion finds, "In a rather unreal way, we catch a glimpse of all that official history, always written in terms of the power structure, leaves unsaid: hopes that are disappointed almost before they are formulated, a bitterness that nobody cares about, useless emotions" (204). If this from a study of professional recording is so, then it must be an even more apt description of the amateur experience of demonstration recording.

Wrath Cobra is still a new band whose story is ongoing, so final judgment will be reserved, but evaluating this weekend's work yields at least two conclusions. Firstly, the fact that nothing tangible was produced marks it as a failure.[26] More to the point, however, is that the band themselves abandoned production because they could not reconcile their idea of good production, conceived with regard to other albums, with the reality of recording. Wrath Cobra's demonstration efforts wound up demonstrating nothing to the audience of D-Beat fans they had in mind when recording, though they did demonstrated to themselves the kind of techoustemology their genre calls for and, arguably, failure of this kind is part and parcel of becoming educated on such matters. Secondly, amateur recording efforts such as the one I have described undoubtedly happen often on the outskirts of popular culture. For each recording that does get made, amateur

[26] More than a year after this attempt, after obtaining an 8-input digital audio interface that eliminated many of the obstacles in this first attempt, Wrath Cobra released a demo recording on their web site.

and professional, underground and mainstream, there must be an exponentially greater number of projects that never bear fruit due to a perceived disjuncture between aesthetics and technology, i.e., due to the fact they 'sound bad'. Moreover, the use of recordings from within the commodity vector orients judgments of good and bad toward the field of recordings already available commercially. Production value is not simply proof of technical wizardry or the unstoppable authenticity of a performer, it is also, and likely more often, only the most immediate aspect of a recording, beneath the surface of which is a silenced labor of false-starts and dead-ends.

4.0 REBIRTH OF HARDCORE PRIDE: (RE)PRODUCING SUBCULTURAL AUTHENTICITY

Through in-studio observation and interviews with band members and their studio engineer, this study documents the recording of a Hardcore group's first full-length album, discovering some of the ways these recordists read the musical soundscape in order to (re)produce sonic signifiers of identity and difference. Hardcore is a style of post-Punk music based on the adage 'loud and fast rules'. However, as it has to exist and compete with other loud-and-fast music, such as Metal, staking out a distinctly *Hardcore* identity on record requires more than a general impression of volume and velocity.

Through this case study, I show how finer issues of production are key to making an album with unmistakable Hardcore authenticity. This work is couched within the study of youth in Hardcore subcultures, particularly recent work from Haenfler (2006) and Wood (2006), and seeks to extend that research from the study of fans to the study of artists by looking at subjects who see themselves as both. Moreover, this study is unique insofar as it presents a case in which a 'youth' subculture is found not to be the sole property of youth but also a scene in which adults who grew up participating in the

subculture continue to be involved. The subjects of this study are adults who were trying to revive the sounds of the subculture from the days of *their* youth in the 1980s. The goal for these older members of the subcultures is, basically, to bring back a more positive attitude to Hardcore music and, at the same time, do so by reviving the sounds of Hardcore music they enjoyed a generation ago when, by their estimation, the scene and the sound were in a better state.

This study also speaks to larger issues in the study of popular music and technology. Most poignantly, it illustrates a principle regarding the historical material horizon of music recording:

> the archives seem to grow ever larger, as old unissued recordings are discovered and brought out for the first time. The result is another potential change in musical consciousness, for as we shall see later, it gives back to us the history of recording as a history of interpretation. (Chanan 19)

In the following, the role of the archive in its materiality can be read through this band's intense focus on their genre's history of recorded music as such. The material practices of their studio recording were plainly spurred by a clear change in musical consciousness affected by their interpretation of the Hardcore canon as they see it, which led them to their particular ideas about Hardcore authenticity and how to (re)produce that authenticity on record.

4.1 POST-PUNK STUDIES: IF ANYTHING IS POSSIBLE, WHY THIS?

Considering, as Paul Theberge puts it, it is technically possible to create "any sound you can imagine," the issue to follow is why, if recording artists can make *any* sound, they make the sounds that they do. Tim Anderson identifies this as *the* question for scholars of communication, and the answers promise to make unique contributions to the study of popular music by illuminating the historical and material *processes* involved in the production of popular musical texts (i.e., recordings). The insistence on studying production processes emphasizes the idea that any material history of the texts and technologies constituting the field of popular music must also look the way the *sound* of popular music is informed by situated understandings of particular texts and technologies.

Antoine Hennion's study of recording studios concludes that the ultimate aim of recording artists is to (re)produce sounds with *sociosentimental resonance*. This broad notion includes everything from composition to lyrics to instrument timbre and signal-processing, foregrounding what an enormously complex phenomenon musical communication is. Stemming from issues in the study of mass mediated culture and communication, my approach emphasizes the material components of such resonance, but this, to be sure, is to tell a select portion of the total story that must, ultimately, be considered alongside other modes of analysis. The larger point to take from Hennion's work is that, due to the fact the audience with whom sounds are to resonate are not present in the moment of production, recordists must construct an imaginary audience and attempt to anticipate their frame of sociosentimental reference. That is to say that, all things being technologically equal, the whys and wherefores of the popular music

soundscape have as much to do with those making the record as it does with those for whom the record is (imagined to be) made. Good record production therefore involves a keen sense of audience in terms of its historical and material experience of sonic, sociosentimental signifiers. In the following study, this point emerges through a consideration of the recording artists' desire for a 'raw' aesthetic, which they aimed to achieve through analog tape and tape-era production techniques. Before delving into the background of this recording project, it is also worth asking another, more reflexive question, if, theoretically, one can study any music whatsoever, why is Punk so frequently studied?

Historically, Punk's transgressive spectacle captivated audiences who were inured to arena-rock and disco. So, too, did it captivate scholars of mass culture insofar as it appeared to be a provocative case of resistance to the culture industries, running counter to the pessimistic predictions of the earlier Frankfurt School theorists. Punk music and its subcultures are privileged within media and cultural studies likely because they figure so prominently in the seminal Birmingham school research of the late 1970s and early 1980s. Inscribed in what are now canonical readings from the likes of Hall and Hebdige, Punk music and Punk people are subjects on which many in popular music studies cut their teeth. What seems to make Punk so compelling, at the academic and subcultural levels, has as much to do with the potential for *resistance* to the culture industries as it does with the way concerted efforts of resistance seem to be easily *recuperated*, doing more to help than to hinder the mainstream of commercial mass culture that is ostensibly opposed. Still, post-Punk subcultures, like Hardcore, continue to revise the rules concerning what is imaginable, hence possible, in the production of new musical styles.

4.1.1 Punk is Dead

Today, visual signifiers of Punk culture are part of the everyday lexicon of pop culture, and not just for the young. The facial piercings and studded leather belts that seemed dangerous in the 1970s are now frequently seen on Punk parents and their children on family-oriented reality programming like *Wife Swap* and *Trading Spouses*; Punk aesthetics are not only solidified within the commercial mainstream, they are now multi-generational. And with the emo-boy-group explosion coupled with a surge in pre-fab Punk-pop princesses, Punk music is arguably more popular and profitable than ever at the moment. So much for opposition, it seems.

As Metal historian Albert Mudrian puts it, "Punk is a rotting corpse." Punk is dead, if ever it was truly alive, but what matters most is the fertile soil left beneath its decaying, safety-pinned carcass. Mick Fish's biographical account of the post-Punk underground describes the mood among his London friends in 1977,

> Punk had given us all the kick up the arse (sometimes literally) we needed. But it was a brief but bright firework, and in truth we were all beginning to tire of seeing the safety-pinned, three chord thrashers that had emerged in the wake of the Sex Pistols. It had, however, left us all with a craving for exotic musical entertainment beyond the expected. (15)

By the early 1980s, first-wave Punk musicians had mostly died, disbanded, or sold-out. What was left, however, were local scenes on both sides of the Atlantic that were still

frustrated with mainstream music, desiring new sounds and promoting the idea that anyone could participate in music-making.

Though the nature of symbols, subcultural or otherwise, is such that their impact is easily defused, subcultural social formations—*scenes*—nonetheless persist as a significant remainder. Punk aesthetics may be so well absorbed that they are hardly distinguishable from any of the other tokens of identity available on the mass market. However, the real legacy of Punk resides in scenes built upon an ethos of commercially independent subcultural creativity. The promise of alternative culture based on an ethic of resistance to the mass cultural status quo is as important as any of the textual artifacts Punk and its progeny have produced.

Post-Punk scenes seem to unanimously proclaim a do-it-yourself (DIY) ethic. All the same, doing 'it' oneself, as a band, is generally not about doing whatsoever one chooses but in choosing to do something quite specific (i.e., to make subcultural genre music). This is not to discredit independent artists, it is simply to highlight the fact that even do-it-yourself recordists have a wide array of creative options that are technically available to them and that more experienced artists, such as those in this study, make quite concerted decisions about how to navigate those options. Post-Punk genres are constituted of highly refined codes marking many sub-genres (e.g., Grebo, D-Beat, Power Violence, Metalcore, Grindcore, Emo). The choice to make independent music is, on one hand, an ethical decision to work outside mainstream culture industries; the aesthetic outcome is generally music for micro-audiences—subcultures—that mass-culture industries do not, can not, and/or will not serve. Due to the dynamic between mainstream and subcultural fans, artists, and industries, it is frequently the case that subcultural music

is intentionally difficult for members outside of the subculture, especially those considered 'mainstream', to decipher and enjoy. For those in-the-know, however, such difficult music voices rich subcultural histories that are constantly evolving.

4.1.2 Long Live (Hardcore) Punk!

One of the strongest critiques of Punk to appear in America is undoubtedly the Hardcore scene. For those hearing the term for the first time, it is reasonable to ask, "hardcore *what*?" The answer is Hardcore *Punk*. Clearly, there is a critique of Punk built-in to this designation. Steven Blush's *American Hardcore: A Tribal History* explains, "Hardcore extended, mimicked or reacted to Punk; it appropriated some aspects yet discarded others. It reaffirmed the attitude, and rejected New Wave. That's why it was *hard-core* Punk—for people who were fed up" (13). Emerging around 1981, Hardcore was the American response to the passing of Punk's first wave. The music was to be louder, faster, and even more abrasive than Punk—more Punk than Punk itself, it could be said. Moreover, the development of this musical style developed along with a subcultural ideology unique in the realm of heavy music: straight-edge (sXe).

Straight-edge Hardcore coalesced around the Washington D.C. band Minor Threat, especially their singer, Ian MacKaye, who penned the lyrics to their song "Straight Edge," proclaiming his dedication to living a drug-free lifestyle. MacKaye, who also started the Dischord record label and now fronts the band Fugazi, remains something of a Hardcore guru. There is virtually a cottage industry concerned with MacKaye, the legacy of his ideas, and the scene he helped to start. For anyone generally

unfamiliar with straight-edge and Hardcore, however, the most illuminating information comes not from MacKaye but from his self-described mentor, H.R., singer of Bad Brains, who were a more established D.C. Hardcore band at the time Minor Threat was forming. In Paul Rachman's *American Hardcore* documentary, H.R. describes helping the young MacKaye with guitar riffs in addition to giving him a copy of the Bible and a self-help/motivational book on the power of positive thinking, which MacKaye seemed to digest along with the music lessons. Stripped-down Punk with middle-class, Christian morality on top is, in a nutshell, what straight-edge was born of. Haenfler and Wood each point out that the Reagan administration's institution of a national Drug Abuse Resistance Education (DARE) program and the War on Drugs boosted this American post-Punk permutation. The coincidence of subcultural attempts to reform Punk and legislative efforts to clean-up youth culture in general has a lot to do with why straight-edge and Hardcore music are inseparable. According to Wood, the link between the two is such that it appears as if turns in the governments' anti-drug rhetoric were be reflected in Hardcore music: "around the same time that mainstream drug warriors espoused a 'get tough on crime' approach to drug criminals, some elements of the straightedge music genre began to espouse extreme and retributive violence towards all perceived drug enemies" (Wood 106-107). Certainly, as the straight-edge movement developed through the 1980s, it became more defined along these poles (i.e., that of pro-active and healthy youth and that of militaristic aggression).

Haenfler finds that, "[s]ince its inception, there has been an ongoing tension within sXe between positivity and militancy. The Hardcore scene as a whole has always attracted a few violent elements and at some shows you can almost expect there will be

fighting" (82). Though the music was undoubtedly heavier, more hard-core, than early Punk ever was, ideologically speaking, it is arguable that there is nothing Punk whatsoever about being volunteer propagandists for the DARE program or street thugs in the War on Drugs. But there is something undeniably confrontational about the more directly socio-political concerns of straight-edge Hardcore as compared to the more fantasy-like orientation of heavy Metal, for example. Moreover, Hardcore scenes are uncommonly violent as far as music subcultures go. Scene documentarians Blush and Rachman come close to celebrating the violent tendencies of Hardcore fans. And although scholars Haenfler and Wood go to great lengths to downplay the violent aspects of the scene, each finds that physical conflicts are common enough as to be a constant issue, whereas similar studies of Metal subcultures (Arnett, Berger, Purcell, Walser, Weinstein) identify little or no real violence among fans.

Haenfler describes the first wave of Youth Crew Hardcore, approximately from 1986-1991, as a reaction to some of the 'negativity' (i.e., violence) that infused the scene, particularly in New York where the 'positive' Hardcore band Youth of Today first coined the 'Youth Crew' tag. Musically, Youth Crew sounds more like Punk (e.g., simple guitar lines, vocals more shouted than screamed) whereas the music of hard-line militarism is Metal-core which, obviously, borrows more from heavy Metal (e.g., 'Cookie Monster' style vocals and complicated guitar riffing). More to the point, perhaps, is that Metal-core became the more prominent form, crossing-over from the subculture to the mainstream. According to Haenfler, "from the late 1990s to the early 2000s, Hardcore music, particularly *Metal*-influence Hardcore, became increasingly commercial" (170). Moreover, he cites the Metal-Hardcore crossover as the problem which exacerbated the

negative, violent tendencies already present in Hardcore scenes. Metalcore is the sound of negativity, both in the sense that it represents negative social values *and* it is the commercialized, 'sold-out' sound that has ceased to carry subcultural authenticity.

Haenfler's study of the scene finds that, today, many younger members of the subculture have no knowledge of the positive side of Hardcore or the Youth Crew moment, and know only the present, most negative incarnation as Metalcore (14). Yet it is key to note that the condemnation of the more violent, negative strain of Hardcore is not simply a reaction against Metalcore values, or lack thereof, rather it seems to hinge on the fact that the more Metallic sound and negative attitude are, for one, a departure from Hardcore *Punk* sounds and attitudes, and, for another, this ideological and aesthetic departure opened the subculture to more outsiders, which caused bands to cross-over into the commercial mainstream. Coupling the subculture's aesthetic and social ideologies, the revival of Youth Crew style in the late 1990s and early 2000s has as much to do with circling the subcultural wagons in defense of further appropriations and incursion from outsiders as much as it is about preserving the more socially positive aspects of the scene.

Furthermore, as Haenfler finds, many of the 'youth' behind the Youth Crew revival are, in actuality, adults.

> Many older sXers (aged thirty plus) came of age during this era, which still holds a special place in their hearts. They often collect all kinds of Punk and Hardcore records and some are sXe historians, able to discuss the history of nearly every band, its music and members. Most reflect the positivity of the bands they love and many are vegetarian. (14).

This is an apt description of the members of Rampage, the Youth Crew revival band in my study. While the group distances itself from the term 'straight-edge', they make no bones about the inspiration they take from Youth Crew era bands.

To be sure, positive Hardcore revivalism is spreading. Specifically, the return to Youth Crew style is part of a polemic against the more dominant sub-genre, Metalcore or, as detractors call it Tough-Guy Hardcore. A tough-guy image is understandably appealing to boys who are, or who want to be, tough, and there is obviously a much larger market for this type of Hardcore than for the positive variant. As Haenfler also notes, the ostensibly more mainstream, pro-social tendencies of positive Hardcore appear to be anathema to a band's crossover success. Staying positive, therefore, is as much a response to politics within the Hardcore scene as it is a tactic making this subcultural music less easily recuperated by industries of mass culture.

On one hand, the greater appeal of negativity over positivity goes to show, unsurprisingly, that popular youth music, at the mainstream as well as subcultural levels, is most widely-appealing when it is at its most rebellious-seeming. On the other hand, this makes the Youth Crew renaissance, like the original straight-edge movement, seem to be a truly noteworthy effort to preserve a (sub)cultural space for genuine alternatives to old-fashioned sex, drugs, and rock-an-roll. Concerted efforts to convey positivity in the world of heavy music, over all, are uncommon, and should therefore be thought of as a critique with implications beyond its genre. It is significant that some people seek to maintain a space for dissent from within, to rebel against rebellion. Though the power of positive thinking and clean living may sound too close to a jazzed-up or, I should say, more *hard-core* version of the protestant work ethic, within the constellation of heavy

music genres and their respective subcultures, the persistence of positive Hardcore reminds the rest that there is another way to go about things, there are other ideas that subcultural art can express, ideas aside from spectacularly oppositional ones, and there are some norms that may *not* be worth transgressing—like working hard to stay healthy in body and mind—in the name of resisting all things mainstream. This is the historical context of the genre within which the band in this study operates. Next I will discuss where these artists see themselves within the present state of Hardcore, especially their vision of Youth Crew revival as a matter of returning to the *production* values as well as the social values of the 1980s scene.

4.1.3 Think Like a House of Dudes

In 2006, Rampage, a Hardcore band from Rhode Island, had just signed with Lockin' Out, an independent record label based in Boston. For this, their first full-length album, *Limit of Destruction*, the band insisted on recording only to analog tape, rather than to digital hard disk, which is now the norm. After looking at different studios around the northeast, the group decided to record at Slaughterhouse Recording in western Massachusetts because it is one of the ever harder to find facilities still offering analog tape recording. Their aim was to produce a recording that resonates sociosentimentally with positive Hardcore bands playing in Youth Crew style.

The Boston and New York straight-edge scenes are infamously the most violent in the nation. However, Rampage, sandwiched between the two in the Providence area, identifies with the more inclusive, less violent, positive Hardcore style, a subgenre

serving to redress the negative, tough-guy mentality that seems to fester in Hardcore scenes. Nothing about this more positive approach should suggest that they are insincere or somehow less Hardcore. Rampage represents is a present-day return to the late 1980s Youth Crew sound and mentality. One should be careful, however, not to put too much weight on Hardcore's conception of 'positivity'.

Brothers Ben and Josh Perrault, Rampage's drummer and singer, respectively, are the chief visionaries of the band's retro-style. As Ben puts it, their goal is simply "to make a ripping record and represent music, *this* music, the way I think it should be." Explaining further:

> It's Hardcore music, but Hardcore can have a lot of difference forms, I guess. This one is to, like, inspire you to take care of your business, you know, in a positive way, I guess. You know, fight against the things that can get on your mind, like depression and stuff like that, like you can work out, you can take good care at your job, no matter what it is you can do a good job, and stuff like that. (interview)

Along with these themes, the band puts physical fitness on the positive Hardcore agenda. Weight-lifting tropes abound in Rampage's lyrics and images, including a muscled, cartoon gorilla pumping iron on the cover of their demonstration recording to the song "Physical Therapy," the first single they released in support of the album under consideration here.

> Time to accept your fate serious time cardio + weights
> I lost my mind I chose the beast
> Four times a week at fuckin least

Call the docters [sic] I'll bust right through

Think like a house. A house of dudes

Physical Therapy. Do it for you take it from me

Physical Therapy for your brain

You got nothin to lose

Don't need a punk with a PhD. reppin bucks

And change is what I need

No prescriptions [sic] or courage in a can

They'll have to take me swingin

The bar in my hand. Physical Therapy do it for you

Do it for me. Physical Therapy for your brain

You've got nothin to lose when you got something to gain.

However, not all band members are agreed on the overall image, particularly some of the lyrics. When *Limit of Destruction* was ultimately released, it contained a disclaimer: "Some people, including band members, don't like certain words in our songs. Rampage is not prejudice [sic] against any group" (Rampage). Presumably, this statement is about the line"Faggots with gadgets, pussies with rings" from the song "Smart Too Slow" or the refrain of the song "Bitch Pleaza" (though probably not about the line regarding PhDs).

Though not Tough-Guy music in terms of subgeneric Hardcore distinctions, it is nonetheless clear that whatever is 'positive' about this Hardcore is primarily so for heterosexual men. Wood finds that 'brotherhood' is a common theme drawing discursive gender boundaries affecting women in the scene (75-78). Haenfler similarly notes that

the hypermasculinity of the scene tends to exclude women but so too does the larger cultural bias that understands this type of music as "angry" and, further, that this is a masculine emotion unbecoming of women (132-136). It should not go without saying, however, that there are identifiable strains of Queercore and Riot-Grrrl music which arose partly as a response to this bias within Hardcore and, to be sure, other post-Punk subcultures. As for Rampage, these observations go to show that the intra-group tension on point of the politics of gender and sexuality are representative of larger, long-standing issues within their scene. Rather than the value of brotherhood, which is clearly a Hardcore hallmark, the value that I find most significant for understanding this project is *nostalgia*.

Though the band may be divided among themselves about lyrical content, what they unanimously rally behind is the sound, specifically their nostalgia for 1980s records. Josh clarifies their concept of what it means to represent Hardcore the way they believe it should be:

> Maybe it's as simple as, like, everything that we grew up on, we listen to, like, early SST recordings…and I mean, like, yeah, the recordings aren't like that—Black Flag, Bad Brains, and early Descendents—I mean, the recordings aren't that great, but I mean that recording-sound, that style, defines the music, and that's what we're going for. In other words, we want it to sound like rough, crappy records [laughs]. (interview)

To be sure, this is not the first generation of Hardcore artists to strike a nostalgic chord and look back to days past when the scene and the bands were better. Even the original Youth Crew vanguard expressed nostalgia for 'old' bands from 'back in the day' when

Hardcore was not yet ten years deep. Consider the lyrics to “New Direction” a hit from the first-wave Youth Crew favorite Gorilla Biscuits, a band that Josh claims vocal inspiration from:

> What do you mean it's time.
>
> Time for me to grow up?
>
> I don't want any part.
>
> It's right to follow my heart.
>
> The new kids ran.
>
> Ran out the back door fast,
>
> And the bands that came before they had their noses in the air,
>
> Pretending that they care about our scene
>
> Just because our money's green.
>
> I'll tell you stage dives make me feel more alive
>
> Than coded messages in slowed down songs.
>
> Now you're so ashamed.
>
> Now I'm so ashamed of you.
>
> We believed the same things.
>
> You stand to the side.
>
> Rebirth of Hardcore pride.
>
> It all came true.
>
> Too bad you can't see all the good things that I see.
>
> Back in, back in the days when I'd wait to see the old bands play,
>
> It didn't seem like wasted days.

I was so sincere,

But now I see more clearly.

Music's only work to them.

It's not to me, so I say.

Hats off to bands that change.

Good luck, go your own way.

Why play for us if your hearts not in it?

Cause what might, what might seem dumb to you

Is pounding in my heart.

Now you're so ashamed.

Now you're so ashamed of you.

We believed the same things.

You stand to the side.

Rebirth of Hardcore pride.

It all came true.

Too bad you can't see.

No you just can't fucking see it.

Now you just turn your back.

You said, “I don't want it anymore”.

Old friends you attack.

Our pain, out of touch.

You don't get it do you?

New stage, new ideas.

You don't have to make excuses for us.

Sitting there, looking back, I'm scared.

Don't spoil memories of the way things were.

These words speak to the problem of Hardcore/ Metal crossover sellouts—bands with 'coded messages in slowed down songs'—and the 'new kids' they brought to, and took from, the scene with them. Further, the refrain calling for a 'rebirth of Hardcore pride' as an answer to those choosing a new (more mainstream) direction highlights the point that even bands of the original Youth Crew era claimed subcultural authority by constructing connections to the way things were back in the day'. To be clear, however, first wave Youth Crew bands did not *sonically* reference the good old days, which is what makes the nostalgia evident in today's Youth Crew revival, Rampage's project specifically, quite different. Another notable difference here is that the current Youth Crew revival largely appears to be the product of adults who were, themselves, teenage Hardcore fans of that era (Haenfler).

Ben and Josh, Rampage's founders, are both in their thirties, and with the benefit of hindsight, the two could see some aesthetic options that had fallen by the wayside over the years as newer bands opted to play in a crossover Metal-influenced style recorded using the latest in digital production. As Josh put it, the problem with this is that contemporary Hardcore bands are "trying to produce a hard recording, you know a hard, tough sounding recording, you know, like a bunch of ruffians, but with a polished sound they lose a lot of that street-feel that we really love" (interview). So the two set about recruiting like-minded fans of old-school Hardcore to form a band.

Rampage bassist Craig explains that the group is united by a common affinity for the Hardcore styles of the 1980s: "We're going off recordings of bands from New York that we liked—Rest in Pieces, Krakdown—mid-late 80s New York hard core—Straight Ahead" (interview). He is also sure to point out that more well-known 'tough' bands like Agnostic Front or Cro-Mags less inspire them. Ben and Craig, particularly, are avid collectors of recordings from minor bands of the time, many of which only ever released demos independently. Some of their preferred scene-research techniques include reading old fan zines, scouring old interviews with famous, national-level bands for their mentions of lesser-known bands, and examining the 'thanks' sections of old records, then trying to hunt down any unfamiliar names. Their intricate historical understanding of the scene affects their approach to Hardcore revivalism by establishing a canonical frame of reference different from what most today would consider the official Hardcore canon. Wood identifies these new movements within subcultures as 'schisms':

> subcultural schism likely finds its earliest point of genesis in situations where a member continues to feel discontented or to perceive a threat, but the subcultural frame of reference fails to provide a sufficient level of articulation and resolution. In these instances, that individual may seek to modify the subculture's frame of reference such that it does provide sufficient articulation and resolution. (132)

Clearly, members of Rampage were dissatisfied with prevailing Hardcore attitudes as well as sounds, and part of re-adjusting the frame of reference for their music involved rediscovering the sound of an era of Hardcore which the band feels represents better values all around. Still, the band is modest in describing their studied approach to music-

making. Rather than painting themselves as especially knowledgeable, talented, or innovative, Ben explains instead that their approach is more about paying careful attention to master-works:

> If you're not in that top tier [of musicianship] where you can break new ground and its good, I think you're better off, like, looking at what they [early Hardcore bands] did, and then…because you're not going to build a house without looking at, like, a good builder of a house, you want to see what works, figure out what works, and then try and make your own take on what works, I guess. (interview)

Evidently, the approach is working for them, as well as others. In the American northeast, Rampage's record label is spearheading a return to the old-school.

Lockin' Out Records is an independent label founded by members of Boston's Mental, a like-minded retro Hardcore band. Rampage guitarist, Brian, describes Mental's sudden rise to global popularity: "There was a huge buzz around them. It was almost like they were bringing this whole new style, which was basically like an older style that nobody else was doing, and they somehow got the whole world or, like, a *lot* of people in the world to do that" (interview) But Mental broke up during a European tour, leaving only the label to carry on its revivalist torch, which is exactly what made Rampage an ideal signing for them. For Rampage, however, the step up was surprising. Brian explains:

> I don't think any of us ever expected this to be a real band that wasn't linked to any of our friends, like, I think the only reason we did was, because, like I was saying, the kid who put out our record happened to be

> getting a huge buzz on the band that he was in at that time and that he was getting a buzz on his record label, and that was literally the only reason that people know about us. (interview)

But this group did not come out of nowhere. Aside from the fact that most of the players have been, or still are, in other bands, Rampage had already recorded a demo on their own, *Heads in a Vice!*, which convinced Lockin' Out decided to press and release the recording as a 7" vinyl record. Moreover, the label offered to fund their next effort. Though the first recording was rough, it was the kind of rough that Rampage and, evidently, others want to hear as part of a Youth Crew revival. Josh explains their approach to the demo, and how it paid off:

> Ben wanted to go over the top with that demo recording, *reverb* on the drums, like right over the top where you think it's too much, and a lot of, like, high-end sizzle on the guitars, which you would think it would be too much, and, like, *ridiculously* fast parts, which you heard, ridiculously fast parts and then, like, *slow*, moshy, hard, heavy, like, you know, danceable beats. And I think he [Greg Wilmot, head of Lockin' Out] really took to that. I think he even said something to me about the recording, the recording being right off the hook, you know.

This is a considerable success story as far as demonstration recordings go. The problem they faced in the professional recording environment at Slaughterhouse, then, was to retain the gritty sound qualities that have become part of the band's identity as authentic Hardcore revisionists.

4.2 RECORDING AUTHENTICALLY

With a successful demo recording and a preference for a raw recording aesthetic, it may seem strange that Rampage would use their money from the label to record in a professional studio like Slaughterhouse. The demonstration recording was 'off the hook' enough by their label's standards to go straight into distribution, and that first record, the band explained, was recorded by an amateur for no more than the price of a pizza. Nonetheless, no matter how well it managed to capture the raw sound they wanted, the demo experience still fell short of the band's ideal recording.

Like most amateur projects made today, it was made on a *computer*. But Rampage wanted their return to the late 1980s Hardcore sound to be more than just about the attitude or the music, they also wanted to record to *analog tape* the way their favorite Hardcore bands once did. Today, unlike the 1980s, however, it is hard to find even a professional studio that records to tape, never mind an engineer experienced with the medium. The first Youth Crew bands recorded to analog tape because they had no choice at the time. And while it may be tempting to disparage amateur efforts as mere computer projects, the fact is that digital technologies are now the industry standard, and the difference between amateur and professional is not whether or not they use 'computers' of some sort, it is merely how powerful and specialized those digital devices are. Rampage hired Slaughterhouse Recording because it was one of the few places they could find that could accommodate their desire to record entirely in a retro, analog style. Moreover, they sought analog *because* of the lack of sonic clarity and editing flexibility such a move might entail. Blush claims that Hardcore bands of the 1980s "expended

little effort achieving prevailing production standards" (9). Yet considering that such failures to meet prevailing production standards are now definitive of a retro-Hardcore sound, it should not be said that they were 'bad' recordings. Rampage's goal was not, in fact, to produce a 'rough, crappy' recording, it was to produce a record that defies today's standards of production by emulating the sound of an earlier generation of production rule-breakers.

Brian elaborates: "it actually *is* going to be a *good* recording, but with an experienced producer you can almost make it sound like it's not" (interview). Like Josh's complaint about contemporary Hardcore records sounding too 'polished', Brian's problem is that on new (Metal-sounding) Hardcore records, "everything's way too clear, it kind of loses a lot of what the music represents" (interview). What they hoped to gain from analog was not just any counter-normative sound but a very specific one, an unmistakable signifier of subcultural authenticity that could put them audibly within the sociosentimental frame of reference for Youth Crew Hardcore.

4.2.1 Analog Integrity

The value of analog for this is that it sounds both unpolished and live. The idea that liveness and a heightened sense of mediation go together may appear paradoxical but even Adorno marveled at the phenomenon in "The Curves of the Needle" wherein he argues that the noise of the playback medium adds to the impression of documentary realism whereas, on the other hand, the clearer, or more high-fidelity, the playback, the less realistic the music sounds. Insisting on analog, therefore, is both a salute to

Rampage's Hardcore heroes as well as part of their desire to represent their music as 'a live thing'. Technically, the idea that analog tape is a closer *analog of reality* is way off base (Sterne 2006). But that is not what the Adorno-effect rests on. His point, rather, is that clarity is undesirable, unmusical even. Nonetheless, members of the band are not wholly uncritical of their attempt at analog purism.

Guitarist Brian confessed he did not think he could tell the difference between analog and digital sound, partly because he believes the current state of digital technology is sophisticated enough to produce the same textures as tape: "I've personally come to believe that it's not as important these days, because there's such good equipment out there that, like, most good studios will have, like, you can pretty much capture the same effects" (interview). Ben, the bassist, equivocates more on the issue, stating the he prefers to record to analog tape, though he finds analog purists are often "people [who] just try to be cool and say they just go and listen to analog records" (interview). As for his own stake in it, he explains, "I think it's cool that we really like a lot of older bands, and they didn't do it digitally, so it's, like, 'Oh, let's just do what they did'" (interview). For the most part, however, the band defers to the opinions of Ben, who writes most of the songs and takes a leading role in production decisions, which is rare for a drummer.

Ben stated that he was attracted to analog because it was the dominant medium in his favorite music era, and adds "I don't like the way that things sound today." Describing the difference:

> analog gives you more you can sink your teeth into, you know what I mean? It's thicker, it's more there. Digital seems more blown-out and papery to me. The weird thing is, like, kids these days, it seems they're so

> used to digital sounds, that's what they *like* now. So, even with music, they're into louder and more intense, but it seems like they're missing some sort of inner grit and strength that music used to have. (interview)

The idea that today's music is 'louder and more intense' as well as 'blown-out and papery' is actually well-grounded in a controversy within professional audio circles concerned with the so-called 'loudness wars', a production trend accompanying the digital era.

Today, popular music, and not just styles like Hardcore or Metal but the bulk of popular music made in the digital era, seems louder and more intense due to a widespread trend in commercial record production to create mixes that are as loud as can be at all times, which means sacrificing dynamic range. This is to say that recordists have used digital audio technology in such a way as to virtually eliminate variations in volume. Jonathan Sterne (2006) analyzes the loudness wars, finding that part of the reason for this is aesthetic. Some music, like Hardcore, is expected to be a constant barrage of loudness, but this does not explain why virtually *all* types of music seem to be caught in the battle. The widespread quest for louder and more intense recordings, Sterne explains, has more to do with a quirk of auditory perception and the problems of being heard within the soundscape of the present music industry:

> Psychological studies have clamed that all other things being equal, a 'louder' song will sound 'better' to listeners than a quieter song. Whether or not this is actually the case, it is taken as gospel in the recording industry, especially because the effect seems most pronounced upon first impression. The theory is that if two songs on the radio are otherwise of

> the same quality, the 'louder' song will be more likely to catch a listener's attention. In practice, musicians and producers have come to measure the loudness of their own CDs—whether or not they will appear on radio—against other commercially released CDs, and the result has been a sort of loudness arms race, fuelled by new software developments in 'loudness maximisation'. (2006, 344)

Loudness and intensity are therefore associated with digital-age sound, though there is nothing about digital that makes such two-dimensional, all-or-nothing loudness necessary. Digital technology merely enabled it, industry conditions encouraged it. Simply opting-out of the loudness wars can be a major subcultural critique of mainstream music signifying a subcultural affiliation. However, the fact that the loudness controversy is based on a set of digital-age practices more so than the technology itself means that one need not eschew the medium in order to avoid the loudness 'arms-race'.

As far as the recording process goes, however, the main theater of contest in the loudness wars is mastering studios, not recording studios.[27] So, from the perspective of Slaughterhouse's owner and chief engineer, Mark Alan Miller, Rampage's recording engineer for this project, the goal of using analog to give listeners 'more you can sink your teeth into' was less about loudness and more about preserving the integrity of live performance and establishing an uncommon occupation of the frequency spectrum. Still, analog recording is more expensive, because blank tapes cost more than hard drives and because it is more labor-intensive. Digital technologies were invented, in part, to

[27] Mastering is a post-production process usually done by a separate engineer/studio after the album has been recorded and mixed. It is the last stage of record production in which, among other things, final adjustments to equalization and dynamics are made before creating a master copy of the record to send to a duplication plant.

overcome the limitations of multi-track tape-editing. Considering this, it is usually in a client's best interest to avoid the pitfalls of analog if they will not truly reap the benefits in the end.

Miller was thus wary at first that Rampage may turn out to be insisting on analog for no reason other than fantasies about techno-authenticity. But once he grasped the total-package retro sound they were going for, particularly the instrumental timbres they were using, he, too, believed analog tape was a savvy choice. Aside from analog's potential to produce an Adorno-effect on the side of listening, on the side of production it has some pragmatic benefits.

Although magnetic tape is not, technically, a continuous analog of an original event, working with an analog tape machine encourages that kind of relationship to the source material more so than digital. The tape itself confronts recordists as one continuous piece that must be physically cut with absolute precision in order to perform edits that, in the digital domain, are non-destructive, elementary point-click-copy-and-paste (and, if necessary, undo) procedures. This is to say that digital recording practices, even for Rock, are now very much like dance-music records built from many samples carefully chosen and arranged; the only difference for a live band as opposed to a dance music producer is that the band is creating their own samples from scratch, as it were, in the studio. But this contemporary standard of practice is anathema to Rampage's retro regime. Here, too, it is worth considering that the digital sound they dislike is not a passive byproduct of the medium as such but the result of sundry editing 'tricks' that, in the analog days, were performable only by the best in the industry but are now easily carried-out by recordists at all levels.

James Fogarty, owner of Zing Studios, a recording facility with a solid reputation in Metal and Hardcore circles, said that one of the big misconceptions amateur Metal bands tend to have is the belief that they can simply record themselves playing live and somehow wind up with a record on par with the bands they are emulating.

> Some of the younger, inexperienced Metal bands think that they can play it live the way the jazz guys do it and that it's going to sound machine-tight, you know, like the records they listen to, and that doesn't really happen. You know, those records are pretty much…I don't want to say 'manufactured' because they *are* actually played, *but* a lot of surgery is done on those records, and they're kind of recorded bar-by-bar, that's why everything sounds so machine-tight. (interview)

These days, simply *playing* Metal is not enough to *sound* Metal on record, one must also record in a *Metal way*. Conversely, if one is to avoid associations with Metal, one would do well to do it 'live' rather than through painstaking digital surgery.

To be sure, it was possible to make music measure by measure on tape, and such had been done well before digital audio. Moreover, it is questionable whether digital recording would have seemed desirable, all things being sonically equal, were it not for the radical editing possibilities it permits, far extending and refining tactics pioneered on tape. But studio editing, by Rampage's estimation, is not really what the music is about, it is supposed to be a live thing, and the highly edited sound of today's digitally recorded Metalcore music is a *bad* sound not just because it fails to provide enough to sink one's aural teeth into but also because it is the sound of an *unethical* production that violates what (Punk) music ought to be at its hardest core. Coupling this idea with the fact that

Hardcore's most Metallic artists are the most popular in the commercial mainstream means that the product of bar-by-bar recording/composition is the sound of selling-out—i.e., audible evidence of subcultural inauthenticity—therefore pursuing such a production would be *doubly* unethical as it violates the supposed essence of the music in one and the same gesture of violating the borders of the subculture that nurtures it. Insisting on analog recording, therefore, was also, in part, to insist on the bare minimum of editing in order to preserve the integrity of the music both in a metaphysical sense of what and where the essence of the sound is supposed to be as well as in an ethical sense of conserving those practices against threats to the 1980s sound and subculture they value. Nonetheless, the other argument behind analog in this case does indeed have to do with the sonic properties of magnetic tape itself.

Rampage's sound is comprised of distorted guitars, overdriven bass, screaming vocals, and echoing drums. Therefore, the task set to Miller, or anyone engineering music built upon layers of distortion, is how to produce an accurate representation of distorted sources, and this band had some special needs in this area. For Rampage, their desire for high-end 'sizzle' that 'you would think would be too much' is another factor making analog the medium of choice. The audible differences between analog and digital, on this point, stem from two factors: first, what happens when the medium itself is driven to the point of distortion and, second, the relatively poor resolution of extreme high-frequencies in digital formats.

Tape distortion is called 'saturation', which happens when the electrical input signal approaches the limit that the magnetic tape particles can register before losing all definition and become an indistinct wash of noise. In digital formats, the equivalent is

called ‘clipping’. A digital signal, on the other hand, remains clear, undistorted, up to the maximum point the medium can handle; anything higher than that will ‘clip’. This is to say that digital distortion is basically all-or-nothing. Nonetheless, the fact that it distorts only at the absolute limit is part of what makes it sound clearer over all. Analog distortion, or saturation, is more gradual; the signal distorts ever more slightly as it approaches its limit. So, unlike the more on/off, 1 or 0, nature of digital distortion, analog distortion is easier to control. Moreover, for a band that values distortion as such, pushing the tape to the point of saturation, distorting the medium with the power of amplified guitars and bass, screaming vocals, and hard-hit drums, helps to further convey a sense of raw sonic power. It may be less clear than digital overall but, again, the instruments are thoroughly distorted to begin with.

Moreover, the kind of distortion Rampage prefers to use on their guitars and bass results in an unusual aggregation of very high frequencies, a range where digital audio’s shortcomings are most audible. This has to do with the Nyquist ratio and an effect known as ‘aliasing’. The Nyquist theorem states that a digital audio sampling rate—the number of ‘slices’ of audio a recorder takes, like the frame rate for film—must be twice that of the highest frequency of the sound to be recorded. The range of (healthy, undamaged) human hearing is approximately 20hz-20khz, so the CD-quality sampling rate of 44.1khz accounts for frequencies outside the audible range.[28] Frequencies outside that range produce *aliasing* effects, which is the digital reproduction of those frequencies too high to be digitally recorded as lower-frequency information. This means that inaudible frequencies, when registered by a digital audio converter, are rendered as

[28] Whether or not these inaudible frequencies are in any way perceptible is debatable; MP3 data compression can produce lower-resolution digital audio files of acceptable audio quality in part because it discards the inaudible high-frequencies.

audible, digital noise. To be sure, distorted electric guitars are perfectly capable of producing these problematic frequencies.

There are ways to work around this, of course, such as using low-pass filters to remove supra-audible frequencies before going to disc. But analog tape is a perfect solution for a band that insists on producing extreme high-end sizzle, wants to avoid digital-style editing, and has a nostalgic yen for it to begin with. It would be within the realm of possibility to produce analog effects using digital media but, with tape, the effect is built-in to the recording medium and, even if nothing else, saves a few steps. Moreover, using the real thing is a solid way to avoid winding up with a record that is unmistakably analog because it *is* analog.

4.2.2 Staging a Vibe

Rather than adapting the *medium* one could change the *source*. Indeed, on Rampage's digitally-recorded demo, that is exactly what the engineer had to do in order to make the material easier to work with. Brian, who says he is picky about his guitar sound, claimed that the band had to pay him $100 to change his guitar tone to something their engineer, working for free, could better mix on his laptop recording rig. Changing the tone of a guitarist can be like asking them to wear someone else's clothes or otherwise assume another identity. After living with the offending tone on the demo, which turned into their debut release on Lockin' Out, Brian was unwilling to compromise and looking forward to hearing his playing featured with the right sound, at last. Nevertheless, the

overall raw, street sound of the demo was intended to be carried-over as a marker of subcultural authenticity as well as a hallmark of the band's self-conscious sonic identity.

Steve Waksman's analysis of Hardcore and Metal guitar timbres reveals that getting a desirable tone is, alongside actually playing the instrument, part of the Rock tradition of guitar virtuosity (696). Moreover, Waksman's analysis concerning Greg Ginn and Eddie Van Halen goes to show that guitarists are as identifiable by their tone as by their playing, which is determined by the particular arrays of equipment they use and how they choose to modify that equipment. Rampage is no exception; each instrumentalist contributes his own personal sound to the mix. This is to say that the overall sound of the record is not solely about recording but also about mixing the timbral identities of these individuals into an ideally staged performance. Since each instrumentalist had his own characteristic tone counting, as much as performance, for his contribution to the total work, the job for Miller, as the engineer, was to make sure that each is well represented.

Drummer Ben was concerned about the way his drums sounded in the studio.

> The [drum] *room*, I thought, sounded a little too much like the Albini sound, you know what I mean, and that's cool for *that* but I don't think that's good for this I think, for this I think things should be a little more tighter-in sounding, then get the bigness from the reverb. (interview)

The reference is to the work of engineer Steve Albini, who is also an analog purist—or 'loyalist' as he prefers to say. Albini typically uses a room's natural ambience to get a more realistic-sounding drum tone, but natural ambience does not fit with Rampage's desire for 'too much' reverb on the drums. The sound Ben wants is best recorded close

so as to get a 'dry' drum sound that will work better with artificial reverb added later during mixdown. This is actually not 'raw' at all, by Albini standards it is over-produced, but it also has to be noted that Albini and his more natural sound are tightly linked with totally non-Hardcore 'alternative' music of the 1990s, his most broadly acclaimed being Nirvana's *In Utero* (1993). So, while the Albini drum sound was positioned in the 1990s as a correction to the preceding era's supposed production *faux pas* of artificial drum ambience, it is clear that the artists in question, here, have reified many of the abject elements of late 1980s sound.

Upon hearing the final mixes, one can hear that the drums are very wide, occupying the full stereo span, and very deep, processed with obvious reverb effects. The wide stereo image of the drums means that the left/right balance changes depending which side of the kit Ben plays on. Whereas the rest of the instruments occupy a fixed place in the mix, the drums are given reign over more mix-territory than any other. As they are typically the background, or foundation, of a mix, this privileged terrain of the drums is not unusual, however in Rampage's mix the drum terrain is further expanded through copious reverb and the somewhat narrower guitar image resulting from the chunk/sizzle approach.

Although guitarist Brian is picky about his sound, his setup is not abnormal, indeed it is a classic, Gibson guitars through a Marshal amplifier, a tried-and-true combination that worked as well for Jimmy Page as it does for today's guitar heroes. Brian, "brings the Metal," Josh joked (interview). They described his sound as the bass-heavy 'chunk' supporting the trebly 'sizzle' and 'fizz' of Zack, the other guitarist. Zack's high-frequency sound comes primarily from his amplifier, made by Radio Shack, a brand

which, unlike Marshall, is almost never seen or heard from in professional music of any sort. Though it is not a professional-quality piece of gear—it could never produce a 'chunky' tone, for example—Zack has learned to set it so that it yields the highest of the high frequencies, which the band identifies as part of the Rampage sound.

Craig, the bassist, is just as choosy as the guitarists: "I'm kind of an amp snob… I always try to play out of an 8x10 if I can, just real loud and full, I usually use a pedal, like an XR Distortion Plus, or a Turbo Rat pedal, or a Big Muff, you know something real ugly" (interview). Usually, bass, unlike guitar, is not distorted, even in rock mixes, but 'ugly' is a good thing for a band like this, and distorted bass is definitely unseemly. Ensuring the drums were not too Albini, the one guitar was chunky enough, the other guitar was sizzling enough, and the bass was really ugly, takes care of individual representational issues but there is also the larger matter of recording these sources.

As far as engineering these instrumental voices, in addition to recording to analog tape, Miller was sure to avoid condenser microphones on the guitars because such could result in a digital-esque sound going to tape. Here, the technical reasoning is similar to that involved in the choice of medium. Condenser microphones, like digital audio media, have wider, flatter frequency responses than other microphone types, like dynamic or ribbon models, which emphasize some frequencies and de-emphasize others depending on the make and model. Further, condenser microphones are also prone to clipping, or producing a distorted signal with a resemblance to digital distortion. Choosing microphones with appropriate distortion and frequency-response characteristics, like choosing a medium along those same lines, is an extension of the engineer's art of mixing. Miller explained that he pays close attention to source sounds, ensuring

everything going to tape, or disc, is as close to the clients' ideal as can be so that he will not have to "fight it in the mix" later on (interview). Definition and control are particularly desirable when faced with mixing layer upon layer of distortion, and pre-mixing preparations extend further still.

It is standard practice in popular music production to record each instrument to its own track(s), which provides better definition to each instrument as well as allowing more control over each during mix down. However, unlike the demonstration recording session in which there was just one room—meaning the band had to first record drums alone, then, one at a time, the rest of the instruments on top—for this effort, in a professional studio, there were enough rooms to isolate each member of the band and there were enough windows between the rooms to maintain a line of visual contact. More than the piecemeal multi-track strategy they had to use before, this synchronous method comes much closer to capturing the band's live feel.

While there would be lead guitar and vocals added afterward, and a few instruments' tracks would eventually be re-recorded, the core of each recorded song remained the vibe the group laid down together. They had no ethical problem with, what Albin Zak terms, *horizontal* editing—overdubbing—but part of their decision to use tape entailed an ethical decision to avoid *vertical* edits—punching-in or splicing multiple takes together. Though not a completely live production, liveness was constructed around a core ensemble performance and enhanced by using complete takes, not Metal-style measure-by-measure song-construction. Here, as in their choice of medium, the deciding factor was partly about a metaphysical problem of representation—like staying true to the essence of music as a live art—and partly about the band's desire to produce

sonic signifiers with sociosentimental resonance—a dated, raw sound. Once the medium was chosen, tones set, tracks recorded and overdubbed, the last step in the material construction of their retro Hardcore vision, mixing, could begin.

For a five-piece rock ensemble like Rampage, each player is typically assigned a position within the stereo field isomorphically related to where one would see them on stage. The lead vocal is front and center, the loudest of all instruments and evenly balanced between the two speakers. Drums span the background, with kick and snare in the middle and other elements of the kit offset to either side, representing the physical girth of the kit on a stage. One guitarist is in the left channel and the other in the right, as they would be placed in a concert. Bass guitar is the most glaring exception to this otherwise straightforward stereo indexing of the sight of staged performance; whereas a bassist on stage, not to mention the bass amplifier on that stage, will be off to one side or the other, the sound is *mixed* center, on record as well as through a concert venue's PA system. In other types of music, like Classical, Jazz ,or folk musics, which strive for a more documentary type of recording, one is more likely to hear bass instruments mixed off to one side as it would be heard, unmediated by amplification, from a group on stage. For Rock music, having bass on one side would be possible but inappropriate by the standards of its live performance and recording traditions. Accepting that the central position of bass in a rock mix is not up for compromise meant that Rampage had some decisions to make about their unique pairing of chunky and sizzling guitars.

The chunky tone was rich in low-midrange and bass frequencies, which convey much of a guitar's pitch information (i.e., what sounds like notes and chords underneath distortion). The sizzle tone, on the other hand, was so distorted and so overwhelmingly

trebly that the fundamental frequencies conveying note information were virtually obliterated by a swarm of inharmonic overtones. Mixing them opposite one another in the stereo field would run afoul of the elementary rock rules of mix balancing: bass must be even. Placing chunk laterally opposite sizzle would be unusual but also imbalanced, or ugly in a bad way.

The solution Miller and band decided on was to use just one track of chunk placed center and two tracks of sizzle, one left, one right. It could also have been done the other way, with a single, centered sizzle and chunkiness in stereo but, for one, that would have sounded more like a Metalcore mix and, for another, it would not accentuate the extreme high-frequencies they were making such an effort to feature. Not only was the resulting frequency signature more appropriate to a pre-Metalcore, late 1980s Hardcore sound, it should also be recognized that, as far as the stereo mix indexes a type of sonic proscenium arch, this arrangement is a departure from the norm and, therefore, less easily mapped to points on an imaginary stage.

As usual, the singer's voice mostly occupies the center position, though it is mixed significantly lower in the mix than is normal for pop music. Vocal tracks provide a key point of attention within a mix since they convey much of what listeners take to be a song's meaning, and therefore provide a reference for establishing the measure of a mix's 'balance'. In addition to frequency and spectrum balances, there is the balance of relative volumes between each instrument in the mix. The relative heaviness of a mix can be increased by lowering the volume of the vocals, making them seem more overwhelmed by the music; combined with the fact that the vocals here, as in other heavy

music, are shouted and screamed, one is further impressed with a sense of the overwhelming power of the music, which even the front-man can only barely overcome.

Moreover, this also happens to be a typical live (im)balance at Hardcore shows, which are often in smaller venues without the kind of live sound-system one would find in regular night-club, where the weak, non-professional public-address system supplied by the house is not loud enough to compete with the amplified instruments the band is playing. But the vocal treatment on this album was not limited to realistic representational modes, *Limit of Destruction* not only evidences the over-the-top reverb strategy applied to the vocals, it also shows considerable use of delay, which, unlike reverb, cannot as easily mapped onto familiar sonic landscapes, it is often read as an intrusion of the recording apparatus into what seems, otherwise, to be rather straightforward documentation of liveness. All the same, although it definitely breaks with a realist paradigm, it is not unusual to hear such things on 80s Hardcore records.

Metaphorically, this is 'stage presence' but on record. Josh explains that good stage presence is a key to their live appeal: "These guys have a great stage presence, like, if you see us live, like, Brian, Craig and Zack just got a [poses with air guitar] they just got a sick stance, you know" (interview). Occupying the stereo field in an unusual manner, even by the standards of 1980s recording, was necessitated by the desire to represent each instrument(alist)'s sonic identity while simultaneously representing a coherent group image along the lines of their revivalist ideology. But as far as traditions of stereo sound-staging go, this has the added effect of sonically representing a kind of 'sick stance', or an interesting stage presence one does not often see/hear.

4.3 CONCLUSION: THE RAW AND THE PRODUCED

While Rampage explained that they never thought their music would be heard by anyone outside their circle of friends, they now have a record label—not to mention distributors, promoters, and fans—with certain expectations of these Hardcore revisionists whose street demo put them on a wave of Youth Crew revival acts bringing back the old-schoo. But how does this album, *Limit of Destruction*, read to such listeners? The album, released by Lockin' Out in June of 2007, is at least being marketed in accordance with the band's desired image. The official press release plays heavily on their old-school image:

> "Thompkins Square Park. "Sick People." CBGB's Sunday Matinees. The Lower East Side. These are the images that come to mind when Providence, Rhode Island's Rampage debut their full length release, Limit Of Destruction. Unabashedly wearing their New York Hardcore influences on the sleeves, Rampage seem to channel the energy of Breakdown and Straight Ahead without blatantly lifting riffs or stealing ideas from either other these seminal NY bands. Unlike many bands influenced by this style, Rampage remembers that speed is one of the most important ingredients to the recipe of good NYHC [New York Hard Core] — breaking from many prevailing Hardcore trends, Limit Of Destruction opens with a drum blast that is as reminiscent of The Crumbsuckers or Ludichrist as their less crossover influenced NYHC brothers. This twelve track full length flies by at eighteen minutes, and is a reminder of the old

> Hardcore adage 'loud fast rules.' At some points it sounds like this thing was put in a vault in the 80s and left to be found in 2007. Booming drums fused with chainsaw guitars creates a classic recording that modern Hardcore has been missing. The raw production only adds to the power of this recording, and as any true fan knows, the classics are the ones that rely on the quality of the song, not in studio tricks and modern production — just look at Victim In Pain or the Raw Deal demo... perfection. Limit Of Destruction is setting the pace for a new generation.

Yet, in practice, Rampage clearly disagrees; the classics are as much about production as about the songs. Is not *intentionally avoiding* modern, digital production a trick in itself? Clearly, the recording was done in a very deliberate manner in order to produce the sense that the new album is a lost gem from the 1980s. Creating a sonic experience that feels like an album from the first-wave of Youth Crew is not an accident but a techoustemologically calculated effort based on their critical, historically-informed observations concerning the current state of Hardcore. Their recording project, and the idea of the band as such, was born from a particular frame reference constructed through carefully reading, interpreting, and (re)producing subculturally specific, historically and materially grounded sonic signifiers of authenticity.

At the time of this writing, just one month after the album's release, there have yet to be any official reviews but, evidently, at least one member of a file-sharing (i.e., music-pirating) community is enthusiastic. Along with an illegal upload of the entire album, user Nocturn3Ev1l provides the following description:

> Here's the new Rampage album. They are one of today's few untainted Hardcore bands.. infact [sic] they are stuck in 88, both in sound and attitude. They definitely don't take themselves too seriously and you can tell they have a lot of fun playing their songs.. what else would you expect from a band who named themselves after a (censored) [sic] sweet videogame. There's even a song called "Geekin Out" on this record. For fans of Straight Ahead, Mental, Cold World and Jaguarz. (online 7/7/07)

Within the Hardcore subculture, at least among those fans of the Youth Crew movement, the year 1988 is regarded as the height of authentic Hardcore, and the numbers '88' are a symbol of such fan affinity. To sound stuck there is to be at the height of old-school Hardcore with a sound 'untainted' by all the negativity that followed. Rather than producing a truly 'raw', 'rough', and 'crappy' recording, Rampage's production values, crafted within a thoroughly retro frame of reference, speak clearly of the artists' studied refusal of current Hardcore trends.

This case is an exception to Haenfler's conclusion that

> [y]outh subcultures, in encouraging participants to question everything, sow the seeds of their own demise. After critiquing their perception of conformist mainstream youth and adult cultures, participants inevitably turn their critical lenses upon themselves, uncovering the inconsistencies within their own movement. The resulting disenchantment contributes to participants leaving the subculture for other pursuits. (211)

While this may be the norm, the case I have presented suggests that, for those who continue to participate, the question-everything mentality may lead to a more critical

attitude towards one's own subculture but that does not always lead to disinterest. After all, the other lesson of subcultures like Punk and Hardcore is that, recognizing the problems with mainstream culture, the solution is to produce one's own alternative (i.e., to do it yourself). This, too, can be turned upon one's own subculture. Rather than getting older, seeing the flaws in their scene, and leaving, Rampage identified the flaws and decided to produce Hardcore music they way they wanted to hear it.

Through the careful identification and reproduction of core elements of the late1980s scene, the band managed to sonically explain their preferred frame of reference for authentic Hardcore, re-inventing Youth Crew style for a new generation. Nevertheless, while the sound is rooted in the 1980s, the adult fans/artists in this study, arguably, are not. They are active and aware of current Hardcore trends, and it was through this contemporary lens that they were able to recognize and reaffirm the value of old-school records as such . That is, they did not drift from the current scene, leaving to collect memorabilia and complain among themselves about 'kids these days' and their music. True to the DIY ethic of their scene, they took their complaint about the present lack of good Hardcore—good like the music they enjoyed in their younger days—and started making it for themselves; they took their personal experiences as life-long scene-participants and combined it with a studied historical understanding of Hardcore recordings. In the studio, this led them to (re)produce an authentic sound guided by their reinterpretation of the Hardcore archive as well as their role as consumers and producers within it.

5.0 THE POP CULTURE MASSACRE: A CASE OF INDUSTRIAL MUSIC PRODUCTION

Compared to styles like Rock, Metal, Punk, Rap, and World Music, Industrial music is barely on the radar of popular music scholars. This is odd, since it has many of the same qualities of these other styles often studied by academics. Industrial is supported by a spectacular youth subculture, it frequently voices radical political opinions, it is largely sustained by independent artists, and its standards of practices are quite close to those of other, more celebrated culture-jammers. What makes it different, and more difficult to discuss, is its use of non-traditional instruments. Further, it is a smaller subculture compared to others and the number of high-profile artists crossing-over into the mainstream is also relatively small. As such, there is less of a second-order tier of critics, historians, or, indeed, fans writing on the topic. Moreover, as a genre built on the value of musical experimentation, 'Industrial' is, by design, a nebulous category covering artists spanning the range from the experimental avant-garde to more pop incarnations. Though audio experiments are the foundation of Industrial music, the focus of the limited academic attention it has received appears to be about everything but.

Jason Hanley examines Industrial music videos, noting simply that Industrial

> is a loud, powerful and often shocking style of avant-garde popular music. It is constructed from mechanical rhythms, harsh and distorted timbres, and dark minor key or modal harmonies, all of which contribute to the creation of a dystopian soundscape. This brutal postapocalyptic attitude is not produced, however, by the music alone. (158)

Hanley's study looks at Industrial bands' use of controversial images from World War II as one of their shock tactics. Plainly Nazi and other fascist imagery can still produce some cultural *frisson*, but are there ways to do the same with sound? How does Industrial music trade in *aural* taboo? Jan Jagodzinski lists Industrial music along with Punk, Metal, and Gangsta Rap as postmodern responses to a "loss of Oedipal authority," exhibiting a "perverse" structure "characteristic of a rebellion against the established Law" (2005, 136), yet his investigation is limited to lyric sheets and artists' biographies. Tricia Henry Young considers how Industrial is related to the Gothic dance scene as an expression of the Gothic subculture's "ambivalence about technology," claiming that Industrial "emphasizes what is perceived as the receding power of humans to that of machines, while at the same time explores the aesthetic possibilities of the new technology" (78). Young goes on to analyze the congruence between Gothic and Industrial worldviews, turning then to analyze the ways Gothic club-goers dance to Industrial music, leaving one to wonder exactly what the exploration of human/machine relations in the quest for new aesthetic possibilities might entail. Karen Collins attempts to analyze Industrial music by looking at notational transcriptions of Industrial recordings, concluding that Industrial songs use melodic arrangement evoking a

worldview similar to cyberpunk film and literature: "[t]he semiotic connotations of Industrial music, particularly in its tonality, seem closely related to the moods and tones of cyberpunk—despair for the future, darkness, anxiety and uncertainty, urban decay, and violence" (175). But is a reading of musical modality really a key to understanding what makes Industrial music *Industrial-sounding* as compared to any other music in a like mode? To be sure, the notation is not entirely beside the point, however, if one is looking to find connections between Industrial music and futuristic science-fiction/fantasy, I believe it is necessary to look more closely at the way new technologies are used in the production of Industrial recordings. True, for Industrial especially, these extra-musical aspects are undeniably part and parcel of Industrial work. Nonetheless, there would be no Industrial music as it is today without the *sound*, and approaches such as the above seem to systematically downplay the most salient (i.e., sonic) traits of the texts ostensibly at the core this (sub)cultural phenomena.

Noting this gap, the following describes a single case of Industrial music recording which takes some of the developing scholarship on Industrial music/culture and puts it into dialog with literature concerned more broadly with music production in the digital era. This study illustrates the way Industrial music is defined vis-à-vis a technological landscape that is not limited to recorded music but to a wellspring of sociosentimentally resonant sounds deriving from all corners of mass-mediated cultures. Perhaps more important still, looking at this particular recording project serves to further scholarship concerning music production in the digital era. This is a crucial subject now that computer-based production is the standard for nearly all types of music, hence issues of 'the computer' as a musical instrument are given special attention. I argue that the

most challenging aspect of Industrial music, the one most problematic for extant approaches to the study of recording and popular music, is its assumption of a middle-ground between traditional Rock and experimental Art music, broadly conceived.

5.1 LESS ROCK, MORE SHOCK

The key genealogical moment for the establishment of an Industrial music subculture was the mainstream split between Rock and electronic pop music (i.e., disco) in the 1970s (Moore). This popular divide was reflected in the underground as well in the split between early Punk and Industrial. Unlike Punk, which remained sympathetic to mainstream Rock insofar as it rejected Disco-like artifice, Industrial took wholeheartedly to drum machines and synthesizers and all manner of studio magic (Neal, Fish, Savage). Although one of Punk's loudest, most constant pronouncements was and still is that amateur three-chord songs are preferable to the kind of pretentious guitar virtuosity pushed by mainstream Rockers, the trouble, from an Industrial perspective, is that, ultimately, Punk Rock is *still Rock*, and even just three chords seems a ridiculous concession to the status quo. If one has a problem with Rock bands, why become one? If being a non-musician is so desirable, why not play non-instruments? The Industrial call to experiment with new instruments was as much a drive to push the envelope of music as such as it was a subcultural, populist ideal that anyone can musick with anything.

Considering the state of electronic music in the 1970s, however, the notion that it took less skill to compose and perform without 'real' instruments, using instead the rudimentary tape machines, synthesizers, rhythm modules, mixers, and signal processors

of the day, rings false. However, the fact that, unlike guitar, for example, there were hardly any generic standards for electronic sounds did mean that, once figuring out how to work everything, it was almost impossible to do be 'bad' at it. The difference between (Punk guitarist) Steve Jones and (Progressive guitarist) Steve Howe was obvious, but what of the difference between (Industrial electronicist) Stephen Mallinder and (Art electronicist) Stephen Reich? Unlike the long tradition of guitar, the standards by which one judges electronicists are, even now, only starting to emerge.

This is not to say that generic electronic sounds do not exist, in fact they appear to have developed rather quickly. Fales observes that "[t]he evolution of generic variation in techno music in the last twenty years has reflected changes in the social/cultural conditions of musicians and listeners as well as the sophistication of accessible technology" (161). Trevor Pinch and Frank Trocco note how quickly the analog synthesizer changed from a custom-made artist's behemoth into a factory-assembled consumer-friendly keyboard due, in part, to consumer demand for an instrument that could reproduce the electronic sounds they had heard before. Concerning the state of computer music, Johnson finds that same tendency to imitate rather than innovate resulting in growing libraries of generic electronic timbres pre-programmed into later generations of digital synthesizers.

> When synthesizers started to be more widely used in popular and commercial music they became, expectedly, much more imitative of acoustic and electroacoustic sounds. They sought to "naturalize" their sounds and minimize their shock value. The digital synthesizers have continued this process to an even greater extent so that even a quick

> survey of the Yamaha DX-7 or Roland D50, two of the more popular synthesizers today, reveals that virtually all preset voices are meant to be imitations of acoustic sounds, amplified electric instruments, or earlier analog synthesizer sounds. It seems t hat the fuzzed or flanged guitar, the Moog bass, and many other predigital electronic sounds lack shock value anymore. These sounds are not real imitations, of course, but rather a kind of indistinct memory of their originals, simulations covered with a heavy dose of electronic effects and nostalgia. (16)

The problem of electronic sounds to become standardized and, therefore, fail to 'shock' or generate interest *as a timbre* is especially pronounced for today's Industrial artists.

5.1.1 A Brief Survey of Industrial Shock Tactics

Industrial music is not so much a descendent of Punk as it is a close cousin to it. John Savage describes Industrial as a result of Punk's mainstream commercialization:

> In the gap caused by the failure of punk Rock's apocalyptic rhetoric, 'industrial' seemed like a good idea. […] Punk, by this time [1977], had not gone far enough: its style had become a pose, window-dressing for packaging and consumption through the usual commercial channels. Something new was needed. (4)

The earliest Industrial artists seemed to have little in common aside from an itch to offend, which Punk simply did not scratch. Industrial emerged as a recognizable genre, like so many others, through the establishment of a core of influential texts. The

Industrial Records label, established by performance-artist Genesis P. Orridge, featuring works by Orridge's band, Throbbing Gristle, as well as William S. Burroughs and Monte Cazazza provided the first canon of sorts. These artists were almost single-mindedly concerned with finding ways to shock their audiences.

Orridge's description of his pre-Industrial performances with the group Coum Transmission reads something like a work-up to the vaudevillian joke "The Aristocrats." This joke is actually more of a comedians' exercise in free-form sexual gross-outs, popularized by Penn Gillette and Paul Provenza in their 2005 documentary, except the punch-line with Industrial music is not that the (fictional) characters are (pretending to be) aristocrats but that the (real) characters are (claiming to be) artists.

> I used to do things like stick severed chicken's heads over my penis, and then try and masturbate them, whilst pouring maggots all over it…In Los Angeles, in 1976, at the Institute of Contemporary Arts (LAICA), Cosey and I did a performance where I was naked, I drank a bottle of whisky and stood on a lot of tacks. And then I gave myself enemas with blood, milk and urine, and then broke wind so a jet of blood, milk and urine combined shot across the floor in front of Chris Burden and assorted visual artists. I then licked it off the floor, which was a not-clean concrete floor. Then I got a 10-inch nail and tried to swallow it, which made me vomit. Then I licked the vomit off the floor and Cosey helped me lick the vomit off the floor. And she was naked and trying to sever her vagina to her navel—well, she cut it from her vagina to her navel with a razor blade, and she injected blood into her vagina which then trickled out, and we then sucked

> the blood from her vagina into a syringe and injected it into eggs painted black, which we then tried to eat. And we vomited again, which we used for enemas. Then I needed to urinate, so I urinated into a large glass bottle and drank it all while it was still warm. (This was all improvised.) And then we gradually crawled to each other, licking the floor clean ('cause we don't like to leave a mess, y'know; after all, it's not fair to insult an art gallery). Chris Burden, who's known for being outrageous, walked out with his girlfriend, saying, "This is not art, this is the most disgusting thing I've ever seen, and these people are sick.' (17)

Like the comedians interviewed in *The Aristocrats* documentary, Coum Transmission eventually had to ask themselves what more could be done once one has gone to these extremes. For Orridge and company, forming a band, Throbbing Gristle, and starting their own label, Industrial Records, was the way to take it to the next level. Viewed from this angle, Industrial music is derived from the popularization of avant-garde ideas. Orridge explains it as much:

> When we shifted from Coum Transmissions to TG [Throbbing Gristle], we were also stating that we wanted to go into *popular* culture, away from the art gallery context, and show that the same techniques that had been made to operate in that system could work. We wanted to test it out in the real world, or nearer to the real world, at a more street level—with young kids who had no education in art perception, who came along and either empathized or didn't, either liked the noise or didn't. A little mini-Dada movement, eh? (15-16)

Currently, the term 'Industrial' is used to describe nearly any music that is somewhat heavy and uses synthesizers, everything from American hard-Rock, like, Marilyn Manson or Nine Inch Nails to European techno, like Apoptygma Berzerk or VNV Nation. Collins concurs: "there is a great body of work which now gets referred to as Industrial, despite many stylistic differences: what holds the genre together is often the ideological basis behind the creation of the music, and the use of cyberpunk themes and motifs as an expression of this ideology" (176). Savage handles this difficulty of defining a genre the most defining trait of which is an ideological dedication to experimentation by outlining five constitutive aspects of Industrial music: "organizational autonomy," i.e., corporate/commercial independence, "information war," meaning the exposure and exploitation of taboos, "use of synthesizers and anti-music," "extra-musical elements," or the band-as-total-package, and, lastly, "shock tactics" used "to make sure what you have to say gets noticed" (5). Many of these traits are certainly observable in today's Industrial music legacies, though the shock factor is dialed way down from where Orridge and company began.

Today, Marilyn Manson's antics are clearly a Disney-like translation of this tradition, just as Blue Man Group is essentially Industrial rendered predictable and family-friendly. Without a doubt, it can be hard to go beyond what had already been done in terms of shock, so one perfectly viable avenue is simply to tone it down instead of trying to reach new extremes. Never the less, there are examples of artists who still seek to shock and even a few who manage to provoke even those audiences accustomed to extreme music. The Industrial noise group Whitehouse is a case in point. Their extraordinarily challenging music and their habit of identifying with the likes of serial

killers and child molesters, even collaborating with Peter Sotos, notorious for being the first American citizen found guilty of possessing child pornography (which he had reproduced in his zine dedicated to the celebration of violent criminals).

The jury explanation for Whitehouse's failure to win a Prix Ars Electronica Digital Music award in 2003, despite being *musically* worthy, gets right to the inevitable problem of pegging one's art to not merely musical experimentation but cultural transgression geared towards offending listeners:

> The UK group Whitehouse are still too extreme to find a majority on this jury panel 20 years after their first appearance. They have shifted from the paradigm of being an ambivalent "80s Industrial" band towards a contemporary-sounding digital blast. They focus on their issues more precisely than ever. Obvious, but not obvious enough, Whitehouse are one of the few collectives to twist political issues explicitly with their extreme and controversial works. Addressing topics of power, media, violence, abuse or fetish, Whitehouse caused the heaviest debate amongst our committee. The voyeuristic aspect to their work struck some of us as choreographed provocation and others as disgusting theatrics. But the very fact of the panel's polarization over the kind of abhorrence, rejections and fascination their music and dialectical message conveys raised the discourse to grant them, with our divided passions, a disputed place in the final honorable mentions. Their unrelenting live spectacles and savage soundworks are an inexorable testament to a brute strength. Let the outrage continue! (Toop and Humon online)

At the slightly less narrow end of the wedge, the band in my study sought to stir controversy and to outrage those within their own subcultural sphere.

5.1.2 Heavy Cheese

Connecticut's Circus of Dead Squirrels (CoDS) are best classified as an Industrial band, though their sound, like that of many Industrial artists, is as idiosyncratic as it is generic. They call their style "Industrial Circus Metal." The music is both silly and scary, centered on befouling iconic sounds and images of childhood. They get compared to bands such as Insane Clown Posse, Dog Fashion Disco, and Mindless Self-Indulgence, but the comparisons, they said, are really "just for the weirdness," as these bands are otherwise, musically, different from CoDS (e.g., the aforementioned are more obviously influenced by Hip-Hop, whereas CoDS draws more from Techno). This study is concerned with the recording of CoDS second full-length CD *The Pop Culture Massacre and the End of the World Sing-A-Long Songbook*. Their first CD, *Indoor Recess* was recorded by engineer Mark Alan Miller at Slaughterhouse Recording Studio in 2004**,** and the successful collaboration brought the band back to Miller and Slaughterhouse for this follow-up.

In 2006, I conducted interviews with the band and their engineer during pre-production, and later spent a week with them at Slaughterhouse studio for vocal recording and final mixdown. The "band," as it were, is primarily the duo of electronicist Dan Raphael and vocalist Matt Foran, who go by the aliases Ninja Turtle Liberace and Pancho Ripchord, respectively. The two began to make Industrial music after the breakup of

their high-school Ska band, Toilet Duck. Though the route from Ska to Industrial seems long, Matt explained that, for he and Dan, it was a quick transition born of necessity:

> It started in high school. We were in a Ska band called Toilet Duck. It was a Ska-*Metal* band, seven people, and we had a real drummer at the time, and we decided to, as people started dropping—I think the drummer was the first one to leave, actually, so we first started programming drums just to replace him, *just* for a demo. You know what I mean? We were planning on getting another drummer, and then everybody else started dropping too. The more players left, the bass player left, and it was just me, Dan, and John Beeler [former CoDS bassist], so we just programmed *everything* just to replace everybody. We were doing the same thing, just programming horns. You know what I mean? We never really planned on doing this, we weren't really into Industrial music at the time. And then, you know, the more we got into doing it—all these cool sounds we were finding—the more we figured out we didn't really *need* the other people, and we can *do* this. (interview)

The unusual amount of instrumentation that typifies their dense sound stems from their origins as a Ska group, which evolved into an Industrial style. The circus aspects of the music began with their admittedly awkward efforts to use computers and synthesizers in lieu of live players trying to make heavy Ska.

As Dan described, they made their first demonstration recording at home using a personal computer with no special configurations or additional gear: "When we started doing, like, we did drums, we did fake drums then we did fake horns, and we used just

regular General MIDI that would come with any PC, it was all we had, it was just, we had 128 effects and that was it!" (interview). After hearing the lackluster results on a demo recordings, they upgraded their production capabilities, purchasing an all-in-one sequencer/sound module, the Yamaha R1X. This unit, as Dan put it, was instrumental in setting them on the path to a heavy circus-themed sound: "We had only that for *years*, so it's like a single-standing box, that's where a lot of our circus sounds come from, just this one little box. Just a lot of trademarks, like the organ sounds, the 'Organ Stab'" (interview). Matt added that it was not only the sound, which, coming from a not-so-sophisticated synthesizer, sounds "cheesy" compared to most Electronica, but also their decision to flaunt it:

> The Organ Stab, he [Dan] used it just one time in a song, and I loved it. It just sounded like a circus organ, you know, and, of course, I gotta do everything *way* too much, so we had to put it on every song, pretty much. And we had the sequencer and we thought we'd get something better eventually, you know, but then we started liking these cheesy sounds and we thought we'd go with this, you know, real heavy music with real cheesy electronics.

Making a virtue of necessity, then, Circus of Dead Squirrels joined the ranks of independent artists for whom the call to defy convention merges nicely with the realities of amateur music-making. Clearly, they meet Savage's criteria of being independent and using synthesizers and anti-music, which are necessary but not sufficient qualification for Industrial status. Next I will turn to the way this Industrial band exposed and

exploited taboos, deployed shock tactics, and incorporated extra-musical elements in their music.

5.1.3 The Baby Jesus Abortion and Other Questionable Concepts

The duo recorded a number of demos over the years, on their own and in studios, experimenting with different sounds and approaches to making music. While Matt and Dan are the group's main visionaries, they have also been surrounded by a horde of collaborators. They estimate that more than twenty musicians have passed through their ranks at one time or another (and the lineup has changed twice since the time of this study). As the sound and lineup changed, so did their name and overall image/concept. Between Toilet Duck and Circus of Dead Squirrels, Matt recalled, "We had various names, too, we were The Baby Jesus Abortion? for a long time, and then Mark [Miller], actually, was the one who told us that, you know, that's not going over well" (interview). Touching on the arguments for and against the failed name, Matt offered:

> See, that title had a question mark at the end of it, too, it was supposed to be like, what if abortion was around in the times of Christ? You know, look at the kind of people, maybe, that we're killing kind of thing, but Mark said people… it's too much. We're going to have to sit and explain it, you know. People are going to be *massively* offended. I don't know, it's not really what I want to do anyway. (interview)

But it was not the name alone, it was also the vile subjects of their songs. Miller recalls working with the band that first time as one of the rare moments in his career when

clients presented him with subject matter which, by his measure, called for an attempt to intervene:

> I actually had a kind of difficult conversation with them [CoDS] regarding their lyrics. They were *so* patently offensive, and I *couldn't find*—even though I was trying really hard to be objective and reasonable in my perspective with them—I couldn't find any really redeeming message to take out of a couple of their songs. It's like, *what is the point of this song*? Like, maybe it's farce or maybe it's satire, but it's *so* far out and *so* violent so… rather…just offensive *without* delivering a message that… Are people going to hear it as *being* satirical or are they going to just go, "That's just *really, really* offensive." And I just *asked them* about that. I said, "Guys, what are your *goals* with this? Are you trying to get people to think or are you just trying to just really nauseate people or really make them think that you just really, basically, got to be locked up, you know, that you're just a bunch of psychopaths?" And they're *not* psychopaths, they're very *thoughtful* guys. And they said, "Well, we thought we were being satirical." I said, "Well, it's just my perspective, but I think you actually have gone *past* the point of being satirical, and you might want to reevaluate what you're doing." And they did. And there are still a couple songs on that first record that were *truly* offensive, but from a First Amendment perspective I'm glad they did them because I think everybody should have the right to express their views. But they brought their lyrics in to a point where they re-wrote some stuff just in such a way—and I

> didn't demand it; I didn't demand it, I just proposed it to them—that you can tell it's satirical. The average person is going to know that they're making a social commentary and that they're speaking from a third-person character, not from a personal perspective. And that was what was indistinct. You couldn't tell. Are they a character? Are they making fun of something? And I'm the last person who's going to condone censorship but I did and will condone responsibility and thoughtfulness, and they took it to heart and I think that they had a better product for it.

Later, Matt said that, if he had any regrets about his back catalog, it would be "all the Jesus stuff." After the fact, he came to realize "the problem's not with him, what'd he ever do to me?" One controversial theme that they are definitely not letting go of, however, is childhood.

The majority of the work recorded under the Circus of Dead Squirrels name has to do with warped representations of children's culture (e.g., their most recognizable visual icon is, what the band calls, the "penta-crayon," a pentagram—a Satanic symbol consisting of a five-pointed star, two points up and one down, inside of a circle—made of multi-colored crayons). The newest album, *The Pop Culture Massacre and The End of the World Sing-A-Long Songbook* continues in this vein, with a pentacrayon on the back of the CD, which is packaged like a classic children's book, complete with cartoon illustrations of the songs and, on the inside cover, a space reading "This book belongs to_____." They even hired illustrator Travis Falligant to design the CD, for which he made cartoon depictions of the action described in the songs, including Sesame Street's

Elmo being decapitated, Ronald McDonald eating a worm-burger, and several other commercial icons in unflattering poses.

In presenting their "sick and twisted" imagination of childhood, they have found that there are perhaps worse things than being perceived as anti-Christian. Matt said that one of the most outrageous misperceptions of CoDS is that they have something to do with child-molestation.

> These were all supposed to be songs mostly about *our* childhood, you know what I mean? The people in our *generation* can relate to these things, and then, you know, we've, unfortunately, been considered by a lot of people—well, not a *lot* but *enough* where it'd bother you—to be child molesters. We've gotten it about three times now from people in the industry…. None of us have *done* that, none of us *will* do that, our music *does not* represent that or even *mention* that, you know what I mean? The childhood thing, though, is something that we're going to build more up on. We have giant baby blocks that go on stage, you know, I'd like to get [an] inflatable bottle with blood in it. I'm going for a sick-and-twisted childhood: *not* sick-and-twisted in the sense that you're molested but sick-and-twisted like you were Jason Voorhees baby, you know what I mean? *That's* the difference. A lot of people are just…they don't understand. If you don't like it, then get the hell out. (interview)

There are also the, perhaps inevitable, problems that come with calling a band "Circus of Dead Squirrels." As Matt described:

> One of the things that bothers us the most is that a lot of people send us pictures of dead squirrels. Yeah, and that's something that… We're not changing our name because we're not telling you to go out and kill these things. You know, you see enough of them [dead squirrels] around the world everyday that it just happens, it's a funny…it's a humorous name, it's supposed to be funny and morbid at the same time. But we're totally about animal rights, we don't want people sending us this shit any more… We get a lot of those things. Stuff that makes me sick, not just road-kill, like people *playing* with road-kill. (interview)

Nonetheless, they're not totally averse to controversy, they merely want to attract the *right kind* of controversy. Of the latest album, Matt said, "We're getting a little more serious about attacking people for the right reason" (interview). He cited songs against commercial culture, multinational corporations, and the President, going on to add: "We can possibly, hopefully get sued this time" (interview). In addition to the anti-establishment themes and the illustrations re-appropriating corporate-owned characters, "We have a *lot* of samples" (interview). By this, Matt is referring to the band's tactic of mixing audio-collages built from samples of radio, television, films, and video games into their music and in-between tracks of the album. It is a sonic *detournement*, the practice of using familiar sounds and images, particularly those of the everyday world, and performing a critique of the everyday by re-presenting those familiar sounds and images in new and unfamiliar ways. Though Circus of Dead Squirrels are clearly more *camp*, their stance is not far from that of *Adbusters'* founder Kalle Lasn.

In *Culture Jamming*, Lasn tries to confront readers with the emptiness of their consumerist dreamworlds by stringing together brand names which, on their own, beg to be taken as meaningful and desirable but, narrativized, seem especially meaningless and, for that fact, harmfully deceptive:

> A beeping truck, backing up in the alley, jolts you out of a scary dream—a mad midnight chase through a supermarket, ending with a savage beating at the hands of the Keebler elves. You sit up in a cold sweat, heart slamming in your chest. It was only a nightmare. Slowly, you reintegrate, remembering who and where you are. In your bed, in your little apartment, in the very town you grew up in.
>
> It's a "This is Your Life" moment—a time for mulling and stock-taking. You are still here. Just a few miles from the place you had your first kiss, got your first job (drive-through window at Wendy's), bought your first car ('73 Ford Torino), went nuts with the Wild Turkey on prom night and pulled that all-nighter at Kinko's, photocopying transcripts to send the big schools back East.
>
> Thos big dreams of youth didn't quite pan out. You didn't get into Harvard, didn't get courted by the Bulls, didn't land a recording contract with EMI (or anyone else), didn't make a million by age twenty-five. And so you scaled down your hopes of embarrassing riches to reasonable expectations of adequate comfort—the modest condo downtown, the Visa card, the Braun shaver, the one good Armani suit. (51)

CoDS version of culture jamming, on *The Pop Culture Massacre*, includes not only moments of *detournement* through sampling but also through scenes thematically similar, if not altogether more jarring, than Lasn's. In their song "Hell's Kitchen," a nightmarish supermarket scenario is rendered in lush Industrial prurience.

> Bathing in flames, the stink of foul flesh
> I shit my trousers, what did you expect?
> A Hershey's stream of pain, peanuts, and corn galore,
> Mr. Peanut, Orville Redenbacher have declared a war.
> Ernie Keebler sucks the E.L. Fudge from my asshole,
> Dips Dunkaroos into the sludge.
> Pillsbury Doughboy sits between my Cinnabuns,
> He pokes and prods and waits for Nestle Quick to come.
> Snap, Crackle, Pop inside my pants,
> I feel my Grape Nuts start to do a little dance.
> Then I hear the words of my fate,
> Tony the Tiger screaming "They're great!"
> Silly rabbit, Trix are for kids,
> Now I'm being punished for being so selfish.
> If I could start again,
> I would eat my Wheaties like Michael Jordan. (Circus of Dead Squirrels)

Other songs take a similar tack on subjects including fast food, the Bush administration, anti-depressants, and big-box retailers with a lyrical style that comes across as an extreme

version of *Adbusters*. Yet, again, what truly sets Industrial music apart from other subcultural musics is its *sound* and its use of studio technologies.

5.2 AESTHETIC ISSUES IN ELECTRO-INDUSTRIAL MUSIC PRODUCTION

For all their effort to shock people through textual twists and turns towards the taboo, the most aesthetically offensive tactic CoDS deploys seems to be the combination of heavy Metal and Industrial electronics. As Dan put it, their experience has mostly shown that the sound of the music alone challenges people more so than the ideas or imagery, "Some people still have a little more trouble with the music…a lot of them just don't understand heavy music with electronics meshed together" (interview). This, they explained, makes it hard to find live venues to play at, it also made it hard for them to find a recording studio to hire.

Creating music that uses all the regular Rock/Metal instrumentation—guitars, bass, drums—in addition to cheesy electronics and found-sound collages, Circus of Dead Squirrels discovered that it was hard to find a studio engineer to help them assemble music for which there is hardly a template. In one way, this is to say that their critique of popular culture informs their entire aesthetic, which is typical of Industrial music. The Circus' project, on that front, is to open Metal to the kind of sonic experimentation that Industrial encourages and expects. But to challenge the Metal production ethic, which insists on a rather limited range of allowable sounds, requires a studio and engineer that are up to the job. What they needed, they found, was more than an engineer to put everything to disc but an actual *producer* experienced with non-traditional, primarily

electronic instrumentation, which is why Slaughterhouse Recording has been home to their two main releases.

Dan compared the other studio engineers they worked with compared to their experience at Slaughterhouse

> Those guys [at other studios] were just *engineers*. Record a guitar? Okay, they'll put a mic there and they'll record. Mark [Miller], you know, he *says* he's just an engineer but he's a real producer, he really listens, and he has a knack for that kind of music.

After some disappointment with other studios, they discovered some of Miller's recordings and, Dan says, knew that "this guy will understand more than anybody else in the area" (interview). Along with being a professional engineer, Miller is an Industrial artist, known as Out Out, who was mentored by Skip McDonald of the Industrial group Tackhead—which was, in fact, the three members of the original Sugarhill Records house band (i.e., McDonald, Doug Wimbish and Keith Leblanc) re-grouped under the direction of British producer Adrian Sherwood. Miller is perhaps one of the only engineers in New England with such a pedigree in recording Metal/Industrial hybrids. With his experience and lineage, Miller was a critical asset for a group such as the Dead Squirrels. Not only was he able and willing to weigh the relative merits of intentional absurdity and offensiveness—he could understand Industrial posturing and shock tactics—he also had an ear for recording and mixing non-traditional, experimental sounds outside the Rock ensemble tradition.

But to understand Industrial music production in the age of computer-based digital recording, it is crucial to consider first the way this band used their own home

studio as their primary compositional tool. In the digital age, the potential of computers to allow amateurs to usurp the authority of professional recordists seems huge. In the case at hand, one can see the limits as well as the potential of home recording through the illustration of a production model involving close interchange between home and professional studios.

5.2.1 Get with the Program: On Digital Music Production

Circus of Dead Squirrels, essentially a two-man band, has a sound that was developed through constantly recording and reflecting on the results. Digital music technologies allowed them to create music in the absence of a stable lineup, music that became increasingly synthetic as the band became more inclined toward and adept with electronic music production. But part of their story also involves the limitations of working this way. While the rudimentary sounds they had to work with at home led them to their signature cheesy circus sound, there were other areas where cheese simply would not cut it.

Originally, on their first full-length, *Indoor Recess*, they tried to overcome the weakness of their synthesizers' electronic bass and drum sounds by stacking lots of them together, which made sense in theory—if one bass sound is not bassy enough, why not use three or four?—but turned out to be a nightmare in the studio. Dan recalled:

> That's why mixing with Mark at Slaughterhouse was such a pain in the ass, because it was like, okay, these two things are doing the *exact same thing* on those sixteen tracks, plus four tracks of guitars, four tracks of

> vocals, you know, how do you make that *work*? And it's hard when…we didn't even *have* directions on the tracks we're just like, oh, *that* sounds cool and *that* sounds cool. Well, let's just put it in there. (interview)

Arriving at the studio with many sequenced sounds but little in the way of production notes, this very rudimentary form of additive synthesis (i.e., layering simple sounds together to create a single, richer timbre) left open the question of relation and identity (i.e., what all these sounds were supposed to *be* when summed). More to the point, even most professional studio engineers, who mostly earn their living recording live ensembles, have no template for assembling the myriad sounds Industrial acts like CoDS create. Day in and day out, the average studio engineer mixes guitars and basses and drums and singers and pianos and trumpets and other instruments for which the history of record production supplies some clear guidelines. To work with an Industrial group, an engineer needs to have much more direction from the band. But, as Matt admitted, on the first album, the band did not know for sure what they were trying to do. The second effort, however, was totally different.

Having learned from that studio experience, also from enrolling in an audio engineering program at the University of Hartford, Dan had a much more systematic approach to the second album. Knowing better, CoDS second album was brought to Slaughterhouse in a form that solved many problems up front while still remaining open to adjustments later in the production process. Dan compared the way he used to work to the way he worked on the newest album:

> I have 32 tracks to work with here, that's with keyboards, drums, guitar, and samples. So when I go to Mark, he's only got 32 tracks to work with.

> But that's including guitar *and* samples *and drums*. The first time around, all the cymbals were on two tracks, we used a stereo hi-hats, cymbals, rides. Now there's crash and rides in stereo, hi-hat on the left…you know, some of the snare drum sounds, there's *room* sounds too, there's snare-top, snare-bottom, snare-room, so even with *that* he's got a lot to work with. So it's not just, like, you know, here's a kick and snare, some hi-hats, and then the rest keyboards, it's *everything* plus guitar. There's less effects, less keyboard effects, but it's more effective now. A lot of the bassier, low-end effects I put all on one track, so it's like, "Okay, Mark, here's our 'bass track.'" You know, mix *that* as a bass, even though it's not directly just one bassline all the way through, think of it that way, instead of our last record, you know, four or five basses on one song, it's like, how do you do that? And they were all doing the exact same thing too! [laughs] So when we actually sat down to mix it, it was like, "God, what do we *do*?" The day we started mixing, we were just like, [holding head in hands] "Oh, my god, what the hell were we thinking?" And, at that point, we were on a real tight budget, so we really couldn't like sit there and think what would be better to take out, so we just said, "Mark, just do the best you can." (interview)

Still, the new way of working, Dan explained, was not just about saving money, or making Miller's life easier, both of which it did, but "To know exactly what we're trying to get. So, if we're putting an effect in a song, it's like, okay, is it really going to be heard after everything's said and done?" (interview). Perhaps the most significant shift in

the band's production this second time was the move away from electronic drum sounds and toward samples of real drums.

Above, Dan describes how, whereas he condensed the low-frequency elements into a single 'bass' track, he chose to multiply the drum sounds (e.g., three tracks of snare each doing the same rhythm but representing a different microphonic perspective). It is key to note that these drum tracks were taken from original recordings made prior to in-studio mixing, while still in the process of composing. That is, instead of using electronic samples from drum machines, as they had done before, the drums for this album, though still programmed, were sampled from drum tracks that Dan played himself on a real drum kit. First, the band made demonstration recordings of all their new songs at home, then brought those rough tracks to Slaughterhouse, months before 'really' entering the studio, so Miller could record Dan playing drums live to the programmed tracks. Dan then took the resulting recordings back to his home studio, where he chopped-up the multi-track drum files into discreet, digital samples and loops, which he could then command from his computer. This tactic, according to Dan, was

> to have a more human feel, to have different *tones*, because on the first record we only used like just two different [drum] kits off the Motif [synthesizer]. I mean, there's always a distinct House kick [pounds fist onto open palm, illustrating a four-beat quarter-note pattern] which really drives a lot of our songs, it's like no matter how Rock or how Metal it is, there's this driving dance beat behind it.

Human-feel and Industrial aesthetics do not typically go together, though one has to take human-ness here within the context of programmed music.

Sounding 'more human' in this situation does not quite mean they want to sound as if they have a human drummer (which in fact they do live, though he plays an electronic drum kit) and, indeed, most of the drum *beats* themselves were ultimately programmed from a computer. What counted as human here was the variety of drum 'tones' for the album. To be sure, many bands that consider themselves simply Rock or Metal, without a tinge of Industrial, produce their drum tracks similarly, which is why the 'House kick'—a booming electronic bass drum sound associated with Roland 808 drum machine, a staple of electronic dance music—is still essential to CoDS' hybrid Industrial-Metal sound.

Further 'humanization' of their sound may be heard in their move away from Musical Instrument Digital Interface (MIDI)—triggering synthesizers and drum machines from a computer, then recording the results back to a very basic digital audio recording program—to a process centered upon the computer-based ProTools digital audio workstation (DAW), the current recording industry standard software/hardware package. Using a professional-quality DAW enables artists to record, edit, and mix tracks as they would in the studio—the Circus of Dead Squirrels record approximately 32 tracks per song before going to Slaughterhouse to record additional vocal tracks and mix it all together. Improving their ability to make multi-track recordings on their own freed Matt and Dan from the need to command a battery of synths through a programmed MIDI device, which they found had a more robotic rhythmic feel appropriate for Techno, maybe, but no for CoDS idea of circus-like chaos. With their DAW, Matt and Dan began recording more tracks of live electronics, actual human *performances* on electronic instruments, as opposed to computer-programmed *sequences* on those instruments.

Moreover, they were able to edit and arrange multiple performances 'in the box' (i.e., using nothing but software). To be sure, the result of all that editing and (re)arranging of multiple takes on multiple tracks still winds up sounding more robotic than human but, again, this, too, is a practice shared with artists in other, more mainstream genres. Digital recording essentially turns all its users into sample-based electronic artists. The major difference between Circus of Dead Squirrels and an average Rock band, on this point, is mostly just a matter of *what* they choose to record and not *how* sounds are recorded, edited, and arranged.

Nonetheless, although the digital age of recording has brought Rock and Techno practices closer together than the surface of either suggests, the spread of electronic sounds and practices once experimental has caused something of a crisis for some electronicists, such as those involved with Industrial, who remain serious about the tradition of experimentation in electronic music production and want to maintain that cutting edge. Electronic producer Matthew Herbert, described in his bio as a "Brian Eno for the 21st Century," is one such artist whose online posting of a "Personal Contract for the Composition of Music" (PCCOM) has caused a stir among electronicists and fans thereof. The original (2000) PCCOM manifesto is as follows:

> 1. The use of sounds that exist already is not allowed. Subject to article 2. In particular:
>
> • No drum machines.
>
> • All keyboard sounds must be edited in some way: no factory presets or pre-programmed patches are allowed.
>
> 2. Only sounds that are generated at the start of the compositional process

or taken from the artist's own previously unused archive are available for sampling.

3. The sampling of other people's music is strictly forbidden.

4. No replication of traditional acoustic instruments is allowed where the financial and physical possibility of using the real ones exists.

5. The inclusion, development, propagation, existence, replication, acknowledgement, rights, patterns and beauty of what are commonly known as accidents, is encouraged. Furthermore, they have equal rights within the composition as deliberate, conscious, or premeditated compositional actions or decisions.

6. The mixing desk is not to be reset before the start of a new track in order to apply a random eq and fx setting across the new sounds. Once the ordering and recording of the music has begun, the desk may be used as normal.

7. All fx settings must be edited: no factory preset or pre-programmed patches are allowed.

8. Samples themselves are not to be truncated from the rear. Revealing parts of the recording are invariably stored there.

9. A notation of sounds used to be taken and made public.

10. A list of technical equipment used to be made public.

11. optional: Remixes should be completed using only the sounds provided by the original artist including any packaging the media was provided in. (online)

One of the main issues addressed by Herbert's rules is the plug-and-play functionality offered by today's music technology. Between MIDI sequencing and the standardization of sounds and effects offered by drum machines, synthesizers, and sample libraries, electronic music is becoming homogenized as more generic sounds are encoded into mass-produced instruments. For example, synthesizer manufacturers often organize and label preset sounds by genre, so an instrument will have buttons labeled 'Drum and Bass', 'Trance', 'House', and so on, which immediately lead users to the standard sounds associated with those styles. For most users, these features help to make a potentially difficult technology much easier to use. But for the likes of Herbert and CoDS, musicians who believe their art encompasses more than just writing songs but also, if not primarily, *designing sounds*, the industry trend towards plug-and-play Electronica is something to be resisted.

The Circus of Dead Squirrels' production paradigm, though not as thoroughly enumerated as Herbert's PCCOM, suggests they struggled with similar issues. Their decision to supplement the typical House kick with original drum samples of their own certainly speaks to the problem of drum machines, and the shift to a DAW-centered production opens their composition/recording process to performance 'mistakes' that, with MIDI sequencing alone, would not happen. Even the factory-preset organ-stab which inspired their sound may be read as part of the larger goal of sonic innovation if only for the fact that, though not custom by any means, it is a 'bad' sound that would not ordinarily be featured on a 'good' record. As for their other timbres, CoDS looks to the professional studio to add a touch of hardware-processing to the sounds they record at home. This second time, however, they have a clear plan for how to process/mix these

sounds, and have learned to better anticipate the mixing process during composition, which, for them, is one and the same as sound-design. Dan says that, when working on new material, "I think about how Mark would mix this track and where he would pan it, how much reverb he'd use, what kind of reverb he'd use" (interview). Use of Slaughterhouse's studio hardware mitigates against whatever tell-tale stock tendencies might be audible in the electronic sounds produced in their home studio.

Although the Circus of Dead Squirrels are definitely more of a pop Industrial act than an avant-garde one, one should not discount what a technical and aesthetic feat an Industrial-Metal record represents in terms of the history of popular music recording. Roger Johnson argues that, today, the more popular arm of experimental music is at least as innovative as that found in proper 'Modern music' circles.

> There is a younger audience for serious, interesting, innovative music, and it is growing, but it is largely one that has come up through popular music and recording. The more successful composers have been those, such as Philip Glass, Brian Eno, Laurie Anderson, John Zorn, and David Byrne, whose music owes less to modern classical music than to popular music technology and has been able to make a bridge to the audience brought up on that music. The vanguard edge is also well represented on many fringes from the early Punk and rap of the past to more recent "hard core," "thrash," and "Industrial" music. Traditionalists are horrified, of course, but I believe these musicians have shown us some ways in which the serious artist can indeed communicate with a larger audience using the technology and Industrial structure of our time. (16)

Indeed, for as absurd as the Circus of Dead Squirrels may seem, it is clear that their production process is seriously engaged with core issues facing electronic music producers in the digital age.

5.2.2 Mixing Fictions

Between recording their first and second albums, Circus of Dead Squirrels became more comfortable handling a greater share of the recording on their own. One major thing they did not do on their own was vocal recording. Vocals, a focal point in any mix, convey much of a song's impact, so it is wise to defer to a professional on recording vocals if at all one has doubts. Moreover, true to Industrial tradition, Matt prefers his vocals distorted—*very* distorted. Here, again, the band relies on the more expansive hardware array of the professional studio to get a custom, signature sound or, rather, lots of sounds. The vocals on CoDS records are a complex collage of the many characters Matt assumes as the schizophrenic Pancho Ripchord. To record these vocals, Miller uses a variety of signal-processing chains; 'distortion' is an oversimplification. In addition to the kinds of fuzzed-out distortions associated with electric guitars, the Circus' *dramatis personae* are built through complex combinations of effects including pitch-shifting, chorus, delay, extreme compression and equalization, vocoding, and post-production digital editing procedures. For the most part, the distortions are applied live, while the vocals are being recorded. This is to say Matt *sings through* the studio apparatus, responding vocally in real-time to the sounds of his processed voice(s), *playing* these 'voice boxes' to produce new guises.

There are a number of promising avenues to be taken from Industrial vocal distortion. Particularly, in this case, the way the distorted voice-characters are conceived along the lines of sociosentimentality. The Circus of Dead Squirrels use the studio's equipment and its engineer's talent to construct 'monster' voices, 'insect' voices, 'robot' voices, and 'cartoon' voices, plus the voices of more human characters like radio announcers, police dispatchers, and film narrators, all of this in addition to more generic Industrial vocal distortions and standard Metal vocals. Keep in mind, also, that these timbres comprise the primary vocal lines, which are supplemented by samples of voices taken from found media texts. Listening to the finished product, it can be hard to distinguish found-sound from original sources. Potentially a chaotic cacophony, the band and their engineer take care to construct a sound-set that will resonate with listeners. The aim, Dan explains, is to "*make* it wacky, *make* it out there, but still make *sense*" (interview). Without a doubt, a study of the sonic semiosis coded into any one of their elaborate Industrial-Circus-Metal audio collages could be fascinating. All the same, here, I would like to draw attention to another avenue, because it leads to understanding something greater than a single text.

Considering the obscuring of identity through vocal distortion alongside the assumed names, and the readiness to use non-instruments (e.g., a computer to replace human collaborators) and 'anti-music' (e.g., movie samples), it should be plain to see that this style of music production is beholden first and foremost to the record as a *surface*, or as a space of its own, and not as a representation of another space, such as that of staged music performance. In the broader context of 20th and 21st century popular music

production, this approach to recording as a medium for producing audio *fictions* is no small point.

Peter Doyle contends that scholars of popular culture are rabidly interested in the way *visible* subcultures claim *public* social space, but less so when it comes to other kinds of subcultures and spaces. The case at hand, for example, draws attention to *domestic* space, the home studio, which may be read as a computer-age version of the (typically masculine) project of constructing private cloisters of high-technology within the home, a contemporary version of the ham radio days. One might also consider *media* space, as in the implications of digital compared to analog formats or the aesthetics of sampling. Yet Doyle argues for more attention to be given to space of another sort, the *acoustic* space, or 'territory', found on record. Recording, he argues, is an act of 'territorializing' as much or more so than is the act of playing-back recordings a form of claiming space.[29] This is a crucial matter here not just because territorialization in the production process is infrequently addressed but also because the (de)construction of (post)modern acoustic spaces is at the heart of Industrial music-making.

Roger Johnson supports the idea that all contemporary recorded music is essentially electronic music, though he notes that recordings are often made in such a way as to deny that fact.

> Classical music recording is an interesting case since it is the most traditional and the one that most strictly denies its electronic nature. The

[29] Doyle draws largely from Deleuze and Guattari to make the case that music-making is a kind of territorializing. "For Deleuze and Guattari, the creation of territory is the very function of the refrain, and the disconnection of refrains from their territory—their deterritorialization—is what they call music" (17). Taking this into account, Doyle's label of stereo as 'territorializing' and 'despotic' should be taken as a critique aimed at the essence of the practice—it is potentially un-musical because of its hard-wiring of pre-defined space. Yet Doyle remains purposefully obtuse, insisting that 'territory' be understood as broadly as possible, in its literal and metaphoric senses, in order to appreciate the spatializing effects of recordings.

> main values in classical recording are 'naturalism' or 'realism.' The listener is supposed to be positioned in an idealized concert hall, in the best seat in the house, in fact. The most conservative classical recording technique starts with the fact that we have two ears and positions two microphones designed to capture the natural stereo image of the music in the hall. (14)

But Classical music is not alone in this mode of denial. Regarding their modes of spatial representation, Rock records are essentially the same as Classical, Jazz, Folk, and other styles with a conservative, realist aesthetic. The implied observer/listener of the representation is one standing still at a concert, these records are like films portraying little more than one would experience at a staged theater production. On this front, there can be no doubt that, compared to other recording arts, the development of an art of record production has been much slower to emerge..

Johnson explains electronic music mixing as the audio equivalent of televisual editing:

> The commercial development of magnetic tape recording after World War II made it possible to detach the recording from the live performance first by splicing together various 'takes,' as in film, and later through the development of multitracking to record, edit, and assemble each layer—each sound even—individually, more the way television is edited. Digital recording and editing have extended this flexibility and malleability enormously. (3-14)

Similarly, Michael Chanan points out that many creative audio techniques were developed in film, such as sampling (from cartoons) and tape editing (from film) (142). Electronic music, Chanan allows, makes good on the creative potential of recording: "these were the first recordings that seemed to be composed for the medium, rather than the medium transparently reproducing them" (142). But, by comparison, other types of music, those based on live performance, are far more conservative in their use of recording media, they are 'repressed' according to Doyle.

Doyle challenges the notion that the invention of stereophony helped make music recording more creative. Instead, he finds stereo had a repressive effect, referring to its 'rigidly territorializing fixity', or the way it seemed to force recordists into a concert-hall paradigm. This is the opposite of mono spatiality, which, Doyle argues, is 'liberatory' because it is 'unmappable' onto real acoustic space. If unmappable sounds are liberatory, electronic music subcultures are some of the most liberatory scenes to date. Doyle's argument deflates the popular belief that stereo sound helped recording artists be more creative with this additional dimension (or at least an additional speaker) to work with. Moving to the stereo standard, Doyle shows, meant that concert hall realism became pres-scripted into recording and playback apparatuses.

Chanan argues that film-sound and popular music recording have developed more closely together than is typically believed, though his point appears to be as much about editing techniques as about the evocation of audible space. Nonetheless, like Doyle, he also finds that film editing techniques evolved much more rapidly than sound recording. Chronicling the early history of sound recording, Chanan stops to ask why, of all the things sound recording might represent, music became the most common.

Reminding readers of the historicity of the medium, Chanan shows that, for as much as music has changed with the intervention of recording, it should also be considered that the apparatus of recording has similarly been affected by its affiliation with music. One can only speculate on alternate histories, but the impact of this historical conjoining of sound recording and popular music is not inestimable.

Recording may be seen to have compromised the art of live performance, but *live performance has reciprocally compromised the art of recording*. Next to its visual counterparts, sound recording is relatively uninventive, yoked by a realist ideology thanks to its affiliation with staged performance. Chanan points to recording's capacity to copy, to mimic, to reproduce any sound as a feature unique to it alone, and he takes this as the basis for his argument that "[a]udio art can only arise when this is acknowledged and then worked upon, to produce a sonic equivalent to the visual poetry of photography and film; a process that includes the creative distortion of the sound image" (139). Industrial musicians are definitely among a rare class of recordists enthusiastic about finding and exploiting 'creative distortions' in the sound image *as an image* and not a reflection of a prior reality.

Albin Zak's *Poetics of Rock* is one of the most enlightening academic texts on recording, and though it is, obviously, geared towards Rock recording, Zak's attention to technology opens onto a range of criticisms that may be levied against the Rock tradition on behalf of Industrial music. For example, Zak observes that nearly all recordists will claim that there are no rules to recording but, in practice, artists can be found to follow numerous self-imposed rules. Rock records, for the most part, must be indexed with the 'natural' world of concert performance. The sound-box of the stereo mix is thought of,

Zak explains, as "a panoramic soundstage across which elements can be positioned and moved about" (145). Elements in a Rock mix, however, do not typically move once they are placed. Although stereophony's advantage was supposed to be its capacity to produce the impression of movement and space, the invention of stereo, as Peter Doyle argues, 'territorialized' records, making them, in effect, imaginary spaces colonized by the comparatively un-interesting, un-moving acoustic space of staged concert performance. Mixes that stray from this convention, however, are "unfamiliar, defying isomorphic analogy with live performance and demanding from the listener an interpretative engagement of some sort" (Zak 146). Industrial music, of course, is all about creating unfamiliar texts demanding interpretive engagements.

As Zak suggests, even a mix of familiar Rock instruments, if it strays from realism defined as isomorphism with staged performance, can be a challenging experience for listeners if the sounds move or are otherwise arranged un-realistically, such is the stuff of 'psychedelic' Rock. Regardless, recording with traditional instruments goes a long way towards helping listeners map the sounds they are hearing to identifiable sources which, Fales finds, is at the core of aural interpretation: "Human interpretation of complex sound stimuli has been shown to be precisely geared to source identification" (Fales 163). This common phenomenon, she argues, is inherently frustrated by Electronica, sometimes with pronounced psychedelic effects:

> If synthesized sounds are sufficiently ambiguous, they can be grouped in more than one way, resulting in auditory illusions offering two percepts that can be switched back and forth like a reversible figure-ground image, neither percept more correct that the other. (167).

Electronic music, as Fales explains, is better conceived of in terms of crafting 'timbral units' rather than in terms of representing sources. This is precisely the type of consciousness Circus of Dead Squirrels developed. From the nightmare of their first efforts based on simply finding as many 'cool' sounds as possible and hoping it would all somehow work later in the mix, they learned to more effectively combine multiple bass-lines into a single bass-unit. The purpose of an electronic timbral unit is not to represent any individual instrument or player but simply to fulfill is compositional role within the text alongside other units in the mix.

Timbral units and instruments/performers are, in Rock, one and the same. Zack explains:

> In a model for a conventional mix, certain instruments, inhabiting specific frequency ranges, combine to form a balanced aural image spanning the audible frequency spectrum. In the basic voice/guitar/bass/drums ensemble, for example, the low frequency range is anchored by the bass guitar and the kick drum; the low-to-middle midrange is shared by snare drum, tom-toms, and the fundamental pitches of the guitar and voice; the upper midrange and high end are represented by the high hat and cymbals, guitar and voice overtones, and ambient air. (151)

In Fale's taxonomy of sound, electronic music is without 'productive' associations (i.e., one does not tend to think of people as they are in the moment of making these sounds). Similarly, Allan Moore argues that when people hear recordings, they tend to imagine the performative gestures behind them and, further, that this is part of musical enjoyment; he lists 'air guitar' as a common example. Therefore, the trouble with electronic music is

that the only gestures associated with it seem to be button-pushing and knob-turning. As yet, I am unaware of anyone playing 'air mouse' to an Industrial track.

Moore concludes that the sounds of electronic music are potentially alienating (154-156). Fales agrees but adds that, when done well, such alienation can be a quite positive form of aural shock:

> Shaped by a skillful musician, the borders of a timbral unit become fluid, changing from one context to another—a phenomenon all the more alarming when the sounds come from the real acoustic world. Techniques such as these disrupt perceptual complacency, fracturing the carefully constructed blind between the perceptual and the acoustic worlds. Listeners begin forceably to acknowledge, if not to approach, the acoustic world, a world that they would otherwise never know to exist. (169)

This is not, Fales assures, to assume Electronica may produce grand epiphanies, but it does seem congruent with a kind of sonic culture jamming, a Situationist-like 'spectacle' that begs one to (re)consider the state of aural things.

For Rock musicians in the studio, Zak finds:

> Perhaps the most difficult challenge facing musicians when they record is somehow to leave in their performance an invitation to the listener to return again and again to the exact same set of expressive gestures—a project that seems to run counter to the very nature of musical performance. (50)

Zak raises a good question, why would live ensemble performance be enough to satisfy a *record* listener? By this same token, recording is the perfect medium for difficult new

sounds because the form allows listeners to pour over the text, mastering the shifting figure and ground relations as they learn to interpret the various timbral units. The dense and chaotic mixes of Circus of Dead Squirrels' songs are nearly impossible to take in all at once. Aside from whatever their work may reveal through *detournement* or outright verbal critiques, one must also consider the potentially edifying value this music has as an illustration of a record that is truly designed to be heard as one.

It would be impossible for me to detail all of the mix elements appearing on *The Pop Culture Massacre*. Unlike Rock records, it is not the same sounds on every song; from one track to another guitar tones change, vocal distortion changes, synthesizer patches switch, natural and electronic drums mesh, and sample sets shift from Sesame Street cut-ups to Pee-Wee Herman hits to President Bush breaks to public service announcement interludes to celebrity impersonators, and on it goes. The end result sounds like a Metal band struggling against (or is it with?) a furious mass-media soundscape. I cannot hope to cover the full field of references on this album in any comprehensive form but only. Still, it is crucial to touch on some of the matter here in order to recognize that referentiality for a band like Circus of Dead Squirrels plays upon cultural resonances with media other than music recordings.

5.2.3 Mapping (Post)Industrial Territories

Luigi Russolo's "Art of Noises" (1913) is one of the best known statements on music, timbre, and the industrial age. Russolo argued that concert music had reached the affective limit of its anachronistic instruments, that the sounds of concert music were no

longer appropriate for a modern listening audience. The music of the future, he contended, must include the sounds of the everyday world.[30] Yet the musical value of everyday noises is still an idea that is rather ahead of its time or, at the very least, now firmly affiliated with 'future music.'

Instead of mechanical hardware like Russolo's *intonarumori*, today's futuristic sounds are made with electrical hardware and digital software. What makes Industrial congruent with Russolo's project, however, is the way it continues to push the range of allowable sounds according to the changing state of what R. Murray Schaeffer termed 'the soundscape' in addition to the emergent, immanent criteria of the Industrial genre. However, Industrial music is unlike Russolo's Art of Noises insofar as its primary theater of operations is a post-Industrial world of digital media, information economies, and wars that did not take place. There is no question that the environment is unlike the early industrial Europe of Russolo, filled with steam whistles and iron machinery, populated with people closely experiencing mechanized warfare on a massive scale. Today, as Baudrillard's body of work illustrates time and again, the hyper-mediated digital environment of contemporary America is, in contrast to the industrial age, a barrage of entertainment media immersing a population that is both more connected and more remote from the rest of the world. Unlike the early Industrial soundscape inspiring Russolo's Futurist movement. The "diabolic symphony of the mechanical age" (Bijsterveld) has modulated in the age of digital media; instead of the constant clamor of machinery, American life is now a maelstrom of entertainment media, and contemporary

[30] Interestingly, according to Cornelia Fales, the very term "timbre" was developed roughly alongside the western industrial revolutions of the 18th and 19th centuries, and that the subsequent electrical and digital revolutions have further affected ideas about timbre and its musical function.

Industrial music, such as that described above, reflects this, though that reflection is anything but passive.

Zak argues that "however unconventional the technique and unusual the resulting sound, the shared history of recorded sound and musical style serves as the anchoring backdrop against which intuitive decisions are measured" (127). Likewise Doyle suggests that record spaces must be understood in terms of media history in general, noting how films, for example, were a considerable source of electro-acoustic innovation in the mono era. To be sure, for contemporary Industrial, it is absolutely necessary to consider how the contemporary post-industrial soundscape affect the artists' and audience's frame of reference.

Karen Collins observes that cyberpunk literature has been a supplement to Industrial music, which is often described in cyberpunk novels just as cyberpunk novels are often referenced in Industrial music. There is also a clear connection between the 'futuristic' aesthetic of electro-Industrial music and science-fiction film. Even audiences unfamiliar with Industrial music have likely heard it featured in science fiction movies; *The Matrix* series is a prominent example. Further, there can be no doubt that science-fiction movies have affected Industrial music aesthetics. Consider Stanley Kubrick's *2001,* portraying what may be the most famous music-making computer in film history, and *A Clockwork Orange*, featuring a soundtrack of analog synthesizer renditions of classical music performed by Wendy Carlos, the mastermind behind *Switched on Bach* and *The Well Tempered Synthesizer*. Additionally, dialog samples from science-fiction moves are a (somewhat clichéd) staple of Industrial music, and it would be a safe bet to say that the most sampled movie in all of Industrial is Kubrick's *Blade Runner*, adapted

from a Philip K. Dick novel, which is also musically notable for the soundtrack written by the electronic artist Vangelis. All things considered, Kubrick may have done as much to establish an Industrial canon as did Throbbing Gristle.

Moore argues that using familiar electronic timbres mediates against the potentially alienating aspects of new electronic sounds, and identifies science-fiction films as an example of how audiences have come to build affective associations with electronic sounds (157). Without a doubt, science-fiction is both a source and a showcase for Industrial as well as other experimental, futuristic sounds. As for the Circus of Dead Squirrels, in addition to the omnipresent circus-organ timbre, they also make frequent use of a Theremin timbre, an unmistakable electronic sound-icon from classic science-fiction films (the eerie, violin-like oo-wee-oo sound).

Also, along with television and film sounds, video game music must be included within the field of texts relevant to Industrial music, and CoDS in particular. Circus of Dead Squirrels' retro-gaming-themed single "8 Bit Piece of Shit" is a favorite among their fans, and the second album continues the trend with another video-game song, "Prize Fighter." Further, just as video game sounds and themes enter into Industrial, Industrial music also winds up in video games, Mark Miller, as Out Out, has done video game soundtracks for Blizzard and Hip Interactive, Chris Vrenna of Tweaker and Nine Inch Nails composes game soundtracks, and Industrial Metallers Fear Factory are featured on a number of game soundtracks. Reciprocally, Industrial music appears to be a *sine-qua-non* of video game movies, including the *Mortal Kombat* series (1995, 1997), *Doom* (2005), *Resident Evil* (2002), and *Tomb Raider* (2001). Scholarship on video

games is still in its nascent stages but there is good reason to give it more attention as inspiration and outlet for electronic musicians.

5.3 CONCLUSION: DIGITAL RESISTANCES

The trouble with digital music production, according to Aden Evens, is that electronic instruments are too easy too use: "Taking a cue from the musical instrument, it is clear that what the computer needs is a resistance, a problematic resistance that, when pressed by a creative desire, turns that desire into expression, generating the new" (167). Recalling Moore's observation of the lack of gesturality in Electronica, it is clear that there is no *physical* resistance to the user, whom is relatively motionless during the moment of sound-making—no more resistance than that of various plastic buttons, knobs, and sliders—but there is considerable resistance of other kinds nonetheless.

Yes, electronic techniques require next to nothing in the way of physical conditioning but they nonetheless encounter obstacles to aesthetic desire that are still *material*, like having a 'cheesy' synthesizer, as well as *symbolic*, as in the problem of producing sounds that are at once generic enough to make the music recognizable as a certain type of music, Industrial Metal in this case, yet innovative enough to be a signature sound, like Industrial *Circus* Metal. Perhaps more to the point of technique, these resistances also present artists with opportunities for creativity as well, like in figuring out what good can be made of a synthesizers' 'bad' preset sounds given the larger goal of sounding 'good' by the standards of Industrial music, which means shocking listeners with the incorporation of new, futuristic sounds. Furthermore, all of

this activity is conducted not in a hermetically sealed domain of subcultural record production, it happens within the context of other media which also affect the way Industrial sounds are interpreted and (re)created as such.

But suppose that electronic music is, as Evens has it, fundamentally unfettered:

> [e]lectronic music evolves or progresses mostly by adding possibilities but rarely by eliminating them. Each successive synthesizer opens new possibilities for the generation of sound without closing off the old ones; the latest synth can do everything its parent did and more. (171)

Are not the myriad possibilities of synthesizers and digital recording software only an *inverse resistance* in which the musician is confronted by the mind-boggling expanse of possibilities rather than hard and fast limits? Herbert's PCCOM is just one pointed example of an informed practice of imposing limits on oneself which, in electronic music production, should be regarded as indicative of *technique*. Similar features can be seen in CoDS work as well. Indeed, the shift from a MIDI to a DAW centered system shows how attitudes toward digital technologies change vis-à-vis the growing archive of recorded sound. Looking at specific cases such as the one presented in this chapter, it should be clear that Industrial artists are absolutely concerned with avoiding certain production practices while pursuing others, and these decisions are further influenced by genre norms, extra-musical inspirations, and pragmatic factors, such as available equipment and technical know-how.

6.0 BLACKER THAN DEATH: ON MAKING METAL SATANIC

Modern Satanism of the sort associated with heavy Metal is interesting because it takes up the missing end of one of history's most long-standing and mostly one-sided dialogs, namely that between dominant, Christian culture and those it subjugates. Prior to modern Satanism, 'Satanic' rhetoric was the product of non-Satanists, the leftover of discursive 'othering'. Yet, for all that has been dubbed 'Satanic', history holds precious few examples of people *aspiring* to this label. That is, excepting the history of heavy Metal, which has so honed Satanic rhetoric as to spawn a specifically Satanic sub-genre called 'Black' Metal.

Heavy Metal has definitely, more than any other strain of popular culture, been labeled 'Satanic' at the same time as it has willfully taken to aestheticizing the Devil and His dark deeds. If Satanism is mostly the stuff of fantasy, with no ground in what might count as real Satanic practice, then whatever weight it has must come from this symbolic inertia. Below, I present a historical look at the discursive preconditions for the establishment of a Satanic genre of music, explain why heavy Metal music has become imbricated in the symbolic order of Satanic culture, and explain how the Satanic has functioned within Metal subcultures of production to result in the foundation of the Black genre.

6.1 SATANIC MUSIC FOR SATANIC PEOPLE

'Satanic' traditionally marks a lack; it is the negative point upon which the dominant order can be turned inside-out, where good becomes evil and evil becomes good, for example. Satanic art and ideology make a tight homology following a common logic of value-inversion and symbolic re-articulation. Satanic art does not necessarily aim to establish a philosophy but to give voice to the Other of a dominant culture.[31] Towards that end, Satanism is not an ideology so much as it is the practice of re-arranging the symbolic order, volunteering an adversarial worldview which, previously, was merely a quality imputed upon cultural practices disagreeable to Christian culture but by no means in league with the Devil.[32] Satanism is less the product of (sac)religious cult activity—which is rare, especially in comparison to the volume of Satanic art being made—and more the practice of inhabiting and deploying long-established icons of frightful alterity.

Therefore Deena Weinstein is right on track, observing

> heavy metal did not invent the discourse of chaos. Indeed, it has borrowed liberally from those cultural forms that already incorporated it. Heavy metal's major source for its imagery and rhetoric of chaos is religion, particularly the Judeo-Christian tradition. Although other religions speak

[31] Gavin Baddeley asserts the affinity between Satanism and art is most apparent in music. I agree, though it is also possible to recognize a strong tradition of Satanic literature, e.g., Dante, Milton, and Baudelaire, the latter of whom Medway calls "the original Satanist." Film-maker Kenneth Anger also deserves inclusion as a Satanic artist. Not only did Anger bring Satanic overtones to the Rolling Stones, his film 'cycles' were loaded with Satanic imagery which he claimed would invoke black magic spells.

[32] This strategy is also etymologically related to the Devil as *diabolos*, an adversary or one who throws-against.

> to chaos, Judaeo-Christian culture nourished the creators of heavy metal and their core audience. (39)

Weinstein finds the connection between the Devil and extreme Metal a natural fit in western culture. It is no coincidence that countries with strong Satanic Metal traditions, like England, America, and Norway, are also predominantly Christian with considerable Evangelical traditions. Adversarial icons are readily mined from centuries of Christian literature, mythology, philosophy, occultist movements, and, of course, popular culture. Continuing with unreserved praise, Weinstein names iconoclasm as heavy Metal's greatest feat, "In its final expression of power, heavy Metal inverts and plays with the rhetoric of pastoral power, depriving it of unquestioned authority. It uses the rhetoric of the transgression of the sacred with abandon, redefining what is sacred and what is profane" (43). If this is the scale, then Black Metal's Satanic fundamentalism is most certainly warranted and, for profaning even sacred traditions of heaviness, the music itself is as good as bad Metal can be.

Nonetheless, looking at the bizarre pastiche of symbols in the Satanic Metal imaginary, it is plain to see that it is in no way a straightforward adoption of religious rhetoric. If one were concerned with the authenticity of Satanism as an *–ism*, it would be difficult to contend with the troubling and inconsistent pastiches of these influences which mark Satanic culture as such. It is not uncommon to find Nietzschean ideas expressed through Tolkien-esque stories sung by musicians wearing gothic horror-show vampire makeup, dressed like Viking warriors, playing electric guitars. Is such a thing *really* Satanic in the way some Christians fear? Is it the result of Satanic religious practices? Does merely playing a recording of that music invoke black magic spells? Is

heavy Metal the product of a secret, global, conspiracy to do evil? No. But does this otherwise incoherent collection of symbols communicate 'Satanic'? Yes, thanks to many people, in many places and across a great length of time, representing the widest conceivable range of ideologies, taking part in the social construction of Satanism.

6.1.1 *Civitas Diaboli*: Fantasies of Satanic People

Medway notes the first mention of Satanism is found in Catholic writing of 1565 as a pejorative for Protestants. For most of its history, documented by Medway and others, it has been a label demarcating lines of power, discursive and otherwise. This suggests that investigating the success of Satanic Metal is also, in part, to follow the academic tradition of finding how a term of denigration comes to operate as a term of empowerment. However, unlike other words with similar histories (e.g., 'nigger' or 'queer') which may now, conceivably, be celebrated, to some extent, by the communities once so labeled, 'Satanic' may test the limits of liberal humanist sensibilities due to the more questionable nature of who and what it empowers when re-appropriated.

The marriage of Satanism and heavy Metal began in England, where Metal itself is believed to have started.[33] Long before heavy Metal, England had a strong tradition of occultism, the boldest figurehead of which is likely Aleister Crowley. James R. Lewis includes Crowley in his encyclopedia, *Satanism Today,* but is careful to point out that Crowley was molded in the tradition of other turn-of-the-century occultist groups like the Rosicrucians and the Hermetic Order of the Golden Dawn. This is to say that Crowley

[33] Fans and historians differ on who should be considered the first real heavy metal band but the main contenders are both English bands, Led Zeppelin and Black Sabbath. On the subject of Satanism in heavy metal, both deserve mention.

did not think of himself as a Satanist, more as a practitioner of mystic arts. Nonetheless, as Lewis notes, Crowley referred to himself as the Beast of Revelation and his writing would be the foundation for the Devil's most high-profile proselytizer, Anton LaVey, author of *The Satanic Bible* and founder of the First Church of Satan, to whom I will soon turn. For the purpose of linking Crowley to Satanic heavy Metal, however, it is important to fill-in some of the gap between Crowley and LaVey.

Folklorist Bill Ellis links Crowley and his era's occultist movements to popular novels and cinema. Ellis explains Crowley's enduring infamy as the product of fiction writer Dennis Wheatley's sensational 'black magic' stories, which debuted in 1934 and featured Devil-worshipping characters based on Crowley's fabled persona. Not only is Wheatley primarily responsible for linking Crowley to Satanism, it is also Wheatley who contributed to a significant transformation in the public image of Satanism. Post-Wheatley, the image of Devil-worship was no longer governed by the fear of dark, malevolent deities, scheming old crones, or other outside threats. Embellishing upon turn-of-the-century occultism, Wheatley offered a new and compelling notion of Satanists as a secret society of people living among us all, coming from all walks of life, and wielding great power behind the scenes of the mundane. Heavy Metal was born at the crest of this new discourse on Satanism as an immanent social, not just spiritual, threat. Given that Wheatley was writing in the mid-twentieth century, when similar enemy-within fears regarding Communists and other potentially subversive domestic threats had great purchase, it is no wonder that his re-imagination of Satanists would go this route and that the public would be captivated by it. Wheatley's novels continued to be popular through the 1950s, then, in the 1960s, Satan-themed popular culture got

another boost through the motion picture industry, particularly Hammer horror movies, which offered a cinematic counterpart to Wheatley's pulp novels, furthering this new, modern image of Satanists.

The youth forming England's first heavy bands in the 1960s and 1970s were steeped in this pop-Satanic tradition. The Devil had been represented with considerable commercial success in oral legend, print, and moving-image. What remained, then, was to conjure a sound to add to the tradition. Early occult-ish bands like Led Zeppelin and Black Sabbath should be seen as the musical wing of a trend spanning British popular culture of the 20th century, beginning with novels, continuing through movies, and expanding into music, informing the symbolic universe of Metal from its inception.[34] The horror-themed work of bands dating to Metal's birth presents virtually countless songs *about* Satan and things that may be called 'Satanic' but this does not mean that the result is, by the measure of heavy Metal aesthetics, a Satanic, or 'Black', sound.

Yet much of the story of Satanism concerning heavy Metal is a story of people and their ideas, not their music. Without a doubt, the articulation of heavy music and Satanism was not solely the work of musicians, and those extra-musical contributors come mostly from 1960s America, the watershed moment for both Satanism and British Rock in the States. This time was also the debut of Wheatley's novels in America, which—along with similar occult-themed British pulp fiction also released in the States at the time—inspired the work of Anton LaVey (Medway 164). In 1966, Anton Szandor LaVey founded the First Church of Satan in San Francisco, declaring it year One, *Anno Satanas*. Anyone in search of genuinely Satanic people is bound to come upon LaVey

[34] Gary Sharpe-Young's history of Black metal, displaying its fundamentalist vision, claims Black metal began the day Tony Iommi of Black Sabbath read a Wheatley novel or watched a Hammer horror.

and his Church, conceived when LaVey himself went looking for Satanists and found none (Medway 21). Though LaVey has been one of the most high profile, avowed Satanists, he is not exactly what he seems at first glance. LaVey's church and his *Satanic Bible* were more or less a consciousness-raising exercise conceived, literally, to play Devil's advocate in a time when new Christian religious movements were recruiting from San Francisco's hippy population.[35] Nonetheless, though he may not entirely conform to popular, paranoid fantasies about Satanists, in LaVey one finds a modern, self-confessing Satanist. Ironically, LaVey is known to hate heavy Metal. A composer of classical music, LaVey's taste is more Mahler than Mayhem. In an interview with Gavin Baddeley, LaVey seems to channel the spirit of Adorno: "I can tell what I often call 'whipping music' when I hear it. It's the same kind of stuff used to urge galley slaves on. The element of habit in listening to this kind of thing is important. A lot of the people who listen to heavy metal have just become used to it." LaVey goes on to add, "I believe our culture reached its creative apex in 1939" (Baddeley132). It was surely dismaying to him that heavy Metal musicians had greater say in the definition of Satanic music than did the author of the *Satanic Bible*.

Nonetheless, though he was called 'The Black Pope', LaVey was not the leader of all Satanists but merely one kind of Satanist. Gareth J. Medway's history of Satanism describes four different types of Satanists. First are those who have delusions of Satan as a 'personal friend'; these people are mostly drug addicts and/or lunatics. Second are

[35] Bill Ellis adds further clarification on the First Church of Satan's anti-Christian project, describing the often overlooked contributions of Isaac Bonewits, a Berkeley student who LaVey found with a home-made 'Sin Mobile'—a public address system—calling students to sin in order to protest the Christian evangelists who came to the area trying to recruit students to new Christian movements. Ellis explains Bonewits' rhetoric greatly influenced LaVey's public persona and media relations strategy. Early on, however, Bonewits disassociated himself from the First Church of Satan because of its increasingly conservative, nearly fascistic, politics.

those who, like LaVey, follow a Satanic religion; most of these Satanists, Medway explains, are interested more in theatricality than spirituality. Third are the teenage 'dabblers', often Metal fans, drawn to the rebellious shock value. The fourth type of Satanist is by far the largest and most established, namely those who do not think of themselves as Satanists at all but are marginalized from the Christian cultural center through the label (Medway 22-23). This goes to show that 'Satanic' is a powerful signifier the primary function of which has been to marginalize others.

If one looks for Satanists, particularly those of the second and third category, there are very few until the 20th century. And, as Medway's history explains, if one looks to find people to put into a possible fifth category of Satanists, those striving to embody the spirit of absolute Evil on Earth, the count appears to be zero. Based on his study, "It is evident that no sane person, and few insane ones, will seriously regard him- or herself as a servant of a Christian-style principle of evil" (49). Instead, he argues "[t]he most common cause of involvement in Devil worship is a reaction to a repressive or hypocritical background—not, as is popularly supposed, simply a dedication to wickedness" (49). Acknowledging the lack of Satanists in the history of Satanism and Satanic popular culture, it seems safe to say that the heart of the matter lies in public discourse.

In modern times, witch-hunts are replaced, in the words of sociologist Jeffrey Victor, by 'Satanic panics'. The triumph of the term 'Satan' over 'witch', however, is not simply a matter of modernizing archaic jargon, it corresponds with the evolving ideologies and rhetoric of new Christian movements in the 19th and 20th centuries. Ellis reports:

> Among Charismatics, we have found the pervasive belief that Satan is actively recruiting and maintaining a *civitas diaboli* made up of demon-possessed people, saints and sinners alike, who resist revivals and the gifts of the spirit. And subversion myths identified devil-worshipping scapegoats for diffuse social threats ranging from plagues to economic depressions. The Satanism Scare was born from the fusion of these elements in to a vision of a flesh-and-blood subversive institution, targeting adolescents, directed by the Devil, and carrying out an Illuminati-style agenda of world domination. (143)

As for public concern with Satanic Metal, the stage for panic was set in the 1970s, which is not only the decade of Metal's birth but also that in which three people, in England and the United States, published autobiographical accounts of their lives as Satanists. According to Ellis:

> All of them described elaborate cults, made up of intelligent, politically powerful people who communicated their subversive agenda through a secret worldwide network. On the ground level, such cults were said to entice curious youngsters, then involve them in occult ceremonies invoking demonic powers. On the global level, these groups allegedly planned to infiltrate and take over western society. (144)

These testimonies bear remarkable resemblance to stories from popular books and movies. It is not hard to imagine why this secret, Satanic society is more seductive than the image of a wart-faced medieval witch living in a cave. Who would not want to be an intelligent and powerful world-ruler-to-be working incognito among the hoi polloi? It is

not surprising people would want to identify with that image.[36] Yet the 'elite' status of these fantasy Satanists also makes it hard to judge testimonial evidence from confessors. However, as Ellis notes, the veracity of testimonies from self-identifying Satanists and ex-Satanists was never so much a concern. Though Satanist testimony seems to invariably feature claims that can not be supported by historical evidence, evidence does not matter much for people just looking to explain their spiritual conversion to Christianity.

Michael Warner's *Publics and Counterpublics* also looks at the rhetorical practices of new, modern Christian movements, arguing that part of what makes these traditions 'new' is their mode of address, which includes publicly confessing sins as part of the process of spiritual rebirth and hearing the voice of God directly rather than through a preacher: people can both hear and be heard by God. Ellis finds that the inverse also became a possibility in this tradition: people could both hear and be heard by Satan. In his close accounting of new Christian testimony, Ellis shows that confessions of 'Satanic' behavior were merely rhetorical tropes commonly found in the confessions of those being born-again, renouncing the Devil and turning wholeheartedly towards Christ. By the 1960s, however, new Christian confessors in both England and America took to describing their lives prior to Christian conversion as more than just metaphorically Satanic, and through the early and mid 20th century the number of self-confessing Satanists increased, and their confessions became more incredible and, not incidentally, very much like the plots from popular film and literature.

[36] Part of Ellis' work describes an exchange of letters, over the span of a few years, between an American and a Canadian teenager. One of the recurring themes of their correspondence was the hunt for Satanic cults, as the Canadian especially hoped to join their powerful secret society. At one point in the exchange, he does suggest he's found a cult to join but is somewhat disappointed by their lack of real power.

In these confessions, a pattern of one-upmanship appeared. It came to pass that these new Christian publics valued most the conversions and confessions of those who had been the biggest sinners: the greater the sinner, the more glorious the salvation. And what could be more dramatically un-Christian than being *anti*-Christian? Yet the nature of public address, as Warner conceives it, is the inclusion of *strangers* in the audience, both real and imagined. For the most part, the stranger in the audience was imaginary as the act of testifying was mostly kept within a church and its congregation. But, in the 1970s, one public confessor caught the attention of some very real strangers in secular society, the FBI. A man by the name of John Todd, testifying he had been a high-ranking Satanist, began advising congregants to arm themselves and bunker-down in rural places, such as Montana, because a Satanic Illuminati was going to start an apocalyptic war. Thus began FBI investigations into Satanic cult activity in America.

One way Todd said Satanists were already waging war was through popular music. The case of John Todd appears in the majority of histories on Satanism because he thrust the fear of Satanic subliminal messages into the public mind, he is also the real-life source behind three comic books in the Chick Tract comic book series, which aim to raise awareness about Satanic conspiracies and the hidden dangers of pop culture, including even Christian rock music which is claimed to be Satanic in its very form regardless of lyrical message.

Furthermore, Todd claimed these things were true because he had participated in making Satanic rock music himself. As Ellis recounts the story, Todd confessed that, in his previous, Satanic life,

> [h]is main task was to use rock music to demonize adolescents. Todd claimed to have been personal friends with most of the influential figures of rock'n' roll, many of whom he personally initiated into witchcraft. Most rock music, he said, is written by witches: the words contain 'coded spells or incantations,' while the melodies are found in 'an old druid manuscript.' When recorded, the master tapes are the focus of an occult ceremony, during which some of the country's most powerful witches conjure up 'Regé,' a principal devil. The witches then ask this being to command his demonic servants to follow the recordings of this song into the homes of those who buy them. (195)

This brought a new, modern witch hunt, a Satanic panic, aimed at rock music on the threshold of Metal's invention. Nevertheless, the idea that music may, itself, be equivalent to an evil, black magic spell is not unprecedented. On this point, Metal joins a very long tradition of musical immorality.

6.1.2 *Diabolis in Musica:* Fantasies of Satanic Music

Even the sound of more conservative, non-Satanic Metal defies many established taboos of western music. Specific uses of dissonance, distortion, rhythm, and recording define different styles of Metal. Each of these can be linked to other historically forbidden, 'bad' sounds. On the topic of Satanic music, one of the more striking cases is the medieval concept of *diabolus in musica*, a prohibition against the dissonant diminished fifth chord, perhaps not incidentally a staple of Metal music. Lewis' research explains

that, in the 11th century, this forbidden chord was thought to conjure the Devil, and, during the Inquisition, those using the chord could be subject to torture and burning at the stake. Scholars of Metal agree that its heaviness can be gauged in part by how thoroughly it eschews melody (Berger, Purcell, Weinstein). However, this should not leave one with the impression that the music lacks harmonic depth. Walser, explaining what makes the so-called 'power chords'' of heavy Metal so powerful, compares distorted guitars to church organs:

> An effect of both distortion and volume, resultant tones are created by the acoustic combination of two notes. They are most audible at high volume levels, and they are intensified by the type of harmonic distortion used in metal guitar playing. Such resultant tones are also produced by pipe organs, where high volumes and open voicings on very low notes are sometimes employed to similar effect: to display and enact overwhelming power—usually, in that context, for the greater glory of God. (43)

As Walser notes, aside from the organ and the electric guitar, there are virtually no other instruments capable of producing this effect (save synthesizers, which are essentially electric organs). If one were to seek a way to pervert the sound of Christian authority, to create music of equally powerful volume and harmonically rich distortions but for the glory of a darker deity, electric guitars appear to be a natural choice due to these rare qualities shared with church organs.

Also relevant to heavy Metal are feared rhythms. Drums and the Devil are well associated. Medway locates Metal at the end of a line of Satanically suspicious popular culture including Jazz of the 1930s —which corrupted listeners with 'the roll and thump

of the Voodou Drum'—and, centuries earlier, the waltz—rumored to have been taught to witches by the Devil himself and supposed to cause miscarriage, abortion, murder, and 'frenzy'. Still, it may be that there is no drumming more frenzied and frenzying than the 'blast beat' heard ubiquitously in extreme Metal and, more and more, in mainstream types of Rock. As heavy Metal de-values and distorts pitched instruments, it elevates and emphasizes percussion. In extreme Metal, this is more than just drumming, frequently the entire ensemble operates as a percussion unit. Further, in combination with distortion, the rapid rhythms of extreme Metal played on pitched instruments have the effect of smearing the attack of each note. This means that, while technically playing many single notes, the resulting sound seems more like a buzzing wash of subtly pitched distortion (Berger and Fales).

In more recent times, after John Todd, there is another taboo found neither in composition of pitch nor rhythm but in the act of recording. The idea of druids composing 60s Rock on scrolls did not become a major feature of the culture wars around heavy Metal, but the idea that one is hearing something truly nefarious, something more than just music—something *really* heavy—seems to have been more compelling.[37] After Todd, legends like The Beatles and Led Zeppelin were rumored to use backwards-masking to encode subliminal messages. Yet the most infamous incident of backwards-masking is the 1990 trial of Judas Priest, who were accused of causing two Nevada teenagers to attempt suicide. Allegedly, the band made them do this by placing hidden messages, backwards, in their songs. The prosecution even rallied Wilson Key, author of

[37] The druid conspiracy theory, though short-lived, did claim a most noteworthy victim. The Beatles' skyrocketing success unhappily coincided with the revelations of John Todd's public confession, and it came to be rumored that their success was evidence of the kind of conspiracy Todd described. This legend played into the fantasies driving Mark David Chapman to kill John Lennon, to silence the 'demons' surrounding the Beatle.

Subliminal Seduction and *Media Sexploitation* fame, to support the claim that one can hear the phrase "do it" when Judas Priest's *Stained Class* album is played backwards.[38]

The idea that some musical sounds can be so bad that they have a deleterious effect on a listener's soul and thereby result in immoral behavior is not at all new but, from the mid-twentieth century onward, this particular critique of 'bad' sound has fallen squarely upon rock and especially heavy Metal—indeed, it is arguable that flirting with this kind of aesthetic/spiritual/moral badness is at the heart of what makes a musical experience 'heavy'. Furthermore, this brief overview goes to support the claim that 'Satanic' has traditionally been a signifier used to mark and marginalize otherness. Protestants, African beats, Italian dance meters, non-Western harmonies, and popular youth culture were all deemed 'Satanic' regardless of a total lack of actual Devil worshippers. Only in the latter part of the 20th century, thanks to a pop culture twist on an age-old theme, did people begin seeking to make contact with, rather than avoid, the real substrate of this imaginary counterpublic, in part by insisting the Devil's music be made. Black Metal, seeking to create music for a historically absent Other, the *civitas diaboli*, may be seen as actually manifesting the Other through its direct address toward it—both evoking and embodying *diabolis in musica*.

[38] The band denied intentionally encoding anything and, in the end, the jury acquitted them. In the official ruling, however, Judge Whitehead did not rule that there were no subliminal messages on the recording. As Bill Ellis reports, the official statement is that there *are* subliminal message on *Stained Class* but they were not the cause of the suicides and, further, that the content was protected as free speech. After all, as many point out, the simple message "do it" begs the question, do what?

6.2 INTRODUCTION TO EXTREME METAL GENEALOGY

Robert Walser's analysis of heavy Metal in the1980s warns against thinking of 'Metal' as a genre term in and of itself. Walser's study shows there is no final answer to the question "what is Metal?" Like 'Classical', 'Jazz', or 'Techno', 'Metal' indicates a mode of production upon which a number of aesthetic sensibilities may be exercised. Motley Crue is no more like Morbid Angel than Brahms is like Wagner. Walser argues, "[r]igid genre boundaries are more useful to the music industry than to the fans, and the commercial strategy of hyping cultural genres while striving to obliterate the differences that make individual choices meaningful often works very effectively to mobilize efficient consumption" (5). A 'Metal Fan' is a market category, not an audience member. People who like this music enjoy *specific kinds* of Metal representing observably distinct aesthetics. The remedy to rigid genre designators is not to ignore genre altogether but to take fans' micro-generic taxonomies seriously. Walser stresses the need for closer attention to the finer judgments occurring under this umbrella term: "Outsiders' representations of heavy Metal as monolithic stand in stark contrast to the fans' views, which prize difference and specificity" (5). The rhetoric of genres is not merely empty talk aimed at erecting walls of jargon around subcultures—though that is certainly one use of it—nor is it always promotional hype—though, again, it is not inappropriate for such use. This countervalent observation strengthens the need to understand the various answers that have been offered in response to "what is Metal?' Beyond that, it calls for some explanation of why some answers are more convincing than others. For the most part, the academic focus on this topic has put the accent on the question of *Metal*,

pointing to the music's derivation from Blues, Jazz, and Classical music, cataloging its lyrical and visual tropes, and attempting to describe the Metal worldview concerning gender, politics, religion, and so on. My question is less often addressed: What makes this Metal *heavy*?

Deena Weinstein's attempt to explain the 'code' used to differentiate between different types of Metal helps to get at this question. Weinstein identifies two competing trends in Heavy Metal, Dionysian and lite. Bands in the lite tradition are those most explicitly concerned with the heaviness of Metal. An acceptable genealogy of heavy Metal genres in this strain would begin with Black Sabbath who, along with other, mostly British bands of the 60s and 70s, such as Led Zeppelin, constituted the first wave of heavy Metal. In the usual history of Rock, Punk, a response to the preceding generation of hard Rock, follows this moment. At the same time, however, the less frequently acknowledged New Wave of British Heavy Metal (referenced as NWOBHM in the Metal press) was emerging through bands like Iron Maiden and Motorhead. These two movements would set the tone for an aesthetic dialog about Heavy Metal. After early 80s Punk and NWOBHM came mid 80s Hardcore and Thrash, followed by the rise of Death and Grind in the late 80s, after which comes 90s Black Metal, the topic to be addressed here.

Detailed explanations of the differences between these various styles are widely available, so there is no need to dwell on them here.[39] For understanding the significance of the Black Metal answer to heaviness, it will be enough to focus on the juncture between the once-dominant Death Metal type of heaviness and the Black style that would

[39] For an up-to-date overview of heavy metal genres, Ian Christe's *Sound of the Beast* is recommended. Histories of specific metal genres are many; the Feral House Publishing series is the most exhaustive.

come to critique it. With this in mind, let it suffice to say that all of the aforementioned genres—Thrash, Death, Grind—are solidly lite in orientation. The Metal community refers to these chaotic styles as 'extreme' Metal, but extremely what? Across all of these there is a common, progressive trend—audible until the intervention of Black Metal—towards 'thicker' sounds emphasizing extreme low bass and high treble frequencies as well as making the music denser with extremely fast and complicated playing.

Walser is right, heavy Metal cannot be thought of as a coherent genre in and of itself. It is, instead, a terrain upon which many conflicts and conversations occur. In the following, I will map the territory of this conflict as I attempt to explain the creation of a new generic code, Black Metal, which is a distinctly 'Satanic' brand of heaviness audibly different from other shades of Metal heaviness. The key point of distinction for Metal aficionados is that Black Metal was a pointed rejection of Death Metal. What I refer to as the 'Black Turn' in Metal genealogy was specifically turning away from the aesthetic logic of Metal heaviness exemplified by Death. First, however, one must know something about Black Metal's nefarious origins, which is what, if anything, is most commonly understood about this music and the subculture from which it came.

6.2.1 Heavy Metal and the Genre that Never Was

Popularized by a string of cult-like crimes committed in Norway in the 1990s that grimly led to a New Millennium Metal-renaissance, Black Metal is one of the most (in)famous styles of heavy Metal to date. Yet the most honest and accurate description of Black Metal may be from Gavin Baddeley, who refers to it as "the musical genre that never

was" (39). Explaining further, Baddeley writes,"[t]he Satanic tag attracted a strange regiment of musicians who wished to test the musical and moral boundaries of what the rock business deemed acceptable" (39). To say that it *is but never was* points to a disjoint between the real and symbolic spheres of Satanic Metal as well as the uneasy compatibility of commercialism and authenticity.

For nearly as long as there's been anything called 'Metal' there has also been Metal calling itself 'Satanic'. In this way, heavy Metal differs from earlier popular musics dubbed 'Satanic' (e.g., Folk, Blues, Jazz, and Rock) because it took the mantle upon itself. For that reason, the 'genre that never was' had been strongly suggested as a possibility before it came to be in Metal. Nevertheless, the fact that it is inauthentic does not compromise its symbolic weight. In simple terms, a member of Demon, a Satanic progressive rock band from the 1970s, explains the basic idea: "people have done your *Jesus Christ Superstar*, done your *Godspel*l. It's always been our ambition to do something for the opposition" (Baddeley 123). And this is not unique to makers of Satanic music. The history of Satanism is mostly the history of people speaking of and for the opposition. Speaking for and from a negative ideological position is surely the root of Black Metal, but the genre has, since the 1990s, become more remarkable in the world of heavy Metal for its intervention into a dominant trajectory in Metal aesthetics. This is to say Satanic Metal became a true genre by developing its own *sound* to go with the look and the language pioneered in other media, to be discussed later.[40]

[40] Weinstein clarifies the issue of genre: "To call heavy metal a genre means to acknowledge it as something more than a marketing category. It has a distinctive sound" (7). This is a crucial consideration for the study of popular music, especially Satanic heavy metal. As Weinstein and others affirm, the Satanic metal of the 70's and 80's extolled sin and the Devil as a marketing ploy for various types of rock music. It is now undeniable, however, that Satanic metal has its own sound and follows its own aesthetic rules. An example of a current genre that is not a genre, by this definition, is 'gore', which explains the lyrical and

Weinstein's seminal study, *Heavy Metal: The Music and Its Culture*, stands as one of the most illuminating texts on heavy Metal aesthetics. This work is exceptional for its development of a Metal 'code' derived from an analysis of genre formation and fragmentation beginning in the murky origins of the form in late 60s rock through its multiplication into a number of generic styles in the 1980s. The vehicles for the code of Metal identified by Weinstein are volume, distortion, melody, rhythm, bass, and vocal timbre. Aesthetic innovations along these axes exhibit Dionysian or chaotic logics. Metal in the Dionysian tradition is associated with themes of lust, love, sex, drugs, driving fast, and other enjoyable pursuits. **.** The extremes of Chaos sought by Satanic Metal artists might seem to be an essentially masculine project compared to lite Metal's ostensibly more feminine Dionysianism. Yet lite Metal—some of which is called 'Cock Rock' for its overwhelming misogyny (Frith and McRobbie) —is as notorious for its negative portrayals of women as Satanic Metal is for its positive portrayals of evil. In spite of the masculine connotations of chaotic Metal, there is actually a far more equitable, though definitely not even, gender dynamic in the more extreme traditions, likely because sex, romance, love, lust, etc. are marginal in their worldviews. Natalie J. Purcell and Harris Berger both write favorably of the treatment of women in Death Metal culture, and the higher profile of women in Black Metal compared to other scenes is frequently noted in descriptions of the Satanic Metal subculture. A quick look for women in Satanic Metal shows the range of positions available for women in Black Metal, in mixed gender bands like Opera IX (Italy), in all female acts like Astarte (Greece), as sex-symbol singers like Dana Duffy of Demonic Christ (U.S.), or as in

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visual imagery associated with bands across a broad spectrum of extreme metal, including Death, Thrash, and Grind.

family efforts like Peccatum (Norway). More broadly, progressive gender politics can be found in Satanic and occult thinking from Crowley to LaVey through today.

Yet there is also a sonic dimension to the lite/chaotic distinction. What Weinstein calls 'lite' Metal is more melodic than rhythmic with little or no screaming and unexaggerated bass frequencies. Lite Metal's most conspicuous contributions to popular music are the 'power ballad' (e.g., Led Zeppelin's "Stairway to Heaven," Aerosmith's "Angel," Poison's "Every Rose Has Its Thorn) and the 'anthem' (e.g., Twisted Sister's "We're Not Gonna Take It," Quiet Riot's "Cum On Feel the Noize," and most AC/DC singles). On the other end of the spectrum, Metal in the chaotic tradition deals with all the unpleasant business untouched by lite Metal; it is both ideologically and aesthetically heavier, with exaggerated bass frequencies, predominantly screamed vocals, and more emphasis on rhythm than melody.

These are more than fair explanations of the categories for constructing and judging Metal genres. It must not pass without noting, however, that Weinstein glosses the categories of volume and distortion, as she mostly lets it go unsaid that both lite and heavy Metal share loud and distorted guitars. More recent scholarship on heavy Metal aesthetics shows that this is much too hasty an assumption. Harris Berger and Cornelia Fales' essay on heavy Metal guitar timbre uses spectrographic analysis to point to the clear distinctions between the distortion typical of lite Metal and that which is typical of heavier Metal; the heaviest Metal exhibits a 'scooped-mids' tone, exemplified by Death Metal, featuring more bass than the lighter distortion. Additionally, Berger and Fales address the issue of volume in terms of dynamic variation, observing that those timbres described as 'heavier' show less dynamic variation and, on the whole, are louder than

those timbres perceived as less heavy. The conclusion of their study, therefore, fills in one of the gaps in Weinstein's explanation. For the study of extreme Metal aesthetics, it is also a step forward from Weinstein's book which goes no further than Thrash Metal. Berger and Fales, writing after Thrash was considered old-fashioned, turn the focus to Death Metal, which is key for understanding the Black sound since it was against Death that it was set. One hears this in the typical Black guitar timbre, which may be described as a pinched-mids sound, the inverse of the Death scoop.

Detailing Thrash's situation in the topography of heavy Metal, Weinstein explains, "If lite metal results from the latitudinarian movements in metal, speed/Thrash is its fundamentalist strain" (48). She goes on to compare artists in the chaotic tradition to Christian reformists:

> There is an obvious similarity between speed/thrash's challenge to heavy metal and the contestation, initiated by Martin Luther and John Calvin, against the Catholic church. Both movements charged that the established form had become corrupt through extravagance and both supported a return to the essential message, stripped bare of all adornment. (49)

Extremely heavy Metal—like Thrash, Death, and Black—presents more than a challenge to the world at large, it also offers a challenge to heavy Metal as such. Berger and Fales analysis of Death Metal, the missing link between Thrash and Black, makes a complimentary observation, heavy Metal is believed to be getting *heavier* with each new

wave.[41] Black Metal obviously exhibits this spirit of reformation identified as a driving force in the evolution of Metal heaviness.

Michael Moynihan and Didrik Soderlind's *Lords of Chaos*, mostly a collection of interviews with 1990s Black Metal artists, bears witness to this Metal fundamentalism in discussions with Oystein Aarseth, singer for Mayhem, one of the first Black Metal bands.[42] Describing the state of extreme heavy Metal in the 90s, Aarseth declares: "We must take this scene to what it was in the past!" (60). Exactly what that past might be, however, is left unstated. But in consideration of the history of Satanic Metal prior to Mayhem, this great past, as I will argue, is an invention. Like many fundamentalists, Black Metal was founded on a very partial and self-serving, yet nonetheless persuasive, reconstruction of the past concerning both heavy Metal as well as the history of western civilization. Yet why should these particular, not terribly articulate critiques from independent young artists concentrated in Norway have such great effect upon a style of music so matured along its British and American axes?

6.2.2 After Death: Norwegian Meddle

'Conversation' is a favorite trope in the cultural study of popular music. The heavy Metal conversation, was primarily a dialog between the United States and England, with some notable interjections from Germany. However, as lines of communication grew

[41] Additionally noting that not all metal artists are concerned with reaching for the extremes of heaviness, Berger and Fales remark that, regardless of orientation, lite and heavy artists generally agree on the dominant code of heaviness.

[42] Aarseth, a.k.a. 'Euronymous', was also the proprietor of the legendary Oslo record store Helvete, founder of the Death Like Silence record label, murdered by Varg Vikernes, a.k.a., 'Count Grishnack', from the equally important Black metal act Burzum

between Metal fans worldwide, so did the chance for intervention from the margins. Surely, Norway was not the only country with its own under-recognized, home-grown scene. Brazil, for instance, had a strong tradition of extreme Metal, continuing to this day, which was gaining prestige in mainstream Death circles of the late 80s, but the antidote to the 1990s Metal malaise came from someplace few had heard from before. The exotic aura of Norway, for those in the western hemisphere, may have had something to do with the quick attention to their cries for attention. Another popular explanation is that these people were *real* Satanists in a way that no other Satanic Metal artist had been before. [43]

Members of these bands really did commit murder and arson, and their music is not much more palatable than their crimes. Even for those who enjoy other genres of extreme Metal, Black Metal presents a challenging listen. Compared to Metal norms, the recordings are bad, the songwriting is bad, the performances are bad, the lyrics are bad, and even the album art is bad. Even though, as Walser notes, a paramount aim of heavy Metal is to transgress the norms of Classical music by aestheticizing non-musical sounds (i.e., noise) Black Metal transgressed the norms of heavy Metal itself, deconstructing generic notions about noise and its uses.

The fact that there is no such thing as *really* Satanic Metal had been more or less an open secret. Even earlier artists, such as King Diamond and Deicide, who bill themselves as practicing Satanists—the former painting an inverted cross between his

[43] Ian Christe's history of metal describes the slow American uptake of early 90's Black metal: "It took five more years for the United States to gradually grasp black metal—as stories spread through fanzines and mass media alike, it was difficult to separate the facts from the urban legends. For Americans there remained very little firsthand exposure to Norwegian black metal bands, though they had sold hundreds of thousands of CDs. There was also unreliable distribution of music released through extremely tiny labels" (285-286). Between the hype and the difficulty of actually obtaining the music, Black metal records gained an aura that the material alone could not convey, making it seem even more possible that fantasies of authentically Satanic music had become real.

eyes, the latter permanently branding one between his—were quite clear that they do not advocate violence of any sort. One reason for the persuasiveness of the aesthetic critique advanced by the Norwegian subculture—the Black Circle, as it was called—could simply be the sense that, for once, something more really was going on thanks to the crimes occurring behind-the-scenes. Whether or not that 'something more' was the work of Devil worshippers or wayward teenagers would be uncertain enough to provide the perpetrators with a global media mouthpiece for their opinions about heavy Metal and Satanism.[44]

It is impossible to discount the effect this criminal connection brought to the music. More renowned cult killers like Charles Manson and Bobby Beausoleil were musicians with strong Satanic connections, and even the founder of the First Church of Satan was a composer, but not one of their efforts sparked its own Satanic genre. The incidents in Norway could just as well have been merely another spooky crossing in the histories of popular music and Satanism had it not also coincided with the symbolic exhaustion of the chaotic Metal code. It is mostly true that early Black Metal, as Metal, was quite awful, but it was awful in the right ways and at just the right time, when Metal's heavy hegemony was susceptible to a totally new fundamentalist movement. The formation of a Satanic sound cannot be explained apart from developments in the rhetoric of Satanism vis-à-vis 20th century pop culture, to be addressed shortly, and an emerging crisis in the code of extreme Metal heaviness, to which I will now turn.

[44] The Norwegian Black metal scene first came up from the underground in a front page story in Norway's *Bergens Tidende* newspaper on January 20, 1993.

6.2.3 'C' is for 'Cookie', 'Chaos', and 'Crisis'

In a recent (February 2006) article from the *Wall Street Journal*'s Leisure and Arts section, Jim Fusili mourns the decline of Death Metal's most distinguishing feature, the 'Cookie Monster' timbre of its vocalists; Fusili opines Metal may have reached its heaviest extreme and had to return to other, lighter means of innovation. Similarly, a sociological study of Death Metal by Natalie J. Purcell reveals a number of fans and musicians in the scene questioning whether or not heavy Metal had reached the ultimate extent of heaviness in Death. Even Death Metal artists have sensed their genre has suffered under the weight of its own formulaic decadence. In a 2003 Death Metal documentary, a guitarist from Séance explains why they strayed from standard Death style. Explaining their reconsideration of the 90s trend toward extremely complex yet barely melodic Metal, the guitarist recalls the difference he noticed between classic Metal and Death Metal:

> In two seconds you could hear what song it was, if it was Judas Priest or whatever, you'd go "Oh, that's that song," and you'd fast forward through the tape, and you go "Oh, it's this song," Now, when you put that kind of music [Death Metal] on, you know, I went, "What is this?" And I'd have to wait for the chorus, then "Oh, that's what it is." It was kind of a challenge to make the songs kind of easy to tell apart from one another. (Death Metal)

This dilemma demonstrates that there was already a 'back to basics' spirit of fundamentalism operating within the Metal underground in the 90s. The 'basics', of

course, are a matter for interpretation. For most Death Metal bands, the solution was, as Fusili observes, a move that made the music more accessible and less extreme—ultimately less heavy. Black Metal, however, was born of efforts not to cede the fundamental value of heaviness, to further pursue the essence of extreme, chaotic Metal. The most readily discernible aesthetic maneuvers in the move away from Death Metal were the preference for amateurism over virtuosity and for low-fidelity production over high.

It could be said that this places Black Metal on the border between Punk and Metal but it only takes a quick listen to tell that the similarities are more discursive than anything else. The black Metal critique of its predecessors is close to the Punk critique of classic rock. But, on the issue of heaviness, there is no comparison. Groundbreaking Punk albums like those by the Sex Pistols or The Clash are actually very well-produced (recorded in major label studios) and, musically, sound like slowed-down Chuck Berry riffs—snotty vocals and gaudy fashion statements aside, there is not much heavy about it. Albert Mudrian's history of Death Metal and Grindcore contextualizes these movements with an opening chapter declaring "Punk is a Rotting Corpse." Therein, he explains that the extreme Metal underground in England and America found the Punk aesthetic too weak by Metal standards. This also shows how Punk and Metal are in a much closer and more constant dialog than many texts on either topic would lead one to believe.

Black Metal presented a coherent criticism of Metal heaviness at a critical juncture in the history of its form. The exoticism of its place of origin and criminality of some of its progenitors certainly added a level of notoriety, mystique, and even authenticity that potentially enhanced the aura of early Black Metal. However, when

asked about these crimes, those who committed them downplay or deny the connections between Satanic ideology and their criminal behavior, and nearly everyone involved with Satanism and/or bBack Metal has publicly denounced the violence.

Consider the testimony of Varg Vikernes of the band Burzum, convicted of three church burnings and a murder, regarding the connection between the arsons and Satanism:

> That [first fire] was the 6th of June, and everyone linked it to Satanism, because of the 6-6 and it was on the 6th day of the week. What everyone overlooked was that on the 6th of June, year 793, in Lindesfarne in Britain was the site of the first known Viking raid in history, with Vikings from Hordland, which is my county. Nobody linked it to that—*nobody*. That church is built on holy ground, a natural circle and a *horg* [a heathen altar]. They planted a big cross on top of the *horg* and built the church in the midst of the holy place. (Moynihan and Soderlind 89)

Vikernes then summarizes his own ideology:, "It's not a Satanic thing, it's a national heathen thing" (Moynihan and Soderlind 90). According to Christe, "Vikernes finally disowned black Metal completely while in jail, preferring to listen to classical music and marches" (279). So even those who made Satanic Metal come to be, even those who recorded influential Black albums and committed stereotypically Satanic crimes, still hold that there is nothing really Satanic going on—nothing but the music.

6.3 SO BAD, IT HAS TO BE GOOD: TOWARD A BLACK CODE

In 2005, roughly the ten-year anniversary of Black Metal's coming-out onto the world stage, *The Observer* checked-in with some of the movers and shakers from the early days, asking them to reflect on the sound and the scene. Explaining what makes this type of music 'Black' compared to other Metals, Darkthrone drummer 'Fenriz', a self-styled Black Metal tastemaker and mouthpiece of the Norwegian scene, explains:

> There wasn't a generic sound back then…We had to decide ourselves what we deemed worthy of the Black Metal stamp. There were many 'Thrash' releases with a lot of 'Black' in them, whereas others had no 'Black' at all. This is not maths, so I can't say one plus one equals 30. It had something to do with production, lyrics, the way they dressed and a commitment to making ugly, raw, grim stuff. (Campion)

This goes to show that there were indeed Black elements prior to the genre's crystallization. The issue concerning Black Metal's aesthetic fundamentalism is whether or to what extent such pre-existing elements were affiliated with Satanism prior to their coalescence as a genre in the 1990s.

The term 'black Metal' is not unique to the genre. It can be traced to a 1982 album, *Black Metal*, from Venom, a British band with a penchant for songs about the Devil. Beyond that, as Weinstein's study describes, it also existed as a marketing category implied by the 80s invention of 'White' Metal, i.e., Metal with Evangelical Christian messages set against bands, like Venom, who were mistakenly feared to be recruiting for the Other team. Venom, however, were hardly earnest or convincing in

their Satanism—they are frequently compared to mock-Metallers *Spinal Tap*. Henry Konow's history of heavy Metal marvels at the unlikely influence of Venom's shtick:

> It's surprising how heavily Black metal bands were influence by Venom, considering the band themselves didn't take what they were doing that seriously. Any true Satanist who went to a Venom or Slayer gig expecting to see ritual sacrifice onstage would have been sorely disappointed. (228)

All the same, as Moynihan and Soderlind point out "Early Black Metal bands like Venom might not have been very serious about their image, but many young Norwegians may have been unable to realize this" (40). It is not difficult to imagine that the Faustian farce of this minor 80s Metal band from England might, a decade later in Norway, appear to be something more than what it really was.

Nonetheless, in the notorious *Kerrang!* magazine cover story, "Arson, Death, Satanic Ritual: The Ugly Truth About Black Metal," the article which brought the Norwegian scene to world attention, it appears that the problem is not an inability to see through the image but simply an unwillingness. In the article, Oystein Aarseth cites Venom as an influence. When the interviewer tries to point out the obvious insincerity of Venom's act, Aarseth answers that Norwegians "choose to believe otherwise" (Arnopp). Accidental or intentional, the inclusion of Venom in the Satanic Metal canon is based on a misreading. At first glance, there is nothing more than nominal continuity between Venom's *Black Metal* and the genre that followed in its name.[45] But upon closer

[45] The refrain of Venom's "Black Metal," "Lay down your soul for the Gods Rock and Roll," does not beg to be taken seriously. They are clearly working in the lighter sex, drugs, and rock'n'roll tradition. Compared to the lyrics from a Darkthrone song like "Grave with a View"—"Rotting Christ before my eyes, I spit in the mouth of the priest. Revenge for those who died, so what if I am fuckin' insane, I'll fuckin' kill you anyway."— Venom seems wholesome and worlds apart from the blasphemes of 'matured' Black metal of later years.

consideration, Satanism is not the only Black element to be taken from Venom. Analyzing the roots of the Black code, the changeover from a mere marketing category to an actual genre, it becomes obvious that Satanic ideology was necessary but not sufficient for something to sound Black. In this vein, Venom offered something more inspirational than verbiage, something shared with a number of proto-Black Metal bands: lo-fi production combined with amateurish composition and performance.

Gavin Baddeley's *Lucifer Rising: Sin, Devil Worship, and Rock'n'Roll* says simply of Venom, "they stank." But, as he continues to explain, they weren't aiming to be good. Like Punk before it, they were against the slickness of mainstream rock and wanted to make something truly hard to like, a tried and true tactic of heaviness. Still, the bad music was less passable for also being poorly produced, and this is a big reason Venom never became as popular as their compatriots, like Motorhead or Black Sabbath. Their albums were of poor quality, even their greatest hits collection notes their lackluster production values as a cause of their decline.[46] All the same, it has assured them a permanent place at the royal court of the extreme Metal underground. Similar formulas for underground Metal success are found in the works of the other two undisputed forefathers of the genre, Hellhammer, from Switzerland, and Sweden's Bathory.

Prior to being adopted by Black Metal, Hellhammer was likely most known as the worst heavy Metal band to ever make a record (Sharpe-Young 184-185). Not only are the Hellhammer albums poorly recorded, the songs are extremely basic and repetitive, very difficult to enjoy even for those who like Metal. Unlike Venom, members of Hellhammer, who later abandoned the project to form the more refined and respectable

[46] "The critical fourth album lacked the sheer power of the first three efforts, being rather subdued and not helped by a thin production. Compared to Metallica's *Kill 'em All* or Slayer's *Hell Awaits*, Venom's *Possessed* just wasn't able to compete in terms of energy and aggression" (Mader).

Celtic Frost, were trying to make good music, they simply failed. In the 1990 CD re-issue of the original Hellhammer material, *Apocalyptic Raids*, Hellhammer/Celtic Frost frontman Tom G. Warrior is frank:

> Hellhammer lasted on us almost like a curse. Even though Hellhammer was the very reason we had thought over our goals and conceived the Frost, HH's left-overs kept being mighty rocks in our way. Many voices saw Frost as the same band with just a name-change. The lack of musical quality in HH made it almost impossible for us to get an unbiased reaction to Frost. To make a long story short, it almost killed all our work and dreams. (Hellhammer)

Yet, obviously, Warrior was convinced enough of the merits of this embarrassment to re-issue it. Explaining why he and bassist Martin Ain abandoned the band soon after releasing just a handful of songs, he puts a happy face on failure, praising Hellhammer's ridiculously inept, nearly ten-minute long 'epic':

> [T]his extremity made us feel trapped. We were only starting, yet Hellhammer's 'music' and concept touched limits already. Where would we go after 'Triumph of Death' (the song)? So, despite our love for the absolute brutal heaviness of HH, three weeks after the recording sessions, Martin and me left the band. (Hellhammer)

For all intents and purposes, it would be nearly impossible to make anything more innocently ill-conceived than "Triumph of Death." Yet because Black Metal would turn towards such campy ineptitude with shocking sincerity, reproducing Hellhammer's style a hundredfold, a once reviled song like "Triumph of Death" may now be considered

among the most perfectly sublime works of Blackness for its stunning return from heavy Metal's unconscious.

Bathory, a Swedish project led by Seth 'Quorthon', stands somewhere between the purposefully raunchy Venom and the accidentally grotesque Hellhammer. As the story goes, in his teenage years, a record company employed Quorthon, screening music for consideration on a compilation of Swedish heavy Metal. With this inside track, he convinced the label to include two songs from his own 'band', which did not as yet exist. Surprisingly, the label agreed and two hastily made Bathory songs were soon released on the *Scandinavian Metal Attack* compilation. Quorthon's ad-hoc effort translated into making tracks that stood out among a string of otherwise acceptable, run-of-the-mill Trash and Death Metal recordings. Discussing this first release, Quorthon recalls, "I never thought we'd be able to enter a studio again after that because we were really dirty sounding. But it turned out that 85-90% of all the fan mail that come to the record company from that record was about our songs" (Moynihan and Soderlind 16). The second Bathory album did not tinker with the successful formula, and it worked stunningly:

> I thought we'd be selling two or three thousand copies; that album is still selling like crazy nine years later. I'm still really amazed about it, especially since when it was recorded it cost me about two hundred dollars and was recorded in fifty-six hours in a twelve-track demo studio south of Stockholm. From then on we just recorded every album on more or less 'borrowed time' because we didn't really have any ambitions whatsoever. (Moynihan and Soderlind 16)

Moynihan and Soderlind affirm what a successful, if unintentional, production scheme this turned out to be, further clarifying:

> Bathory's first three albums follow a similar mode of expression as Venom, though the music is made even more vicious by a potent arsenal of noisy effects and distortion. The hyperkinetic rhythm section blurs into a whirling maelstrom of frequencies—a perfect backdrop for the barked vocals of an undecipherable nature. Much of the explanation for this sound was simply the circumstances of recording an entire album in two and a half days on only a few hundred dollars. The end result was more extreme than anything else being done in 1984 (save maybe for some of the more violent English Industrial 'power electronics' bands like Whitehouse, Ramleh, and Sutcliff Jugend) and made a huge impact on the underground Metal scene. (18)

These authors are not wrong in their comparison of early Bathory records and Power Electronics bands in terms of the challenge each presents to received notions of 'good' music. Yet they are far off when it comes to their vastly different techniques. The sort of distortion found on Bathory albums is worlds apart from the sort of distortion employed by Noise groups. In point of fact, the Bathory records in question sound thickly distorted for their *lack* of processing. In 2004, the same year he died of congenital heart failure, Quorthon went into detail about the recording sessions for his unexpectedly ground-breaking work twenty years ago. Working, naturally, with no clue as to what would become of the album, the primary goal at the time was to record an LP without a real

band and with less than $700, amounting to just over fifty hours of studio time, to do it. As Quorthon recalls:

> We knew about this place that was originally a garage or a private car workshop turned into a demo studio. It was situated at the end of a private house in Huddinge, a southern suburb to Stockholm. It had some rather primitive recording equipment, a home made 8-track table, two small recording machines in one room, plus this switchboard thing on the wall with miles of stereo cords hanging plugged into eight times eight rows of holes. The place didn't offer much as far as effects are concerned. The buildt-in reverb and gold plate was basically all we had to work with. Essentially it was a private small demo studio very likely best suitable for acoustic and vocal type of material, and maybe light pop music. But nothing like BATHORY had ever been recorded there. We had to adapt to the place and its limitations at the same time the place had to adapt to us. (Bathory website)

The first Bathory albums definitely sound like they were made in a garage, not only because of their low quality but also because they use the acoustics of the room to color the drum sound. Unlike the standard Metal sound of hyper-realistic close-microphoning—putting a microphone on nearly every drum in order to place each on its own track, making it possible to achieve a clear focus that is unattainable in the natural world—the Bathory sessions recorded just the sound of the drums in the room and used a dynamic limiter to flatten out the dynamics of the unruly sound. The resulting thin

sound, like beating on cardboard boxes, is emulated by Black Metal purists to this day.[47] Yet the other elements were a good match for this. Recording with amateur quality guitar and bass, each sharing the same 20 watt guitar amplifier—not enough volume to overpower conversation, never mind drumming and screaming—was not the usual way one would go about making a Metal album to begin with.[48] But the main focus was on making a *heavy* album, not exactly a good one.

As Quorthon himself confesses of songs like "Necromancy": "we went through several attempts trying to make the syncopation parts to work, which they basically never did, we had basically never rehearsed that track prior to recording it. Finally a take deemed ok had been caught on tape and we rushed forward, eager to play something else" (Bathory). Nevertheless, Moynihan and Soderlind are not hyperbolizing when they claim, "Though not conscious of its influence, Bathory managed to create the blueprint for Scandinavian Black Metal in all its myriad facets" (Moynihan and Soderlind 22). Venom and Hellhammer had already put forth the proposition of increasing heaviness through lo-fi slop but they were less immediately successful than Bathory, who apparently had immediate and enduring underground success through half-hearted effort.[49] Note that Bathory was no more authentically Satanic than Venom or

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[47] The double bass drum sections are literally performed on cardboard boxes because the drummer did not have the right equipment, so they dubbed supplementary cardboard box beating in its place. Quorthon reports this was the engineer's idea: "Boss told us if we really, really wanted double bass drums on a track, or if there was a double bass drum passage we felt was absolutely crucial to a particular song, we could then always try out playing that short passage on that single bass drum placed over one of those cardboard boxes using regular sticks wrapped up in pieces of cloth."

[48] On point of similarities between Punk and Metal, this same strategy of close-microphoning an overwhelmed, little amplifier to get an uncommonly nasty tone is common in Punk production; the band Husker-Du is known for this technique.

[49] Addressing his casual approach to the whole affair, Quorthon explains, "We weren't taking the band too seriously after all. Not even after having recorded two tracks for a compilation album did we ever envision anything beyond that. The day when I received a call from the record company telling me that BATHORY just *had* to record an album, I just casually said the band didn't exist anymore. But we agreed on trying something out and planned for a session in the summer." For the past twenty years, this $700 album has

Hellhammer; like them, Satan was just a favorite lyrical and visual theme. More than seeming Satanic, it was the quick underground popularity of Bathory's garage-Metal that opened the door for the first generation of artists to think of themselves as being within a Black genre.

If one is looking to the recorded history of heavy Metal in order to (re)construct a tradition of 'ugly, raw, and grim' music, these otherwise 'bad' records may become desirable in the field of texts in and against which aesthetic decisions occur. Moreover, elevating these degenerate texts, saving them from the historical garbage-heap and emulating them in order to perpetuate their sins and make virtues of them is not solely the outcome of emulating the sounds of Satanic Metal's past. It is not difficult to find Satanic Metal from the 80s and earlier that sounded just fine for their day. Metal historian Ian Christe explains, "black Metallers ultimately viewed themselves as elites of rarefied sensibility" (273). But twisting one's ideals so that incompetence becomes virtuosity is more than a little convenient for novice musicians, which the Black Metal bands of the 1990s mostly were.

After disqualifying the issue of authenticity—since one band was no more truly Satanic than another, and it seems nobody was honestly ignorant of this fact—the development of Black Metal aesthetics should be even more striking for its systematic exclusion of more mainstream, good-sounding Satanic records from acts like Coven, Mercyful Fate, Slayer, and Deicide. Furthermore, scanning the horizon for nothing more than ugly, raw, and grim music may have suggested other, non-Satanic candidates meeting the same Black criteria (e.g., Punk-Metal crossovers like England's Extreme

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sold 8,000-15,000 copies annually. (Bathory)

Noise Terror or Boston's Siege) or even non-Metal candidates (e.g., Power Electronics) yet the unspoken qualifier for Blackness, originally, was that this sound also had to be reproducible in composition, performance, and, most of all, on record.

Bathory also represents another key intervention into Metal tradition—there was no band, no live performance, no life of the musical work outside of recording. Such a mode is more common and more acceptable in Black Metal than in any other Metal genre. Though this, too, speaks to the modest circumstances in which these artists find themselves, it is more than a trivial fact. Albin Zak's *Poetics of Rock*, acknowledging the creative opportunities opened by sound recording, notes that those opportunities are limited by aesthetic decisions about the relationship between live performance and its documentation on record. Rock and Metal records hardly conform to standards of documentary realism, but they do go to great lengths to preserve an image of liveness in the work of recording, even if, in practice, there is very little being done live. For mainstream acts, or just those with mainstream aspirations, live performance is key to professional success both because touring is a source of publicity for up and coming acts and because it is a primary source of revenue for major label bands which typically see little profit from record sales alone. Many legendary Black acts, including Darkthrone and Burzum, are one or two person 'bands' that have no live incarnation whatsoever. As a widespread phenomenon of the genre, the open subordination of performance to recording is a significant deviation from the traditional heavy Metal mode of production.

Further, without the pretense of representing performed music, Black Metal is freer than most Metals to explore new textures of heaviness.[50]

Oystein Aarseth's band, Mayhem, was one of the first self-consciously Black bands to come out of the Norwegian scene, and the first to make a major issue of Black production values. On the back cover of Mayhem's 1987 debut LP *Deathcrush* is a crossed-out picture of Scott Burns surrounded by the words "no fun," "no core," "no mosh," "no trends." Burns was an engineer from Morrisound studios responsible for creating the Florida Death sound that boomed in the late 80s and early 90s. The Burns interpretation of heaviness wound up dominating the genre, especially the combination of prominent, somewhat muddy bass and tightly focused drums. As with Venom, Hellhammer, and Bathory, Mayhem's first albums are the direct opposite of this. Yet with Mayhem it becomes difficult to say whether bands in this tradition were making a virtue of necessity or whether they had genuinely come to appreciate that kind of sound. Metal historian Ian Christe goes one step further than the evidence still on record today, beyond the lo-fi textures made by underground artists of meager means, to consider a key feature in the 80s Metal soundscape: tape trading.

Before the internet, tape trading was the primary network for underground music and musicians. No understanding of underground music is complete without an account of the channels through which its primary texts flow. Subverting the official, commercial channels of distribution, tape trading was sort of like the internet before there was one. Tape trading networks developed among friends in local scenes as well as among fans from around the world who often met one another through classified ads listed in the

[50] Recordings by Satanic artists like Havohej (New York) and Abruptum (Sweden) experiment with making music that is way more Black than it is metal, making primitive recordings that are as atmospheric as they are aggravating.

backs of Metal magazines. The idea was simply to re-record songs or albums of music you had that another person might want in exchange for the same. The outcome of trading networks was that the recordings were often of low quality. Using analog decks, the result of making 'multi-generational' recordings—i.e., copies of copies of copies…—is that the original signal gets more obscured by electro-mechanical noise with each passing generation.[51] Even high fidelity, professional quality recordings can wind up sounding like a Bathory album after several re-recordings made on consumer-quality home stereo equipment.

Christe's attention to the role of tape trading in the 1980s Metal scene suggests that the low quality of proto-Black work by the likes of the aforementioned may not have stood out all that much. From today's perspective, early Black Metallers may be heard as purposefully producing a lo-fi heaviness but it is essential to recognize that this was *already* a feature of their heavy Metal soundscape. The tape trading network was therefore more than a means by which fans heard new, underground, independent music, it also lent a certain sheen to that music as it passed from hand to hand and deck to deck. In more ways than one, the Black soundmark arose from the recording environment of its time. Peter Manuel's *Cassette Culture* finds that tape-trading in Northern India resulted in a listening public that preferred the 'bad' sound of duplicated tapes, thus affecting a Northern Indian recording aesthetic with rather different ideas about fidelity, compared, for example, to American standards of practice. Fans of Satanic Metal, it is likely,

[51] Consider also that a good many releases were still on vinyl at the time, so a lot of music in the tape network did not even originate on tape. In addition to adding a layer of vinyl cracks and pops to the din of tape hiss, this additional level of technological translation can also make for great variances in playback speed, and therefore also pitch and rhythm, making copies even less like their originals. Not only can tape copies differ from their source, the character of each system it goes through adds its own grain, sometimes so much so that the copies also greatly differ from one another in a techno-organic fashion relating to their specific generational legacies.

developed a lo-fi sensibility similar to that of the listeners in Manuel's study due to the particularities of their subculture's mode of distribution.

Aside from the public spectacle of crimes in its inaugural period, the revolution of black Metal stemmed from the fortuitous harmony between a genre that never was and musicians that barely were at a time of a symbolic crisis in extreme Metal heaviness. In this relation, something positive—a sound, a genre, a body of works, and a history for these—sublimated in a critical historical juncture. Setting an interpretation of Metal heaviness against the dominant sounds of their time, establishing a Satanic style entailed drawing out pre-existing yet formerly unaffiliated possibilities within the Metal code. An important feature to note here is the retroactivity of the relation in question. It is not the case that other artists did not have access to Venom or Hellhammer, these and other bands in the Black canon also appear as reference and influence in other Metal genres, especially Thrash and Death. Black Metal returned to that common field of texts, recovered the cast-offs of heavy history, and shaped the symbolic order of a new, idiomatic logic of heaviness through its retroactive (re)ordering of the canon. Further, recognizing the symbolic retroaction involved in the creation of the Black Metal is not to say it has a 'retro' sound; it is unmistakably new. It opened for heavy Metal a new arena of allowable sounds, effectively finding heaviness where there was none before.

6.3.1 There is No Meta(l)-Language

Deena Weinstein's conception of a Metal code has been a helpful heuristic for understanding Black Metal as a genre unto itself. But her basic formula needs

reconsideration after observing the Black turn. Weinstein argues, "[t]he core of heavy Metal—its sonic, visual, and verbal code—is defined in terms of the genre's period of crystallization in the mid to late 1970s" (8). It is difficult, of course, to say what has crystallized in an era until it has passed the test of time. Black Metal's retroactive ordering of the Metal canon, for example, reveals a nascent form of Blackness in fringe works which, in many ways, were embarrassments to what previously counted as the core tradition of heavy Metal. Looking back from today's vantage, in which Black Metal bands are nominated for European Grammy Awards, it is impossible to deny that what was once, a short while ago, just a folkloric fantasy carried over into confused culture wars and Metal marketing has become institutionalized as albums and ideas once unpromising turned out to be inspirational in unexpected ways.

The process of crystallization, therefore, continues as cultural conceptions of what counts as authentic Metal of this or that style become further refined thanks, largely, to the expanding archive of texts that may be (re)interpreted time and again as subcultural values change. Weinstein's analysis finds that heavy Metal has a 'core' code set in place by the late 1970s, though she allows that "[t]he dialogic process that creates a genre does not stop once that genre has crystallized" (21). As far as the Black reformation goes, the roots of the code crystallized not in the 70s but in the 80s; clearly it exemplifies the ongoing dialogic process of genre formation whereby a core seems to take shape. Yet 'dialog' may be a misleading metaphor for the hermeneutic activities of subcultural artists and fans. Observing the Black turn should both highlight the contingent, historical qualities of the Metal core as well as show that the ongoing contest over Satanic music, if it is a dialog, is a very confused one.

For one, the common term putting so many different interests into conversation, 'Satanic', points to nearly as many different objects of concern. The condition of possibility for Satanic heaviness was established through centuries-old rhetorical traditions coming into the modern era and butting against new cultural forms. Yet the adoption of a Satanic position within heavy Metal was not unlike Satanic Occultist movements in that it primarily aimed to speak to a subcultural audience for commercial or aesthetic reasons rather than for spiritual or political reasons (Gunn). Underneath the 'Satanic' master signifier, the simple matter of who is speaking to whom about what and why is blurry. It is all the more remarkable, therefore, that there is nonetheless almost unanimous agreement that it is possible for music to be Satanic, that there is such a thing as a Satanic style, and that heavy Metal may somehow be a manifestation of Devil's music. Through many conversations at cross-purposes, the of Satanic Metal was figured.

Culture industries, beginning, evidently, from the moment there was such a thing as an industrial culture, exploited public anxieties about organized anti-Christians and, at the same time, invented a tradition of Satanic aesthetics. With sound recording coming later than print and motion picture, heavy Metal was the last to join but was charged with manifesting the oldest fantasies lying behind the modern Satanic panic, i.e., Satanic sounds from and for Satanic people. Yet Metal's Black turn, which attached a sonic code to 'Satanic', was a more insular affair addressed toward heavy Metal as such.

All the same, the Black turn was not the outcome of careful deliberation. Instead, it was largely propelled by circumstance, accident and exigency. While it is possible to point to a resulting Black code, it is impossible to point to any logical necessity for its Satanic connotations. Moreover—looking at the inexhaustible fervor for Satanic pop

culture, the exhaustion of the Death code, the globalization of extreme Metal through underground tape trading, the shocking spate of criminality in the Norwegian scene, and eventually the mainstream success of Black Metal bands—it seems equally impossible to imagine another way Satanic heaviness could have developed, which suggests that genres are formed when contingency appears as necessity. Either way, it is hard to characterize Black Metal as the outcome of dialoging with a core code either of heavy Metal or of Satanic culture in general, rather it seems to be a matter of symbolic exchanges through which a center, or core, emerges.

The core of this code is a fiction, which is not to say it does not exist, only that it is not a definite collection of master works nor is it exclusively situated within a hermetically sealed heavy Metal world nor is it governed by an ahistorical aesthetic of Chaos. It is a dynamic, sublime object resulting from multiple discourses bearing upon the history of heavy Metal. Therefore, this look at the Black turn suggests that the study of Metal genres demands more attention to the historicity of Metal works; what they seem to say in one era is often not the same in subsequent generations. Further, this is not simply to say that great works must stand the test of time, the essence of recordings is their uncanny spatio-temporal displacement of sound—'canning' music means it stands through time regardless of its merits or flaws as a work of art, a fact which obviously laid the groundwork for the Black school of Metal heaviness. The best and worst persist through history, still there to be revered, reviled, or totally forgotten as part of an ever-growing archive of albums. Black Metal shows how the basics, the classics, the canon, the fundamental Metal message, may not only appear to be different but, with the evolution of genres, actually *become* different.

The lineage of discourses concerning *diabolis in musica* and the *civitas diaboli* coincided in the reflexive Blackening of Metal. Discourses on Satanism expressed a sphere of exclusion that subsequently came to be inhabited by various discursive hucksters, dupes, pirates, and onlookers. Aesthetic judgments about good and bad Metal also relied upon excluding certain works in order to justify the values identified in others, and these margins of Metal would come to be defended under a black banner of Satanism. Yet these histories are filled with ulterior motives and exceptional circumstances, such as Christians looking to increase their socio-political power or teenagers trying to make do with what little they have to work with. While Metal's detractors have long applied the term 'Satanic' to things believed to espouse un-Christian values, the tradition of Satanism in heavy Metal is hardly characterized by earnest, ideologically motivated activity—the two do not meet. The fruitful collaboration of divergent interests and intentions leading to the Black turn confounds any simple notions about agency in cultural evolution.

6.3.2 Scenius at Work

Looking back on heavy Metal history under a Black light brings new core works from the likes of Venom, Hellhammer, and Bathory to attention because they are so widely referenced and because so much of their catalog is still available. But a more extensive look for Satanic Death and Thrash of the 80s exploring Black sounds before there was such a thing is equally instructive, revealing that the Black style appears to have developed in several places at once. In addition to the more or less official grandfathers

from England, Switzerland, Sweden and Norway, there are forgotten relatives like Hungary's Tormenter, Germany's Sodom, and Sarcofago from South America, all of whom arguably sounded as Black as the others. Fenriz's pedantic *Best of Old School Black Metal* compilation includes these and other bands to show that Black Metal "didn't follow any *wave* or geographic pattern." Listening to these under-recognized proto-Black recordings helps to draw some conclusions and raise some questions about the Black turn.

There was no shortage of ugly, raw, and grim Metal in the 1980s underground. Amateur musicians with small recording budgets and a Satanic pose were not a unique breed. Even key features not explainable by lack of skill and financing, like the Black Metal vocal timbre, appear to have been common. It is reasonable to believe that all of these geographically dispersed bands were united by tape trading networks and, thus, intuited the same aesthetic possibilities in the same field of texts at roughly the same time. Taking this into consideration along with the heap of questionable judgment and honest mistakes that went into making the more widely recognized Black masterworks, it is hard to say just who or what made Black Metal happen or sound the way it does. This is not an isolated phenomenon.

Attempting to explain the advent of Death Metal, Nick Terry, editor of the Metal magazine *Terrorizer*, was hard-pressed to account for the forces responsible for creating this genre. As with Black Metal, it is hard to point to any single factor as the primary cause of Death Metal. Trying to do justice to the phenomenon, Terry explains that there is no one genius or even group of geniuses that can take the credit. Instead, Terry suggests it was something about the cultural climate of the scene at the time that made the

people and their music evolve towards the Death Metal style. The ontogenesis of the movement, as Terry puts it, is best thought of as guided by 'scenius'—a collective genius sublimating from the larger culture.

The above stories concerning Satanic Metal suggest the density and variety of forces required to heat the forge for a new type of Metal. The coincidence of so many discursive streams in the body of Black Metal aesthetics seems aptly described as 'scenius'. But does this idea do anything more than obscure an already foggy object of inquiry? Warner's theory of the public sphere may go a long way toward making sense of scenius. In *Publics and Counterpublics*, he explains public-ness as a theoretical challenge of mass culture.

> The temptation is to think of publics as something we make, through individual heroism and creative inspiration or through common goodwill. Much of the process, however, necessarily remains invisible to consciousness and to reflective agency. The making of a public requires conditions that range from the very general—such as the organization of media, ideologies of reading, institutions or circulation, text genres—to the particular rhetoric of texts. Struggle over the nature of publics cannot even be called strategic except by a questionable fiction, since the nature and relationship of the parties involved in the game are conditions established, metapragmatically, by the very notion of a public or by the medium through which a public comes into being. (14)

In this light, 'scenius' can better be seen as a sign pointing to a massive aporia, one similar to that which Warner attempts to surmount with his theory of (counter)publics.

Warner's aim is similar that of cultural studies in its emphasis on the contest over the meaning of popular cultural texts. It differs, however, insofar as it gives such a broad, holistic vision of the public as to disqualify the idea that it may be addressed strategically. Such a concept may be frustrating to those who like to find empowering semiotic transgressions in every corner of a subculture but it speaks to the challenge of appreciating the nature of Satanic Metal, a fictional object brought to being through its public mediation.

The key to Warner's theory is the idea that the balance of power in mass culture is neither on the side of producers nor consumers but in the field of texts common to them both. What, then, is the character of this field? Drawing from literary theory, Warner explains:

> Publics are essentially intertextual, frameworks for understanding texts against an organized background of the circulation of other texts, all interwoven not just by citational references but by the incorporation of a reflexive circulatory field in the mode of address and consumption. And that circulation, though made reflexive by means of textuality, is more than textual—especially now, in the twenty-first century, when the texts of public circulation are very often visual or at any rate no longer mediated by the codex format. (One open question of this book is to what degree the text model, though formative for the modern public, might be increasingly archaic.) (16)

Seeking a focus on the intertextual, reflexive field in the mode of address and consumption in the study of Black Metal means that one should give theoretical priority

to recordings, the primary mode of circulation, but cannot ignore the fact that the rhetorical potency and allure of the Satanic came from centuries of efforts to repress this non-existent thing, which had the side-effect of making an extremely durable yet empty discursive sphere capable of hosting a Satanic counterpublic. Taking up the 'wrong' end of Satanic public discourse, heavy Metal did more than play Devil's advocate, it solidified a counterpublic sphere of Metal meddlers who took an adversarial stance towards their own subculture as well as towards mainstream society. Existing before only in fantasy, the modern, Metal *civitas diaboli* developed its own textual para-site with and against dominant values.

Warner also notes that public 'texts' are not always textual. In the preceding, I've shown how Black Metal became a genre in line with Satanic books and movies but its contribution to Satanic culture was a sound derived in a reflexive relation with the field of heavy Metal's primary texts, recordings. The reciprocity between fantasies of Satanic sound, leading to efforts to censor heavy Metal, and the movement to produce that sound is a solid illustration of the public/counterpublic dynamic Warner tries to draw attention to, and the role of tape-trading networks and recording media speak to some ways Warner's theory of the public textual field may operate with non-textual 'texts' like sound recordings. With the public discourse on Satanism so solidly established as a means of drawing cultural boundaries to exclude other value systems, the space for a counterpublic was rhetorically cleared yet uninhabited until the 1960s countercultural revolution, when popular interest in real Satanism spread through England and the United States, sending wannabe Satanists, Christian Evangelists, and law enforcement on a quest to find the heart of a dark territory that had, over centuries, been discursively constructed.

Still, prior to the Black turn, heavy Metal had only flirted with this territory, suggesting that there may be Satanism afoot but turning to red-faced retractions when directly interrogated about the issue.

All the while, however, an archive of Metal called 'Satanic' was amassing. Regardless of the intentions of their authors, these works would be the textual references for later generations more eager to lay claim to this forbidden zone, making a counterpublic representing the Other of both heavy Metal and the Christian west. With the field of reference already seeded, Satanic Metal could sprout and spread. This history of Black Metal shows that there is a rhetoric of heaviness communicated on Metal albums, and that conversations about what is or is not heavy about Metal occur primarily but not exclusively on record. Further, although the result of such a dialogic enterprise is a code helping to differentiate one kind of heaviness from another, there is no absolute order to be referenced; in every Metal effort, the relative substance of its heaviness is regenerated.

6.4 CONCLUSION: SUBCULTURAL PLEASURES, SATANIC AND OTHERWISE

In looking at Satanism through the lens of heavy Metal, one encounters the phenomenon Warner describes (i.e., that the balance of power appears to be at the level of texts as such rather than on the side of either producers or audiences). It seems as if it is virtually impossible to do anything that would qualify as being undeniably Satanic. Consider that, officially, there is no such thing as Satanic crime in the U.S. In addition to debunking

myths of Satanic ritual abuse, the FBI's 1992 Study of Satanic Ritual Abuse states: "a satanic murder should be defined as one committed by two or more individuals who rationally plan the crime and whose primary motivation is to fulfill a prescribed satanic ritual calling for the murder. By this definition I have been unable to identify even one documented satanic murder in the United States." Further, by this definition, the Black Metal crimes in Norway do not count as Satanic crimes. Moreover, it is arguable that there is simply no such thing as Satanism because there is not actually any –ism there to speak of . Joshua Gunn's study of modern occult rhetoric argues that Satanism is unlike previous occult movements and their rhetoric because, Gunn argues, Satanism is not properly 'occult' by his definition, i.e., that it is concerned with revelation of secrets, because it is nothing but symbols, and a somewhat incoherent pastiche of them at that. The biggest secret about Satanism is that there is no secret, there is nothing other than the Symbolic Order that society keeps afloat. There is good reason to believe, therefore, that 'the Satanic' exists *only* as a fantasy that helps some people to make sense of their culture's symbolic systems, musical and otherwise.

Robert Pattison's *The Triumph of Vulgarity* summarizes the relationship between Rock music, in general, and the cultural environment in which it was born and continues to thrive:

> In its mythology, rock absolutely identifies its energies with those of Satan, just as Blake makes angelic imagination appear I the guise of a diabolic fiend in *The Marriage of Heaven and Hell*. The repressive morality of the established order will always perceive any excursion

> beyond its restraints as the work of Satan, and in its myths rock continually assaults these limits. (176)

Pattison goes on to marvel at how many people, from the political right as well as left, have so fallen for this Satanic mythos that they try to connect the counter-normative discourses of the music with cases of real-world deviance. Pattison notes, simply, that it is true that music has become more vulgar, "nevertheless conservatives have thrived, Christian revivals have prospered, the young fall in love and marry, the courts and the prisons still function, and property remains secure" (177). Basically, whatever is Satanic abut music is only so at the level of myth, or fantasy.

Further, one should not mistake the willingness of some to participate in the making of these myths for anything other than just that. Slavoj Zizek , analyzing Kripke's claim that it would be impossible to prove a unicorn's existence, argues that "when we encounter in reality an object which has all the properties of the fantasized object of desire, we are nevertheless necessarily somewhat disappointed; we experience a certain 'this is not it'; it becomes evident that the finally found real object is not the reference of desire even though it possess all the required properties" (91). Is this not also the problem with Satanists? For all the powerful fantasies of the Satanic that exist, what emerges whenever a would-be Satanist surfaces is usually disappointing. Is a confused, white, working/middle class, teenage male in a heavy Metal band really the object of those fantasies? Yes and no.

The dominant use of the Satanic label has been to mark certain modes of enjoyment as bad and others, the non-Satanic, as good. Of course, the temptation that comes from forbidding some fruits and not others should be plain, and the interest in

discovering or, failing that, creating authentically Satanic culture based on exactly those modes of enjoyment that are forbidden might well have been anticipated. Moreover, this wisdom seems apt given that, in the present day, Satanism is not so much a subject of broad concern so much as it is a symptom of anxieties regarding youth. Today, the fear is not so much that a politician, policeman, or otherwise influential member of the community may be involved with a secret Satanic sect. Rather, the issue nowadays tends to be about the effect Satanic symbols may have on young people.

Jan Jagodzinski casts youth music, including Metal, as a symptom of today's postmodern culture, which he prefers to call 'post-Oedipal' in order to draw attention to his point that youth music subcultures are formed in reaction to a cultural system that is acephalic, one that can no longer support a monolithic system of values but, instead, offers only unstable, inherently polysemic symbols. Such a scene, Jagodzinski contends, leaves people, youth especially, in a 'perverse landscape of the media' in which audiences are constantly confronted with the question of how to enjoy themselves in the absence of any grand scheme that would make meaning of the multitude of pleasures on offer. The appeal of subculture is that it allows entrée into symbolic spheres that seem to provide a stable value scheme, though on a less grand level. It is this move of individuals or subcultures to take the place of a greater, more traditional Other, like family, church, or state, that seems to perturb those who worry about contemporary Satanic music.

It should be recognized that one of the major contributing factors to the growth of a Satanic culture was not simply the frequent recurrence of the Satanic as a rhetorical trope but also the waning authority of the Church and religion as such with regard to cultural regulation. One is undoubtedly much freer now to explore modes of pleasure

outside of those confines, to go behind the rhetoric of the Satanic and inquire as to the real practices of Satanism, or at least of those things once called Satanic. Although the condition of possibility for Metal to become Satanic evolved over hundreds of years, the idea of Satanism as such is a more recent development, and intentional efforts to produce Satanic music are more recent still. In the history of Satanic culture, the slippage of authority that began with the declining role of religion in public life appears to have dropped the problem of Satanism in the laps of the state, which found no real cause for concern, and then to the family, which likely plays the greatest part in affecting Satanic culture. Again, Satanic Metal required a culture of the Devil to grow up in, which first requires people who believe in such things or, at least, in the affective value of the symbols related to them. Is it any surprise that those interested most in Satanism are children raised in Christian homes?

There is, to be sure, nothing essentially diabolical about heavy Metal in and of itself. Paul Greene's exploration of Nepali Pop finds that "heavy metal in Nepal has no history of association with Satanism (or any other evil spirit)" (206-207). Greene explains that heavy metal is not even heard as transgressive in Nepalese culture. Instead, it is a progressive symbol of globalism and modernization devoid of the anti-establishment affects accruing in the symbolic systems of western cultures. Nonetheless, in the United States, it remains a symbol of moral and spiritual decrepitude frequently labeled 'Satanic'. So, what a Satanist is and what such a person would listen to, is clearly not a question in the minds of listeners the world over, but in the United States, at least, the work of answering is now largely in the hands of heavy Metal fans. But, as it should

be clear, not all Metal is the same and the development of a Black code happened through questioning from within Metal subcultures as to what constitutes a Satanic aesthetic.

I have demonstrated how the possibility of a Satanic music genre was figured in popular culture well before heavy Metal began to dabble with the diabolical. I do not mean to suggest, however, that Black Metal as a generic style has been shaped specifically by these extra-Metal factors. Rather, what I find remarkable is that the Black Turn was not at all about whether or not one could possibly make such a thing as Satanic Metal, that was already a given, but about how Metal espousing Satanic ideas should sound. That is, there is a dual address in the Black Turn that is observable in most, if not all, subcultural productions: the work is aimed both at the mainstream culture that is Other to the subculture but also at the subculture itself. Clearly, reason for the Black turn was not that popular culture at large needed any more support to think of Metal as Satanic. Instead, it was a lack only identifiable within the Symbolic Order of heavy Metal subcultures that made something like Black Metal seem desirable.

BIBLIOGRAPHY

Acland, Charles. *Residual Media*. Ed., Charles Acland. Minneapolis, MN: University of Minnesota Press, 2007.

Adorno, Theodore. "The Curves of the Needle." Trans. Tom Levine. 55, 1990. 48-55.

Anderson, Tim. *Making Easy Listening: Material Culture and Postwar American Recording*. Minneapolis, MN: University of Minnesota Press, 2006.

Arnett, Jeffrey. *Metalheads: Heavy Metal Music and Adolescent Alienation*. Boulder, CO: Westview Press, 1996.

Attali, Jacques. *Noise: The Political Economy of Music*. Trans. Brian Massumi. Minneapolis, MN: University of Minnesota Press, 1996.

Arnopp, Jason. "Arson, Death, Satanic Ritual: The Ugly Truth About Black Metal." *Kerrang!,* No. 436. March 27, 1993.

Auslander, Philip. *Liveness: Performance in a Mediatized Culture*. New York: Routledge, 1999.

Baddeley, Gavin. *Lucifer Rising: Sin, Devil Worship, and Rock 'n' Roll*. Plexus Publishing,1999.

Bathory. Official Web Site. Online: www.bathory.se Accessed 5/1/06.

Benjamin, Walter. *Illuminations: Essays and Reflections*. Ed. Hannah Arendt. New York: Shocken Books, 1969.

Berger, Harris. *Metal, Rock, and Jazz: Perception and the Phenomenology of Music*. Hanover, NH: Wesleyan University Press, 1999.

Berger, Harris and Cornelia Fales. "'Heaviness' in the perception of Heavy Metal Guitar Timbres: The Match of Perceptual and Acoustic Features over Time." *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Eds. Paul Green and Thomas Porcello. Middletown, CT: Wesleyan University Press, 2005, 181-197.

Bijsterveld, Karin. 'The Diabolical Symphony of he Mechanical Age: Technology and Symbolism of Sound in European and North American Noise Abatement Campaigns, 1940-1930." *Social Studies of Science* 31 (1): 37-70, 2001.

Blush, Steven. *American Hardcore: A Tribal History*. Ed. George Petros. Venice, CA: Feral House, 2001.

Campion, Chris. "In the Face of Death." *Observer*. London, 2/20/05.

Chanan, Michael. *Repeated Takes: A Short History of Recording and Its Effects on Music*. London: Verso, 1995.

Christe, I. *Sound of the Beast: The Complete Headbanging History of Heavy Metal*. New York, NY: Harper Collins, 2003.

Circus of Dead Squirrels. Interview with the author, 7/3/06.

---. *The Pop Culture Massacre and the End of the World Sing-A-Long Songbook* (CD). Foranation, 2007..

Collins, Karen. "Dead Channel Surfing: The Commonalities Between Cyberpunk Literature and Industrial Music." *Popular Music*. 24 (2): 166-178, 2005.

Cunningham, Mark. *Good Vibrations: A History of Record Production*. London: Sanctuary Publishing, 1998.

Darkthrone. "Grave with a View." *Transylvanian Hunger* (CD). Peaceville, 1994.

Death Metal: A Documentary (DVD). n/a. Oaks, PA: Music Video Distributors, 2003.

Doyle, Peter. *Echo and Reverb: Fabricating Space in Popular Music Recording, 1900-1960*. Middletown, CT: Wesleyan University Press, 2005.

During, Elie. "Appropriations: Deaths of the Author in Electronic Music." *Sonic Process*. Ed. Mela Davila. Barcelona: Museu d'Art Contemporani de Barcelona y Actar, 2002, 39-57.

Ellis, B. *Lucifer Ascending : The Occult in Folklore and Popular Culture*. Lexington, University Press of Kentucky, 2004.

---. *Raising the Devil : Satanism, New Religions, and the Media*. Lexington, Ky., University Press of Kentucky, 2000.

Evens, Aden. *Sound Ideas: Music, Machines, and Experience*. Minneapolis, MN: University of Minnesota Press, 2005.

Fales, Cornelia. "Short-Circuiting Perceptual Systems: Timbre in Ambient and Techno Music." *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Eds. Paul D. Green and Thomas Porcello. Middletwon, CT: Wesleyan University Press, 2005, 156-180.

Fikentscher, Kai. "There's not a Problem I Can't Fix, 'Cause I Can Do It in the Mix: On the Performative Technology of 12-Inch Vinyl." *Music and Technoculture*. Eds. Lysloff and Gay. Middletown, CT: Wesleyan University Press, 2003, 290-305

Fish, Mick. *Industrial Evolution: Through the Eighties with Cabaret Voltaire*. London: SAF Publishing, 2002.

Fogarty, James. Interview with the author. 7/26/06.

Frith, Simon. *Music and Copyright*. Edinburgh University Press, 1993.

---. *Performing Rites: On the Value of Popular Music*. Cambridge, MA: Harvard University Press, 1996.

Fusili, Jim. "That's Good Enough for Me: Cookie Monsters of Death Metal Music." *Wall Street Journal*. New York, NY. 2/1/06

Gitelman, Lisa. *Always Already New: Media, History, and the Data of Culture*. Cambridge, MA: MIT Press, 2006.

Gorbman, Claudia. *Unheard Melodies: Narrative Film Music*. Bloomington, IN: Indiana University Press, 1987.

Gorilla Biscuits. "Start Today." *New Direction* (CD). Revelation Records, 1989.

Gracyk, Theodore. *Rhythm and Noise: An Aesthetics of Rock*. Durham, NC: Duke University Press, 1996.

Greene, Paul D. "Mixed Messages: Unsettled Cosmopolitanisms in Nepali Pop." Eds. Paul Green and Thomas Porcello. *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Middletown, CT: Wesleyan University Press, 2005, 198-221.

Green, Paul. D. and Thomas Porcello, Ed. *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Middletown, CT: Wesleyan University Press, 2005.

Gunn, Joshua. *Modern Occult Rhetoric: Mass Media and the Drama of Secrecy in the Twentieth Century*. Tuscaloosa, AL: University of Alabama Press, 2005.

Hall, Stuart. "Encoding, Decoding." *The Cultural Studies Reader*. Ed. Simon During. London: Routledge, 1993, 507-517.

Haenfler, Ross. Straight-Edge: Clean Living Youth, Hardcore Punk, and Social Change. Piscataway, NJ: Rutgers University Press, 2006.

Hanley, Jason. 'The Land of Rape and Honey: The Use of World War II Propaganda in the Music Videos of Ministry and Laibach', *American Music* 22 (1), 2004: 158-175.

Hebdige, Dick. *Cut'n'Mix: Culture, Identity, and Caribbean Music*. London: Routledge, 1987.

Hebdige, Dick. *Subculture: The Meaning of Style*. London: Routledge, 1979 (2002).

Hecht, Joshua. "Discriminating Aesthetic Components of Sound Recordings." Dissertation. University of San Francisco: School of Education, 1996.

Hennion, Antoine. "The Production of Success: An Anti-Musicology of the Pop Song." *On Record: Rock, Pop, and the Written Word*. Eds. Simon Frith and Andrew Goodwin. New York: Routledge, 1990.

Hennion, Antoine and Bruno Latour. "How to Make Mistakes on So Many Things at Once—And Become Famous for It." *Mapping Benjamin: The Work of Art in the Digital Age*. Eds. Hans Ulrich Gumbrecht and Michael Marrinan. Stanford, CA: Stanford University Press, 2003, 91-97.

Herbert, Matthew. "Personal Contract for the Composition of Music(2000)" Online: http://www.matthewherbert.com/pccom.php Accessed 9/21/07

Howard, David, Jude Brereton, Graham Welch, Evangelos Himonides, Michael DeCosta, Jenevora Williams, and Andrew Howard. "Are Real-Time Displays of Benefit in the Singing Studio? An Exploratory Study." *Journal of Voice*. Amsterdam, NL: Elsevier, 21/1: 2007, 20-34.

Jagodzinski, Jan. *Music and Youth Culture: A Lacanian Approach*. New York: Palgrave Macmillan, 2005.

---. Youth Fantasies: The Perverse Landscape of the Media. New York: Palgrave Macmillan, 2004.

Johnson, James. *Listening in Paris: A Cultural History*. Berkeley, CA: University of California Press, 1995.

Johnson, Roger. "Machine Songs I: Music and the Electronic Media," *Computer Music Journal* 15(2), 1991: 12-20.

Jones, Steve. *Rock Formation: Music, Technology, and Mass Communication*. London: Sage, 1992.

Katz, Mark. *Capturing Sound: How Technology Has Changes Music*. Berkeley, CA: University of California Press, 2004.

Kealy, Edward. "From Craft to Art: The Case of the Sound Mixer." *On Record: Rock, Pop, and the Written Word*. Eds. Simon Frith and Andrew Goodwin. New York: Routledge, 1990, 207-220.

Keil, Charles. "The Theory of Participatory Discrepancies: A Progress Report." *Ethnomusicology*. 39/1, 1995. 97-104.

Konow, H. D. *Bang Your Head: The Rise and Fall of Heavy Metal. New York*. NY, Three Rivers Press, 2002.

Klepko, John. "Acoustical Optimization of Control Room 'A' at the McGill University Recording Studios." Dissertation. McGill University: Faculty of Music, 1991.

Lanza, Joseph. *Elevator Music: A Surreal History of Muzak, Easy-Listening, and Other Mood-Song*. New York: Quartet Books, 1995.

Laing, Dave. *One Chord Wonders: Power and Meaning in Punk Rock*. Open University Press, 1985.

Lanning, Kenneth. *Investigator's Guide to Allegations of 'Ritual' Child Abuse*. Quantico, VA: National Center for the Analysis of Violent Crime, 1992.

Lasn, Kalle. *Culture Jam: How to Reverse America's Suicidal Consumer Binge—And Why We Must*. New York: Harper Collins, 1999 (2000).

Latour, Bruno. *Aramis, or the Love of Technology*. Cambridge, MA: Harvard University Press, 1996.

Lewis, J. R. *Satanism Today*. Santa Barbara, CA, ABC-Clio, 2001.

Lipton, Jeff. Interview with the author. 7/25/06.

Lockin' Out Records. "Limit of Destruction." Press release, 2007.

Lysloff, René and Leslie Gay, Jr. "Introduction: Ethnomusicology in the Twenty-First Century." *Music and Technoculture*. Eds. Lysloff and Gay. Middletown, CT: Wesleyan University Press, 2003, 1-22.

Mader, Matthias. Liner notes. *From Heaven to the Unknown*, Snapper Music, UK,1999

Malsky, Michael. "Stretched from Manhattan's Back Alley to MOMA: A Social History of Magnetic Tape and Recording." *Music and Technoculture*. Eds. Lysloff and Gay. Middletown, CT: Wesleyan University Press, 2003, 233-263.

Manning, Peter. *Electronic and Computer Music*. London: Oxford University Press, 1993.

Manuel, Peter. *Cassette Culture: Popular Music and Technology in North India*. Chicago, IL: University of Chicago Press, 1993.

Marx, Karl and Frederick Engels. *The German Ideology*. Trans. Lawrence and Wishart. Ed. C.J. Arthur. New York: International Publishers, 1970.

Massey, Howard: *Behind the Glass: Top Record Producers Tell How They Craft the Hits*. San Francisco, CA: Miller Freeman Books, 2000.

Massey, Bob. "Jonathan Kreinik: Boomboxmagnetica and Beyond." *Tape Op: The Creative Music Recording Magazine*. 57: 2007, 60.

McRobbie, Angela. *Postmodernism and Popular Culture*. London: Routledge, 1994.

Medway, G. J. *Lure of the Sinister: The Unnatural History of Satanism*. New York, NY, New York University Press, 2001.

Menocal, Maria Rosa. "The Flip Side." *Mapping Benjamin: The Work of Art in the Digital Age*. Eds. Hans Ulrich Gumbrecht and Michael Marrinan. Stanford, CA: Stanford University Press, 2003, 291-300.

Meintjes, Louis. *Sound of Africa!: Making Music Zulu in a South African Studio*. Durham, NC: Duke University Press, 2003.

Miller, Mark Alan. Interview with the author. 5/21/2006.

Miller, Paul. *Rhythm Science*. Cambridge, MA: MIT Press, 2004.

Moore, Allan. *Rock: The Primary Text*. Burlington, VT: Ashgate Publishing, 2001.

Moynihan, Michael and Didrik Soderlind. *Lords of Chaos: The Bloody Rise of the Satanic Metal Underground*. Venice, CA, Feral House, 1998.

Mudrian, Albert. *Choosing Death: The Improbable History of Death Metal and Grindcore*. Venice, CA, Feral House, 2004.

Neal, Charles. *Tape Delay: Confessions from the Eighties Underground*. London: SAF Publishing, (1987 [2001])

Neuenfeldt, Karl. "Nigel Pegrum, 'Didjeridu-Friendly Sections,' and What Constitutes an 'Indigenous' CD: An Australian Case Study of Producing 'World Music' Recordings." *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Eds. Paul Green and Thomas Porcello. Middletown, CT: Wesleyan University Press, 2005, 84-102.

Nocturn3Ev1l. "Rampage—Limit of Destruction." Online: **http://sharethefiles.com/forum/viewtopic.php?t=75030** Accessed 10/20/07.

Orridge, Genesis P. Interview in *Re/Search: Industrial Culture Handbook*. 6(7), 1983: 6-19.

Pattison, Robert. *The Triumph of Vulgarity: Rock Music in the Mirror of Romanticism*. New York, NY: Oxford University Press, 1987.

Perlman, Marc. "Golden Ears and Meter Readers: The Contest for Epistemic Authority in Audiophilia." *Social Studies of Science*. London: Thousand Oaks, 34/5: 2004, 783-807.

Pinch, Trevor and Frank Trocco. *Analog Days: The Invention and Impact of the Moog Synthesizer*. Cambridge, MA: Harvard University Press, 2002.

Porcello, Thomas. "Speaking of Sound: Language and the Professionalization of Sound Engineers." *Social Studies of Science*. 34/5: 2004, 733-758.

Purcell, Natalie. *Death Metal Music: The Passion and Politics of a Subculture*. Jefferson, NC, McFarland and Company, 2003.

Rachman, Paul. *American Hardcore* (DVD). Sony Pictures, 2007

Rampage. Interview with the author. 7/24/06.

---. *Limit of Destruction* (CD). Lockin' Out Records, 2007.

Reznor, Trent. "News 4/15/05." *Official Nine Inch Nails Web Site*. Online. www.nin.com. Accessed 5/25/06.

Richardson, J. T., Joel Best and David G. Bromley, Ed. *The Satanism Scare*. *Hawthorne*. New York, N:, Aldine De Gruytner, 1991.

Rose, Tricia. *Black Noise: Rap Music and Black Culture in Contemporary America*. Hanover, NH: University Press of New England, 1994.

Russolo, Luigi. 'The Art of Noises (1913)." *UBU Web*. Online: http://www.ubu.com/papers/russolo.html Accessed 9/27/07.

Savage, Jon. "Introduction." *Re/Search: Industrial Culture Handbook*. 6(7), 1983: 4-5.

Schaeffer, R. Murray. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, VT: Destiny Books, 1977 (2004).

Schmidt Horning, Susan. "Engineering Performance: Recording Engineers, Tacit Knowledge, and the Art of Controlling Sound." *Social Studies of Science* 34/5, 2004.

Sharpe-Young, Gary. *A-Z of Black Metal*. London: Cherry Red Books, 2001.

Small, Christopher. *Musicking: The Meanings of Performing and Listening*. Middletown, CT: Wesleyan University Press, 1998.

Sound.org. "Open Mix." Posted 4/2/05. Online: http://www.sound.org/open_mix.html Accessed 12/7/06.

Sterne, Jonathan. *The Audible Past: Cultural Origins of Sound Reproduction*. Durham, NC: Duke University Press, 2002.

---. "The Death and Life of Digital Audio." *Interdisciplinary Science Reviews* 31/4, 2006.

Straw, Will. "Characterizing Rock Music Culture: The Case of Heavy Metal." *The Cultural Studies Reader*. Ed. Simon During. London: Routledge, 1993, 368-381.

Symes, Colin. *Setting the Record Straight: A Material History of Classical Recording*. Middletown, CT: Wesleyan University Press, 2004.

Theberge, Paul. *Any Sound You Can Imagine: Making Music, Consuming Technology*. Hanover, NH: University Press of New England, 1997.

---. ""The Network Studio: Historical and Technological Paths to a New Ideal in music Making." *Social Studies of Science*. 34/5: 2004, 759-781.

Thompson, Emily. *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America: 1900-1933*. Cambridge, MA: MIT Press, 2004.

Toop, David. *Ocean of Sound: Aether Talk, Ambient Sound, and Imaginary Worlds*. London: Serpent's Tail, 2001.

Toop, David and Naut Humon. "Jury Statement: Prix Ars Electronica Digital Music Award." Online: http://www.aec.at/en/archives/prix_archive/prixJuryStatement.asp?iProjectID=12343 Accessed 7/24/07.

Toynbee, Jason. *Making Popular Music: Musicians, Creativity and Institutions*. London: Arnold, 2000.

Victor, J. S. *Satanic Panic: The Making of a Contemporary Legend*. Peru, IL, Open Court, 1993

Venom. "Black Metal." *Black Metal* (LP/Cassette). Neat Records, 1982.

Waksman, Steve. "*California Noise: Tinkering with Hardcore and Heavy Metal in Southern California*." *Social Studies of Science*. 34/5, 2004. 675-702.

Wallach, Jeremy. "Engineering Techno-Hybrid Grooves in Two Indonesian Sound Studios." *Wired for Sound: Engineering and Technologies in Sonic Cultures*. Eds. Paul Greene and Thomas Porcello. Middletown, CT: Wesleyan University Press, 2005, 138-155.

Walser, Robert. *Running with the Devil : Power, Gender, and Madness in Heavy Metal Music*. Hanover, NH, University Press of New England, 1993.

Warner, M. *Publics and Counterpublics*. Cambridge, MA: MIT Press, 2002.

Hellhammer. Liner notes. *Apocalyptic Raids* (CD). Futurist Records, NY, 1990

Weinstein, Deena. *Heavy Metal : A Cultural Sociology*. New York, NY: Maxwell Macmillan International, 1991.

Westergren, Tim. "The Music Genome Project." Online: pandora.com/mgp.shtml Accessed 4/25/07.

Wood., Robert. *Straightedge Youth: Complexities and Contradictions of a Subculture*. Syracuse, NY: Syracuse University Press, 2006.

Young, Tricia Henry. "Dancing on Bela Lugosi's Grave: The Politics and Aesthetics of Gothic Club Dancing." *Dance Research: The Journal of the Society for Dance Research.* 17(1), 1999: 75-97.

Zak, Albin J. *The Poetics of Rock: Cutting Tracks, Making Records.* Berkeley, CA, University of California Press, 2001.

Zizek, Slavoj. *The Sublime Object of Ideology.* New York, NY: Verso 1989 (1997).