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**Metal Machine Music:
Technology, Noise, and Modernism in Industrial Music 1975-1996**

A Dissertation Presented

by

Jason James Hanley

to

The Graduate School

in Partial Fulfillment of the

Requirements

for the Degree of

Doctor of Philosophy

in

Music

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Abstract of the Dissertation

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The British band Throbbing Gristle first used the term *Industrial* in the mid-1970s to describe the intense noise of their music while simultaneously tapping into a related set of aesthetics and ideas connected to early twentieth century modernist movements including a strong sense of history and an intense self-consciousness. This model was expanded upon by musicians in England and Germany during the late-1970s who developed the popular music style called *Industrial* as a fusion of experimental popular music sounds, performance art theatricality, and avant-garde composition. As a result, the first generation of Industrial music (1975-1983) can be understood as a modernist endeavor that connected philosophical ideals, including a Marxist critique of contemporary capitalist society and author William Burroughs' concept of the *information war*, with specific musical techniques mined from the past including the use of noise, indeterminacy, timbral exploration, and electronic and tape-based music. Throughout the dissertation I focus on how Industrial musicians, journalists, and fans worked to construct an

active, self-conscious history for themselves in a subculture that viewed musical sound as a form of political action.

This dissertation traces both the creation and breakdown of a modernist ideology within the history of Industrial music. I illustrate how the various modernist strands that led to the emergence of Industrial music in the 1970s were understood and combined, and how the eventual breakdown of that modernist paradigm in the mid-1990s resulted in the deterioration of the subculture. I do this by examining what I have labeled as three separate generations of Industrial music, mapping out the sound of each using phenomenologically based musical cues that musicians combined to compose a series of musical archetypes. The first generation (1975-1983) assembled the past into a unified subcultural and musical style. The second generation (1983-1989), including Front 242, Skinny Puppy, and Ministry attempted to assimilate contemporary popular music styles into the modernist framework in order to diversify their sound and reach a larger audience. During the third generation (1989-1996) bands like Nine Inch Nails and Marilyn Manson worked with music producers who had devised a sonic “formula” for the creation of Industrial music that eventually led to the music’s absorption into the mainstream of the popular music industry.

**For my wife Christine,
And my children Maisie, Ella, and Hannah**

Table of Contents

List of Examples	viii
List of Tables	x
Acknowledgements	xi
Introduction	1
I. Modernisms: The Historical and Cultural Framework	22
Toward an operational definition of Modernism in the 20 th Century	27
Philosophers of Modernism	33
Understanding Modernisms – Artistic Aesthetics and Political Systems	45
Machines and Manifestos – Futurism and Dada	47
Modernism and Politics from 1920 to 1945	61
Modernism, Utopia and Dystopia in Fictional Literature and Film before 1950	71
Inside Industrial Music	81
II. Musical Modernisms and the Post-War Avant-garde.	83
Luigi Russolo	90
Edgard Varèse and Organized Sound	94
Pierre Schaeffer and Musique Concrète	99
Karlheinz Stockhausen	105
John Cage – Silence, Noise, and Indeterminacy	112
LaMonte Young and Terry Riley: Minimalism	119
III. Musical Modernisms in Popular music 1967-1974	124
New York City Proto-Punk – The Velvet Underground	134
Space Rock – Pink Floyd	139
Krautrock – Kosmische Musik in West Germany	148
Can – “It’s the Rhythm”	151
Tangerine Dream – “It’s the Synthesizers”	158
Kraftwerk – “It’s the Future”	163
Introduction: Part Two	173
IV. Building the Machine: The Story of Throbbing Gristle and Industrial Records	189
Beginnings: The Status Quo	298

	Beginnings: Genesis P-Orridge (TG 1 of 4)	202
	Beginnings: COUM Transmissions	205
	Beginnings: Throbbing Gristle	212
	Sounds/Tapes: Early Sonic Experimentation	218
	Beginnings: The Formation of Industrial Records	223
	Noise and Fury: <i>The Second Annual Report</i>	230
V.	“Spread the Virus”: The First Generation of Industrial Music and Culture 1975-1983	236
	Reporting on the Subculture	239
	Tracks and Elements: Industrial Music Archetypes and Stylistic Cues	250
	Punk-Garage	254
	Ambient Noise	260
	Experimental Noise	266
	Metallic Percussion	274
	Synthesizer-based	280
	Mixture	283
VI.	“Assimilate”: Dance Beats, Electronic Noise, and Rock and Roll 1983-1989	288
	Reboot '83: The Second Generation of Industrial Music	292
	Historical Interlude: Synth-Pop 1977-1983	299
	Front 242 and RRE	313
	Skinny Puppy and Nettwerk Records	331
	Ministry and Wax Trax! Records	346
VII.	Splinter and Crack: The Third Generation of Industrial Music 1989-1996	358
	Pop Industrial: Nine Inch Nails and <i>Pretty Hate Machine</i> (1989)	360
	Turning Away 1990-1995: How John Fryer Ruined Industrial Music	368
	The Theater is Closed: Marilyn Manson and <i>Antichrist Superstar</i> (1996)	381
	Epilogue	389
	Bibliography	391
	Appendix A: Discography	403
	Appendix B: Selected Additional Listening	407
	Appendix C: Videography	409
	Appendix D: Industrial Music Styles	410

List of Examples

I.1	Industrial.org discussion, “Who Originated the Industrial Genre of Music” .	14
I.2	<i>Industrial Culture Handbook</i> reading/listening lists	16
1.1	AIR Ammo Box Poster	26
1.2	The Machine Demon Moloch in Fritz Lang’s <i>Metropolis</i>	80
2.1	Beguine rhythmic pattern in “The Dada Man”	85
2.2	Sound map of the opening section of “The Dada Man”	86
2.3	Measures 59-62 of <i>Hyperprism</i> (1923) by Edgard Varèse	96
2.4	Sound map of the first two minutes of <i>Etude aux Chemins de Fer</i>	103
3.1	Form and Pitch comparison of “Zyklon B Zombie and “I Heard Her Call My Name”	126
3.2	Sleeve cover to the 45rpm of “Zyklon B Zombie”	129
3.3	Lyrics to the first verse of “Zyklon B Zombie”	130
3.4	Musical Form in Pink Floyd, “Interstellar Overdrive”	143
3.5	Guitar and Bass riff from Pink Floyd, “Interstellar Overdrive”	144
3.6	Musical Structure in Can, “Hallelujah”	156
IT.1	Cues, Archetypes, and Sub-styles	184
4.1	Sample rhythmic/pitch patterns in Throbbing Gristle’s “Final Muzak”	221
4.2	Sound layers in Throbbing Gristle’s “Final Muzak”	222
4.3	“Music from the Death Factory” artwork	229
4.4	Front Cover of <i>The Second Annual Report of Throbbing Gristle</i>	231
5.1	Musical Form and Chord Progression in “Here She Comes Now”	256
5.2	Ambient noise versus Vocal Samples in “Vally of the Shadow of Death”	265
5.3	Amplitude waveform graph of “Slogun” by SPK	269
5.4	Frequency Spectrum analysis graph of “Slogun” by SPK	271
5.5	Frequency Spectrum analysis graph of “Here She Comes Now” by the Velvet Underground	271
5.6	Metal columns reverb effect in Einstürzende Neubauten’s “Stahlversion”	277
5.7	Opening Factory Rhythm of “Stahlversion” measures 1-8	278
5.8	Synthesizer rhythmic/pitch pattern in “Blank Clocks: by The Future”	282

List of Examples (cont.)

6.1	Lyrics to “Assimilate” by Skinny Puppy	290
6.2	Factory Rhythms in “Blue Monday” by New Order	306
6.3	Delay effect added to a quarter note kick drum pattern	307
6.4	Factory Rhythms and Musical Layers in “Pipeline” by Depeche Mode	311
6.5	<i>Front</i> by <i>Front</i> 3+3+2 Sixteenth-Note Note Rhythmic Pattern	322
6.6	Opening Factory Rhythm in “Headhunter V 3.0” by Front 242	323
6.7	Kick drum rhythm in “Headhunter V 3.0” by Front 242	324
6.8	Factory Rhythm and Synthesizer parts in “Headhunter V 3.0”	325
6.9	Chorus of “Headhunter V 3.0” by Front 242	327
6.10	Musical form of “Dogshit” by Skinny Puppy.	340
6.11	Selection of lyrics from Segment 1 of “Dogshit” by Skinny Puppy	342
6.12	Lyrics from Segment 3 of “Dogshit” by Skinny Puppy	343
6.13	Amplitude Waveform Graph of “Dogshit” by Skinny Puppy	344
6.14	Jello Biafra Speech at a Ministry Concert	354
6.15	Biafra and Jourgensen during “The Land of Rape and Honey”	354
6.16	Ministry, “The Land of Rape and Honey”	355
7.1	Marilyn Manson, “Antichrist Superstar” (Live, from <i>Dead to the World</i> concert video)	386

List of Tables

4.1	Throbbing Gristle live at the AIR Gallery (7.6.1976)	.	.	.	.	191
5.1	Musical Cues of the First Generation Bands	.	.	.	.	252
5.2	Additional stylistic Cues in the Punk-Garage Archetype	.	.	.	.	255
5.3	Additional stylistic Cues in the Ambient Noise Archetype	.	.	.	.	262
5.4	Additional stylistic Cues in the Experimental Noise Archetype	.	.	.	.	266
5.5	Additional stylistic Cues in the Metallic Percussion Archetype	.	.	.	.	275
5.6	Additional stylistic Cues in the Synthesizer-based Archetype	.	.	.	.	281
6.1	Musical Cues of the Second Generation Bands	.	.	.	.	297
6.2	Sub-styles of the Second Generation	.	.	.	.	298
6.3	Musical Cues in the music of Front 242 (EBM)	.	.	.	.	317
6.4	Musical Cues in the music of Skinny Puppy (Industrial Noise)	.	.	.	.	335
6.5	Musical Cues in the music of Ministry (Industrial Rock)	.	.	.	.	349
7.1	Musical Cues of the Third Generation Bands	374
7.2	Producer Projects during the Third Generation, 1990-1996	376

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Introduction

I remember the very first time I ever heard an Industrial music record. It was 1988, my freshman year in college, and some of my friends had invited me along to the university radio station to pick up a friend of theirs on the way to dinner. He wasn't ready yet, but he told us we could listen to some music in the lounge of the station and showed us a stack of new records that had just come in that week. I think it was an album cover that attracted me first. It was grainy, and hard to make out, and the muted colors looked different from all of the other more recognizable band names and flashy photos. The album title was also different: *The Land of Rape and Honey*. But nothing prepared me for the sound soon to burst forth from the stereo speakers. The crackle and hiss of the empty record grooves soon gave way to the flanging hiss of a high hat cymbal, and eventually there came a blast of distorted guitar noise unlike anything I had ever heard before. Even the punk and metal records in my collection did not equip me to deal with that sound.

My popular music upbringing was a solid one, thanks to my parents. Elvis Presley, Johnny Cash, and doo-wop gave way to my own obsession with the Beatles, and then, in middle school, a top 40 radio phase. In high school I listened to progressive rock and new wave. The best preparation I had for what I heard in the college radio station that day was either Depeche Mode or Iron Maiden, but the sound of *The Land of Rape and Honey* by the band Ministry was much more...brutal. That was the day I first learned about Industrial music. How else, other than a college radio station, was I supposed to learn about it? Surely no one would ever play it on the top 40 radio stations I listened to in middle school. I found other people who taught me about this music, about the dark night clubs downtown where people danced to this music until 3 am while dressed in black clothing and wearing black nail polish and lipstick, about the music

that had come before such as Cabaret Voltaire and Kraftwerk. Then I read the books that the lyrics talked about—like *Naked Lunch* and *Brave New World*. The music painted a bleak picture of the world, but also gave a sense of empowerment to its listeners. At that time, my friends and I felt that that we could begin to see past the commercialism and politics of society and glimpse the “control networks” that existed underneath. The music asked us as listeners to think for ourselves and move outside *the system*.

Industrial is essentially a genre of popular music. It constitutes a large catalog of commercial recordings, which are created in recording studios with the assistance of sound engineers and producers. These products contain graphics and advertising, and are eventually purchased by a public audience. The creation of the music is not subsidized by private donors or government agencies, and musicians must be able to turn a profit in order to continue recording. Industrial music concerts take place in bars and nightclubs, and at the height of its popularity in the late 1980s even in large stadiums. It has a system of star performers who conduct interviews, release press photos, and help to create the image and style of the scene. At times, it has attracted a large following that can be considered a subculture of Euro-American society.

Yet at its core there lies an aesthetic that is out of place in the traditional popular music/rock paradigm. Industrial music consists of noise sounds that are unacceptable even in some of the most aggressive popular music. Industrial musicians only occasionally produce pieces that could be considered songs in the formal sense, often relying on larger and more subtle structuring devices. The degree of concern with originality, progress, and social commentary, along with the particular sound qualities used, allies Industrial music more with contemporary classical music than with most forms of popular music. Industrial music is, by design, simultaneously a part of popular culture and a modernist Trojan horse seeking to tear the system

of Western culture down from the inside out. As such, the musical style finds itself caught between the dual biases of popular music studies: a bias against music that is too popular to be truly authentic (pop music), and one that is against music that is too complex to be of the people (art music). But when the sounds of Ministry's song "Stigmata" from the album *The Land of Rape and Honey* blasted out of that radio station stereo system, it had a sound that communicated grassroots authenticity. It was popular music with a good beat and an incredibly heavy sound, but I could feel that there was something deep and complex just below the surface. It felt real then, and it still does now.

On Popular Music

A clear judgment concerning the relation of serious music to popular music can be arrived at only by strict attention to the fundamental characteristic of popular music: standardization. The whole structure of popular music is standardized, even where the attempt is made to circumvent standardization. . . . Most important of all, the harmonic cornerstones of each hit – the beginning and the end of each part – must beat out the standard scheme. This scheme emphasizes the most primitive harmonic facts no matter what has harmonically intervened. Complications have no consequences. . . . Every detail is substitutable; it serves its function only as a cog in a machine.

Theodor W. Adorno (with the assistance of George Simpson)
From "On Popular Music" 1941¹

Theodor Adorno's 1941 article, "On Popular Music," has become an albatross for popular music studies. His harsh criticism of twentieth century music created for a wide public audience antagonizes scholars who take popular music as the object of their study. And although one might wish to dispel the conclusions that Adorno comes to regarding the disposable nature of popular music, it is impossible to ignore the fact that many of his accusations about the repetitive and formulaic nature of the music are often true. While Adorno's work finds itself

¹ Theodor Adorno, "On Popular Music," In *On Record*, ed. Simon Frith and Andrew Goodwin, 301-331 (New York, Routledge, 1990), 302.

contained within the musical value debates of his time regarding jazz, swing, and jitterbug, it also established two basic arguments that continue to plague the field today. First, it pits the value of popular song against that of serious composition, and does so by claiming that popular song is based on the standardization of musical parameters, and therefore contains few of the esteemed and innovative techniques of art music.² Second, Adorno proposed that popular music was incompatible with the ideals and listening practices of serious modern music and instead categorized its listeners as either “rhythmically obedient” or “emotional.” The music’s adherence to a simple pulsing beat, claimed Adorno, suggested a sociological obedience to a mechanical collectivity.³ Adorno’s work was firmly rooted in his leftist political stance centered in Marxism; his critique classified popular music as part of the culture industry and a tool of capitalism. Songs were allegedly composed as if on an assembly line, designed to please and soothe the masses while simultaneously lulling them into a trance of complacency and transforming them into the gears of the capitalist machine.

Adorno’s musical arguments reflected deeper held beliefs within the field of musicology that seriously hindered the ability of scholars to engage with popular song on its own terms, as a musical form with its own set of values—i.e. the valuation of rhythm and timbre over the more traditional pitch and harmony. Adorno’s statement and others like it may have often dissuaded musicologists from pursuing the connections between “serious composition” and popular music but it did not stop musicians in the twentieth century from forming them. While it may appear that musical details within popular music are simply reduced to the function of cogs in a

² Adorno was by no means the first person to place these two musical styles as separate from one another; in fact he mentions this commonly held perception in the opening paragraph of the article. His “turn” was to place them against one other, claiming that popular music was not just something different, but instead a pale ghost of serious music.

³ It should be noted that Adorno also attacks Igor Stravinsky and Paul Hindemith for what he calls an anti-romantic feeling, one that allows their focus on rhythm and “reality” to create a music overly concerned with the machine age.

machine, it was the very idea of the machine itself that became a source of inspiration to many musicians in the twentieth century. One of the major themes present in the arts and sciences of western societies within the twentieth century was the glorification of the machine, the mechanical, and the relationship between the human body and technology.

Adorno's declaration of an incompatibility between serious music and popular music was, ironically, supported by the dominant paradigm of subsequent rock music history. The histories put forth by journalists and cultural theorists in academic circles beginning in the mid-1960s suggested that rock music was valued for its revolutionary traits, its disavowal of bourgeoisie norms, its loud volume, and its do-it-yourself attitude.⁴ As a whole these traits indicated that rock music did not value development, intercontextuality, and complexity. Many forms of rock music that demonstrated these traits were panned by the popular press, such as the progressive rock movement of the 1970s, which often still finds itself excluded from the rock music canon today, including most popular music textbooks and even the list of inductees at the Rock and Roll Hall of Fame. It is for this reason that the narratives of so many rock music textbooks and articles continue to focus on psychedelic rock and punk music, the most obvious of all the loud, do-it-yourself (DIY) rebellions, that either take convention or rebellion as their norms.

The perceived division between serious music and popular music became embedded in the framework of popular music studies, and is played out within the two kinds of works typically published in the field of popular music studies: those that contain musical notation and

⁴ As early as 1964 Stuart Hall and Paddy Whannel summarized this division by saying that popular music was seen as symbolizing "some sort of deep undermining of adult authority and tastes." Reprinted in *On Record*, ed. Simon Frith and Andrew Goodwin, 27-37. On the journalistic side, Jann Wenner's "A Letter from the Editor" in the first issue of *Rolling Stone* in November of 1967 stated that the magazine was going to reflect changes in society related to rock and roll and was designed for, "the artists, the industry, and every person who 'believes in the magic that can set you free.'"

those that do not. This assertion is a simplistic way to categorize scholarship on popular music; however, the binary highlights a major division in methodology that still concerns scholars in the field today. Studies published by musicologists often tend to privilege the text of a musical work, what Philip Tagg has termed “notational centrality,” focusing on such issues as transcription, chord progressions, formal analysis, and lyrical analysis.⁵ The investigations of cultural theorists and sociologists, on the other hand, tend to analyze the music from a production-consumer approach, examining the economics of the music industry and the ways in which listeners receive, process, and make use of these products. This division arises from the interdisciplinary nature of popular music studies as a field, something that is necessary if one attempts to understand not only the musical texts generated by musicians but also how those texts function within a complex set of relationships, thus allowing for both text- and context-based study.

It is the broader goal of this dissertation to combine aspects of cultural studies with musicological analysis in order to investigate how the popular music style called Industrial was created by musicians within the dynamic system of the music industry and defined within a subculture consisting of musicians and audience members. A work of art interacts with the audiences that receive it both as aesthetic object and product. Sometimes this occurs simultaneously and sometimes separately.⁶ If we consider the sounding work as a part of the triangular paradigm of creation, distribution, and consumption, then an analysis of the work

⁵ Philip Tagg, *KOJAK, 50 Seconds of Television Music: Toward the Analysis of Affect in Popular Music* (Göteborg: Studies from the Department of Musicology, 1979), 28. Also see Richard Middleton, *Studying Popular Music* (1990) and David Brackett, *Interpreting Popular Music* (1995).

⁶ Music is almost always directly connected to society through its function within that society. Art is almost never truly “autonomous.” The difference is that popular music often directly and consciously engages society with the goal of creating a profit. As in the case of a “hit factory” such as the Brill Building in New York and Motown Records in Detroit; the “Boy Band” phenomenon such as The Jackson Five, New Edition, New Kids on the Block, and N’Sync; and more recently in the Disney mega-music machine based around Hannah Montana, *Camp Rock* and *High School Musical*.

becomes the study of how music is created, distributed, and consumed. One can also consider the audience of the particular musical genre, how the musicians respond to these audiences, how the record companies market the music accordingly, or even how major record labels push an artist in a particular stylistic direction based on public response to what is currently considered popular.⁷ By keeping the sounding work at the center of this study we can see how music provides an impetus for aspects of subcultural identity: which musical features connect a song to a particular style, what makes the music “move” a particular audience (physically or emotionally), or how the musicians create the sound that is so easily identifiable by large numbers of fans.⁸

Studies based in both musicology and cultural studies are often guilty of exclusion when it comes to the analysis of timbre, and the number of studies that examine it as an essential element in the creation of music can be counted on one hand.⁹ Some recent work in this area, such as Danuta Mirka’s study of Penderecki’s music, suggests a descriptive notational system that is based in the kinds of materials that are used in the production of sound – an approach based on the composer’s own prescriptive graphical scores such as *Threnody for the Victims of*

⁷ The list of musicians who were convinced to change their musical direction in response to the vocalizations of the “masses” and the pressure of the music industry is a long one.

⁸ Many music studies do not keep the sounding work at the center of their discussion, and this can often be problematic. Keith Negus in his introductory book to the theories used to study popular music, *Popular Music in Theory* (1996), confronts this issue in his introduction. “...this book contains little direct engagement with formal musicology. . . . Despite its usefulness, and in spite of my best efforts, I am simply not conversant enough with the discipline to include substantial musicological references.” p. 4. This not only presents us with the attitude that popular music studies has several different approaches, but also that musicology is one of those that can be left out. The book contains many musical issues, but absolutely no music theory or analysis. The same is true of Roy Shuker’s dictionary for popular music studies *Key Concepts in Popular Music* (1998). There are, of course, several books that do examine the music from both viewpoints, such as Robert Walser’s *Running with the Devil* (1993) and Trica Rose’s *Black Noise* (1994), but these studies are more often an exception than the rule.

⁹ Robert Cogan’s work in this area is the most substantial to date including: *New Images of Musical Sound* (1984), *Sonic Design: The Nature of Sound and Music* co-authored with Pozzi Escot (1976), and *Sonic Design: Practice and Problems* co-authored with Pozzi Escot (1981). Also see Wayne Slawson, *Sound Color* (1985).

Hiroshima (1960).¹⁰ While helpful, these systems only tell us part of the story when describing the various synthesizer-based timbres that are at the heart of much Industrial music - the kinds of electronic sounds that Jean-Charles François has called “dynamic timbres.”¹¹ For the study of a musical style such as Industrial, where the music revolves around the creation of evolving sonic timbre landscapes and not pitched-based harmony, this kind of investigation becomes essential.

Several authors have suggested that the study of popular music is, and should always be, accomplished through a synthesis of various approaches and methodologies, each examining separate aspects of the field.¹² Since the term “popular” brings such a large number of divergent musical genres together under one designation, it may be impossible to create a single method or system of study to enable effective analysis. I believe that each individual study should attempt to incorporate the analytical tools available in order to explore the layers of the music and the process of musical reception. By investigating popular music styles on three interconnected levels—creation (the musicians), marketing (the industry), and reception (the audience)—it is possible to begin an understanding of not only how the music is created, but also how that text is consumed and understood by millions of different people.¹³ I suggest that we go beyond surface level connections, and attempt to represent musical sound and subcultural behavior and style as manifestations of a larger self-created philosophy. The development of Industrial music was a

¹⁰ Danuta Mirka, “To Cut the Gordian Knot: The Timbre System of Krzysztof Penderecki,” *Journal of Music Theory* 45, no. 2 (Autumn, 2001): 435-456.

¹¹ Jean-Charles François, “Fixed Timbre, Dynamic Timbre,” *Perspectives of New Music* 28, no. 2 (Summer, 1990): 112-118.

¹² Will Straw addressed this issue in his closing remarks for the 1999 IASPM conference. “Instead of ambitious attempts at methodological synthesis, we now have a plurality of approaches, in which formal and non-formal kinds of analysis are brought into play to respond to the exigencies of a given case study, not as building blocks in the elaboration of a great, unifying Method.” Reprinted in *The Review of Popular Music* No. 27/28, July 1999. He later points out that this new “easy” attitude may result in the organization’s deterioration into a series of “show-and-tell” events that are devoid of any shared understanding of deep analysis.

¹³ This is more than a circular process in which the reception stage may cause changes in the creation stage; it is in fact a triangular process. Each part of the triangle is connected to every other part, and changes on any side or angle will affect the rest of the sides and angles. The music or the “text” itself can be viewed as an entirely different object centered in the middle of the triangle and subject to the three interconnected viewpoints.

conscious action on the part of musicians and audiences to create the sounds and histories of its own particular subculture.

There are several tools that I will use in the analysis of both musical and cultural texts, with the goal of connecting the two methods. I will make use of traditional transcriptions in conjunction with the analysis of traditional musical parameters. I have developed a phenomenological sound score approach to represent timbre that allows for representations of both performed and heard sounds—showcasing situations where the sonic results of Industrial music may be more than the sum of its enacted parts. Both of these descriptive scores will be used in association with phenomenological and semiotic theory in order to connect the musical issues to those of the surrounding subculture. Cultural texts such as song lyrics, live performances, and music videos will also be analyzed using these semiotic and theoretical ideas.

I consider other texts including published interviews with artists; published interviews with fans; published music critic reviews; fanzines; websites, email groups, blogs, and posting sites. Because of my professional connection to Industrial music I will also take into consideration conversations I have had with musicians and record label executives over the years, and several new interviews I have conducted while working on the dissertation with Al Jourgenson from Ministry, Peter Hook from Joy Division/New Order, Tommy Victor from Prong/Ministry, Paul Lemos from Controlled Bleeding, Richard from Neikka RPM, Ron Musarra and Aaron North from Nine Inch Nails, Sin Quirin from RevCo/Ministry, and Cosey Fanni Tutti from Throbbing Gristle. My professional work as a musician, and as an employee of the Rock and Roll Hall of Fame and Museum, has given me access to these kinds of interviews and conversations, and is essential to my overall methodology. In order to understand the subcultural nature of Industrial music, I have to understand how its musicians make musical and

social connections, and to verify particular aspects of my theories about how, and why, they made their music the way they did.

On Industrial Music

During the 1960s and 1970s particular strands of modernist thought developed as musicians began freely making connections between “serious” and “popular” forms of music.¹⁴ The Industrial music style and subculture developed in the mid-1970s in England and Germany from a mixture of experimental popular music sounds, performance art theatricality, avant-garde compositional techniques, and an ideological framework based on modernist philosophy.¹⁵ Although Krautrock groups such as Kraftwerk and Can had previously referred to their music as organized noise that was the product of a youthful industrial generation, the particular use of the word *Industrial* to describe a musical movement can be traced directly to the formation of the Sheffield, England-based group Throbbing Gristle in late 1975. Throbbing Gristle used the term *industrial* to describe the sound of their music while simultaneously tapping into a related set of ideas and imagery connected to early twentieth century modernism – i.e. factories, machinery, and the struggles of the working class. In 1976 they created their own independent record label called Industrial Records, and recruited a roster of British bands with a similar sound and mission based on the concepts of sonic and political noise, including Cabaret Voltaire, Clock DVA, and SPK. By the late 1970s German groups such as *Einstürzende Neubauten* (Collapsing New Buildings), *Die Krupps* (The Krupps [Family]), and *Deutsch Amerikanische Freundschaft* (German-American Friendship, aka DAF) created a more percussion-based sound by using

¹⁴ For more on this topic see Bernard Gendron, *Between Montmartre and the Mudd Club: Popular Music and the Avant-garde* (Chicago: The University of Chicago Press, 2002).

¹⁵ The use of the term *avant-garde* refers to the music of the concert tradition throughout the twentieth century, and I will argue that particular avant-garde ideas and methods make their way into the Industrial music vocabulary.

sledgehammers, power tools, and sheet metal to produce their own brand of metallic industrial music.

The specific stylistic characteristics produced by early industrial bands varied from one group to the next but they were generally harsh and abrasive and played at extreme volumes, frequently with the purpose of causing physical pain to audience members. One 1978 performance by Cabaret Voltaire was described as being intense and probing “at the cost of comfort and listenability.”¹⁶ Synthesizers, multi-track tape recorders, drum machines, and distorted vocals formed the core instrumentation for both recordings and live performances. Musicians used guitars and percussion, incorporating them in a manner more common to avant-garde art music than to rock performance practice. This included banging instruments on the ground, playing on “found object” percussion, using extreme amplifier feedback and sculpted white noise sound for extended periods of time, and strumming rhythmically across the neck of a guitar without fingering traditional chords. Many of these techniques had previously been used in the music of Jimi Hendrix, the Who, and the Clash as effects within a performance, but did not constitute the body of the song. Industrial groups also made use of specific avant-grade composition and performance practices such as Pierre Schaeffer’s *musique concrète*, John Cage’s indeterminacy, Karlheinz Stockhausen’s *elektronische musik*, and Terry Riley’s minimalism.

The rise of industrial music was directly tied to the socio-economic status of the United Kingdom in the 1970s. Industrial music was not a celebration of the industrial revolution, or of modern industrial might. Industrial musicians suggested that unless aggressive political and social reform was carried out, the people of the world would eventually have to live in what was

¹⁶ Gill, Andy, “The Catch 22 of Cabaret Voltaire,” *New Musical Express*, Aug 5, 1978, 37.

left over—the broken factories and the scarred landscape. Building on the philosophies of Marx and Nietzsche, industrial musicians claimed that the poverty and despair of the late twentieth century was a result of post-industrial society, and that change must be carried out through what author William Burroughs called the “information war.”¹⁷ Burroughs suggests that the majority of people on the planet are always being oppressed by the very fabric of society itself. This oppression is encoded within the most basic social structures of nation and family, and concepts such as good and evil. Words, music, and images are all parts of the system of control that must be cut, smashed, and broken for us to be able to see them for what they really are. Writers, artists, and musicians must lead the revolution and manufacture change by creating noise in the system. This information war became the mission of the earliest Industrial musicians but also continued into subsequent generations. If the system itself is the enemy, then the war against it continues regardless of who the political leaders are at any particular moment or in any particular place.

In his well-known *Noise: The Political Economy of Music*, Jacques Attali examines the ways in which the dominant social class of a society draws a line between sound that it considers “music” and that which it considers “noise.” This, he claims, is in itself a political action, an exercise in the use of power, for no sound is intrinsically noise; it only becomes such when someone deems it to be an unwanted sound, interfering with the reception of proper or accepted sounds. While Attali’s study of the political nature of noise has spawned a large body of scholarship, none of it actually confronts the musical issues behind the politics: how we describe

¹⁷ See William S. Burroughs (with Daniel Odier) *The Job: Interviews with William S. Burroughs* (Middlesex, England: Penguin Books, 1974).

the sounds that are considered noise, and, more importantly, how they change from noise back into music through compositional organization within a particular style of music.¹⁸

During the 1970s Industrial musicians began to build their own musical techniques and a history regarding the use of noise in music. They deliberately attempted to connect that musical venture to the use of political and social noise that was described by Burroughs, linking it to Marxist and Nietzschean philosophy. This allowed Industrial musicians to create a web of history that linked their own artistic endeavors to the past, and push it forward into the future. While it often appears that history is waiting to be discovered, artistic history is in reality something forged by the members of a particular artistic/musical subculture. Drawing on the work of literary critic Mikhail Bakhtin, George Lipsitz has suggested that we consider popular music as dialogic, “the product of an ongoing historical conversation. . . . The traces of the past that pervade the popular music of the present amount to more than mere chance. . . . They reflect a dialogic process, one embedded in collective history and nurtured by the ingenuity of artists.”¹⁹ Artistic history does not always have to be a direct chain of cause and effect, evolving from one step to the next, confined to one particular art form. More often it is an open-ended construct weaving strands between different ideas and art forms, between literature and music, film and politics. Over time, strands can dissolve and be replaced by others, even after the influence of the original strand had already been assimilated.

¹⁸ *Rhythm and Noise* by Theodore Gracyk: *An Aesthetics of Rock* (Durham: Duke University Press, 1996) contains chapters such as “Pump up the Volume” and “Jungle Rhythms and Big Beat,” both of which start out as discussions of noise as compositional device, but both chapters quickly dissolve into discussions of classical Rock texts, and the closest Gracyk ever comes to a discussion of musical timbre in detail is his analysis of rock’s famous electric guitar sounds. Other such books include: David Toop, *Ocean of Sound* (New York: Serpent’s Tail, 1995) and Thomas Swiss, ed., *Mapping the Beat* (New York: Serpent’s Tail, 1998).

¹⁹ George Lipsitz, *Time Passages: Collective Memory and American Popular Culture* (Minneapolis: University of Minnesota Press, 1990), 99.

As these strands grow and connect, they form a web of ideas with an even larger sphere of influence. Throughout the dissertation I use the concept of an actively constructed history as a method to describe the way that modernist ideas are understood and practiced by Industrial musicians. While modernism is characterized by originality, it is also obsessed with the past and connections to that past. As such, modernism is not one particular stylistic turn or technique, and instead can be understood as the connection of ideas across boundaries both artistic and chronological made by whoever is at the end-point of that particular modernist strand. Works of art may be understood and interpreted by different groups or subcultures, each claiming an entirely different level of influence, and maybe for an entirely different reason. This dissertation investigates the development of the Industrial subculture and explores how a specific, particular modernist strand was actively constructed by the musicians and fans within the subculture – the core of Industrial music’s style, personal identity, and group ideology.

Numerous musicians and members of the Industrial subculture have spoken directly about their connection to the ideologies of modernism, and their use of the modernist aesthetic in their artwork. Industrial musicians see this as an intentional artistic goal of their work, and fans develop it even further into an active dialogue within the subculture at large. Example I.1 shows a 2004 exchange between several Industrial music fans participating in the online chat forum *Indurstrial.org*, which demonstrates that not only are they aware of this history, but that they also passionately debate both the stylistic boundaries and the meanings it has for them as fans of the music.

Example I.1
Industrial.org discussion, “Who Originated the Industrial Genre of Music”

Post subject: Who Originated the Industrial Genre of Music?

- This may sound like a stupid question, but, just out of curiosity, who or what band is generally regarded as the pioneer of industrial music? I first became aware of Nine Inch Nails and Nitzer Ebb around 1990 but as mainstream as my sources are, I'm sure these weren't the first.
- Some of the pioneers are Throbbing Gristle (UK) and Eintürzende Neubauten (GER).

- Throbbing Gristle coined the term "industrial music for industrial people" many years ago.
- Before the term Industrial you need to look into the works of French composer Pierre Henry.
- throbbing gristle and monte cazazza were probably the first, they coined the term, but avant-garde composers had been experimenting with the idea of making music from found and altered sounds since, I think, the forties or so. That was called musique concrete. 'nothing is true, everything is permitted'
- *Post subject: a little further back* - You can even go back to early 20th century to find more on "machine" music with the Dadaist and Futurists (i.e. Luigi Russolo).
- Kraftwerk?
- YOU DON'T KNOW WHO KRAFTWERK IS!?!?
- Oh, I know who Kraftwerk is, but what did they have to do with the origin of Industrial music?
- They are the major origin of electronics in music...
- Here are some good essay type articles on the history/pre-history of Industrial music;
<http://media.hyperreal.org/zines/est/articles/preindex.html>
- "Without music, life would be a mistake" --F. Nietzsche
- *Post subject: industrial history* Monte Cazzazza coined the term, to describe gristle. It's a campaign, it has nothing to do with art.
- To take it any further back than where the term was coined is moot, as the music was something else before that. Be it "experimental," "Krautrock" or whatever.
- I would say the Industrial genre undoubtedly sprung from the Krautrock movement...
- No it didn't, while Throbbing Gristle may have shared influences with Krautrock (i.e. Stockhausen) they are 2 very different things. Industrial is not just music, it is a set of ethics and philosophies.
- Well, uh, I'm talking about the style of music here...
- But that's the thing, industrial isn't just music, read the link someone posted. And while taking it back as far as I did is ridiculous, I'd say the work of Russolo was definitely Industrial music, it just wasn't referred to as such, not only in sound, but also in aesthetics, i.e. the "industrial" aesthetic and the use of anti-music.²⁰

It is fascinating to note that the postings contain references to Industrial musicians, avant-garde musicians, and modernist philosophers. The last posting attempts to examine the validity of considering Luigi Russolo's music "industrial," and one posting includes a short quote from the philosopher Friedrich Nietzsche. Even within this short online post we begin to see that the Industrial music subculture has an especially self-conscious sense of its own history. The participants are careful to state the fact that particular musical groups or composers might normally be labeled "experimental" or "krautrock" and that they are not in fact Industrial musicians; however, they also suggest that these artists do figure into the larger picture of the Industrial subculture.

²⁰ Taken from the online chat forum on the website www.industrial.org on Wednesday, January 07, 2004; the postings originally occurred between May of 2002 and December of 2003. Bullets represent the consecutive postings on the forum. All text has been reprinted exactly, including the original errors.

These debates are an important and active part of the subcultural experience for fans and musicians alike, and result in a strong educational component. Within the postings long-term fans attempt to explain the musical roots of Industrial to newer ones, including many links to books, articles, music, and other texts. This educational aspect has always been a major factor of the Industrial subculture even before the birth of the internet. The *REsearch* [sic] *Industrial Culture Handbook*, published in 1983 by the alternative press V Search, includes interviews, discographies, and biographies of various groups and musicians. It also includes several lists of books and films that Industrial musicians possess in their own personal libraries, and offers additional reading lists. Example I.2 shows a selection from the lists printed in the book (the full set of lists would take up over ten pages, and items that appear on more than one list are not duplicated here). While the selections I have chosen serve the purpose of demonstrating the involvement of Industrial musicians with the material I will cover in the first three chapters, the entire set of lists as printed in the handbook broadens the scope of their interaction with modernist intellectual culture even more.

Example I.2
Industrial Culture Handbook reading/listening lists

Artist

Throbbing Gristle

Media

Seven Dadaist Manifestos, Tristan Tzara

The I-Ching

A Scanner Darkly, Philip K. Dick

Dada Almanach, Hülsenbeck

The Beat Scene

Nausea, Jean-Paul Sartre

Mein Kampf, Adolf Hitler

The Manson Murders, Cooper

Nazi Propaganda, Z.A. Zeman

Velvet Underground [audio tapes]

Kraftwerk [audio tapes]

William S. Burroughs [many books and tapes]

Hitler Speaks [audio tape]

Cabaret Voltaire

Unlimited Dream Company, J.G. Ballard

Popism, Andy Warhol

The Third Mind, William S. Burroughs and Byron Gysin

SPK	<i>Blade Runner</i> , Ridley Scott [videotape] <i>Clockwork Orange</i> , Stanley Kubrick [videotape] <i>SS Experiment Camp</i> [videotape] <i>Mad Max (1 & 2)</i> [videotape] <i>A Fistful of Dollars</i> , Sergio Leone [videotape] <i>The Works of Claude Levi-Strauss</i> <i>Hitler's Propaganda Machine</i> , Rutherford <i>Crash</i> , J.G. Ballard "Every word of Nietzsche" <i>Political Economy and the Sign</i> , Jean Baudrillard <i>Silence</i> , John Cage <i>Eraserhead</i> [videotape]
R&N	<i>Triumph of the Will</i> [videotape] <i>Formalized Music</i> , Iannias Xenakis <i>The Will to Power</i> , F. Nietzsche <i>My Secret Life</i> , S. Dali <i>Hymnen</i> , Karlhienz Stockhausen [record] <i>Le Voyage</i> , Pierre Henry [record] <i>Computer pieces from IRCAM</i> [record] <i>Metropolis</i> , Fritz Lang [videotape]

At first glance the lists are both impressive and daunting. We see connections growing outside of purely musical concerns into the fields of literature, film, philosophy, photography, politics, and history (to name a few). A quick glance also reveals the level of intellectual involvement presented by the band members and the importance that such works have for the subculture as a whole. The sheer scope of this selected listing represents the larger process that is at work within Industrial music. The Industrial music subculture attempts to assimilate massive amounts of data, both musical and non-musical, into itself so that it may be processed as if it were fuel for an engine. The unifying factor that ties the works on the list together is how they are used by Industrial musicians to create particular modernist aesthetics that attempt to comprehend and comment on what came to be known as the "modern crisis" of the twentieth century.

The "crisis of modernity" is an idea that dates back to the developing modernist philosophies of the nineteenth century, but intensifies in the twentieth century.²¹ It suggests that the rapid pace of progress and change has unhinged us from traditional ways of life and replaced

²¹ See Marshall Berman, *All That Is Solid Melts into Air* (New York: Penguin, 1988).

it with a sense of fear and doubt over the unknown. The most obvious example, discussed later, is Nietzsche's claim that God is dead or that we no longer believe in a god, and hence rules and regulations of religion begin to lose meaning. Industrial music struggles with the nature of this crisis in the double-edged sword of modernist progress in the way that each advancement pushes us further into the unknown future. Once viewed from this vantage point it is possible to see how all of the works contained in the musicians' lists could be understood to exist within modernist thought.

On the Dissertation

This dissertation is a study of the multiple ways in which Industrial musicians, journalists, and fans within the subculture build a self-conscious history for themselves and tie that history directly to modernist engagements with the crisis of the twentieth century. I illustrate how the various modernist strands that led to the emergence of Industrial music were understood and combined, and how the eventual breakdown of that modernist paradigm in the mid-1990s resulted in the deterioration of the subculture and the style's move to a mass marketed popular sound.

I trace Industrial music from its formation in 1975 to the eventual splintering of the style in the mid-1990s. As such the dissertation is divided into two parts. The first part establishes the history of modernist ideologies from the late nineteenth century until the mid-twentieth century, examining the progression of ideas that gave rise to Industrial music in the 1970s. The modernist ideologies and movements considered serve as a basis for a subcultural community that continually reinscribes these works and ideas with the values they serve for the overall ideology of Industrial music. Throughout the dissertation I use the term *subculture* to define the group of musicians, fans, and journalists connected to Industrial music who share a common

understanding of sound and philosophy that distinguishes them from mainstream society. I invoke the term in much the same way that cultural theorist Dick Hebdige does in his book *Subculture: The Meaning of Style*, as an understanding of a group of people and the manner in which they code and decode the signification of objects and ideas, and in this case sounds. This leads to the formation of a subcultural ideology that Sarah Thornton has described as “a means by which youth imagine their own and other social groups, assert their distinctive character and affirm that they are not anonymous members of an undifferentiated mass.”²² In this way the active history-building project of Industrial music was a way in which the musicians created a specific language or code within which their musical, political, and philosophical concepts could be engaged and understood. As I will show, it also means that the language of Industrial music, the subcultural system of codes and signs, changed rather significantly over the twenty-one-year period discussed in detail during the second half of this dissertation.

Members of the Industrial subculture then have active agency over the meaning of the individual works as they relate to the modernist strand. This includes the occasional “misreading” and reinterpretations of certain philosophies and artworks. As such, an accepted alternate interpretation of a particular work may at times be essential to an understanding of the subcultural identity. The boldest example of this can be seen regarding the works of Nietzsche. Industrial musicians often debate aspects of his philosophy that are remnants of the Third Reich’s reinterpretation of Nietzsche during World War II. Despite the fact that some of these elements have been dismissed by Nietzsche scholars, they became a vivid part of the discussion on modernism and philosophy within the Industrial subculture.

²² Sarah Thornton, *Club Cultures: Music, Media and Subcultural Capital* (Hanover: Wesleyan University Press, 1996), 10.

Each of the three chapters in part one begins with a short analysis of a specific Industrial music work in order to frame how the historical texts discussed in that chapter relate to Industrial music. Chapter one defines particular strands of Modernist thought through non-musical sources (including philosophy, politics, literary and artistic movements, and film) and examines the elements that will be used by musicians in the creation of the Industrial music subculture connecting to a broader understanding of Modernism within twentieth-century thought. Chapters two and three follow the development of these elements within music, examining the progression from Modernist avant-garde art music in the beginning of the twentieth century to the development of experimental popular music styles such as Krautrock in Germany during the early 1970s.

Part two of the dissertation has four chapters. Chapter four looks at the birth of the musical style and the origin of the band Throbbing Gristle and the Industrial Records label. This history traces the assembly and development of the musical and philosophical characteristics that eventually form the Industrial music subculture. Chapters five through seven investigate particular historical periods of Industrial music. Members of the Industrial music subculture often segment the history of the music into three different historical generations but rarely make the distinctions between them explicit. In this part I will map out the music of each generation and examine musical cues, technological developments, connections to modernist philosophies, and subcultural elements that make each unique.

In chapter five I explore the first generation which is based on the era of Industrial Records from 1975 to 1983 and features a musical sound that is centered on innovation and noise experimentation. Musicians in England and Germany used tape machines to manipulate the sounds of rock instruments, synthesizers and drum machines, and metallic percussion to create a

sound that owed a large debt to the music of twentieth-century avant-garde composers and the energy of rock and roll. Live shows made use of performance art techniques and pushed both the visual and sonic aspects of concerts to the edge of discomfort for the audiences—often in the name of political noise. In chapter six I examine the second generation of Industrial music from 1983 to 1989, which saw the formation of a more definite musical style influenced by the use of advanced drum machines, sequenced synthesizer patterns, and digital sampling. During this time period Industrial moved across the Atlantic and found a home in the dance clubs of North America, developing a large subculture and assimilating elements of rock music. Bands such as Front 242, Skinny Puppy, and Ministry popularized Industrial music within the college radio format and dance clubs in urban areas and promptly brought the style to the attention of major record labels. The final chapter functions both as an overview of the third generation of Industrial music, from 1989 to 1996, and a conclusion of the dissertation. This final time period witnessed the expansion of Industrial music stylistic cues and the erosion of a particular subcultural identity. The band Nine Inch Nails pushed the style closer to popular music and melody while simultaneously ushering in an era of producers who developed formula for the creation of radio friendly, mainstream Industrial music. During this time the overall noise level of Industrial decreased, both in terms of the timbres used and in the amount of political protest and activism undertaken by the members of the subculture. With very few exceptions most Industrial bands consisted of male musicians, although the fan base began to shift to include more female audience members during the third generation. Industrial music continues into the twenty-first century; however, the style is now typically considered a subgenre of the larger umbrella marketing terms of alternative rock or electronica.

Modernisms: The Historical and Cultural Framework
Chapter One

We will sing of great crowds excited by work, by pleasure, and by riot; we will sing of the multicolored, polyphonic tides of revolution in the modern capitals; we will sing of the vibrant nightly fervour of arsenals and shipyards blazing with violent electric moons. . . .

Filippo Tommaso Marinetti
From “The Founding and Manifesto of Futurism” 1909¹

Forget what shame is, what fear remorse and pain is,
We are relentless, anything for progress.
An operation soulless, we’re heartless and godless,
We’re synchronized and seamless, in worship of success.
Why do we act like machines?

Die Krupps
From “Metal Machine Music” 1992

The release of the album *Year Zero* [Nothing, 2007] on April 13, 2007 by the third generation Industrial band Nine Inch Nails caused excitement among fans and critics alike. The album was released only two years after the group’s last album *With Teeth* [Nothing, 2005], and Nine Inch Nails mastermind Trent Reznor was notorious for taking long breaks between albums. Stylistically *Year Zero* was a strong return to the Industrial music sound, especially after deviating into aggressive alternative rock music of *With Teeth*. Allmusic.com critic Thom Jurek described the dense sonic makeup of *Year Zero* as having “hidden sounds, textures, shadings, passages, and more in virtually every cut where heavy metal, industrial, ambient, hip-hop, post-futurist balladry and strings rub up against each other and punch one another in a glorious *rawk*

¹ Umbro Apollonio, ed., *Futurist Manifestos* (New York: Viking Press, 1970), 22.

din.”² But the album *Year Zero* was presented as only one part of a much bigger marketing/artistic campaign by Reznor and his band.

This larger campaign worked on several different levels simultaneously. From a marketing standpoint, it suggested ways that the lackluster music industry of 2007—embroiled in battles over downloadable digital music sales and digital file sharing, the woes of falling sales, and competition with video games and the ever-widening television/internet market share—could find its way back to a larger relevance to its audience. *Year Zero* was designed as an alternate reality game that connected the album to websites, concerts, promotional events and merchandise, and phone numbers that played back pre-recorded messages with secret codes. It all seemed like the perfect way to connect a musical artist into the larger scope of the new digital era in a manner that no one else had managed yet.

On the artistic side, the elaborate fictional world Reznor created for *Year Zero* was a twenty-first century application of the information war fought by the first generation of Industrial musicians.³ Once fans began to piece together the messages contained in the various media (websites, merchandise, and promotional materials), the project presented those fans with a vision of the United States of America set in a paranoid dystopian future circa 2022. In this elaborate fictional world the government has become a fascist dictatorship ruled by “Capital G,” who has restarted the calendar to year zero as a way to wipe the past clean and erase any sense of history. In this fictional reality, Capital G uses fear of terrorism as a tool to strip American citizens of their freedoms and to persecute those who are considered to be on the outside of society due to matters of race, sexual preference, religion, leftist political leanings, etc. The

² Thom Jurek, “Year Zero review” on allmusic.com (accessed 5/15/09).

³ Nine Inch Nails became a hugely successful band based on Reznor’s ability to take particular artistic/musical ideas and condense them down into their most essential form, and then taking that to a broader audience in a way that the hyper-violent hyper-intense earlier Industrial bands could not (or did not want too).

government has introduced a chemical called Parepin into the water supply, allegedly to fight bio-terrorism, but the drug's "side effect" is that it creates a docile population. The "Church of Plano" is a powerful religious entity that controls government decisions, breaking down the separation of church and state. The story even suggests an otherworldly "presence" that threatens to destroy humanity for our wicked ways if we don't change, and a group of artistic rebels who use time travel to send messages to "the present" in an attempt to stop the nightmare before it begins.

The time traveling rebels have planted messages in various websites – ones that Reznor actually had created. The sites piece together the full concept of *Year Zero* beyond what can simply be understood from the lyrics. References to particular works of literature that have been banned in the year zero due to their subversive content and now carry a particular significance for the resistance appear throughout the maze of websites. They include fiction novels such as *The Trial* by Franz Kafka, *1984* by George Orwell, *Slaughterhouse-Five* by Kurt Vonnegut, *A Clockwork Orange* by Anthony Burgess, and *Fight Club* by Chuck Palahniuk; poems such as "Howl" by Allen Ginsberg and "The Second Coming" by W.B. Yeats; philosophical texts such as *Also Sprach Zarathustra* by Friedrich Nietzsche, *The Communist Manifesto* by Karl Marx and Friedrich Engels, and others such as *Orientalism* by Edward Said, *On the Origin of the Species* by Charles Darwin, and the classic graphic novel *The Watchmen* by Allan Moore.

This web of references, combined with the science fiction story of *Year Zero*, exemplifies how the Industrial music subculture continually constructs a particular history for itself. The creation of that history is an active process that carries on from one generation of Industrial music to the next, yet builds ties that connect to particular modernist concepts and ideologies. Reznor suggests on *Year Zero* that we as a society need to retain our sense of history. The evil

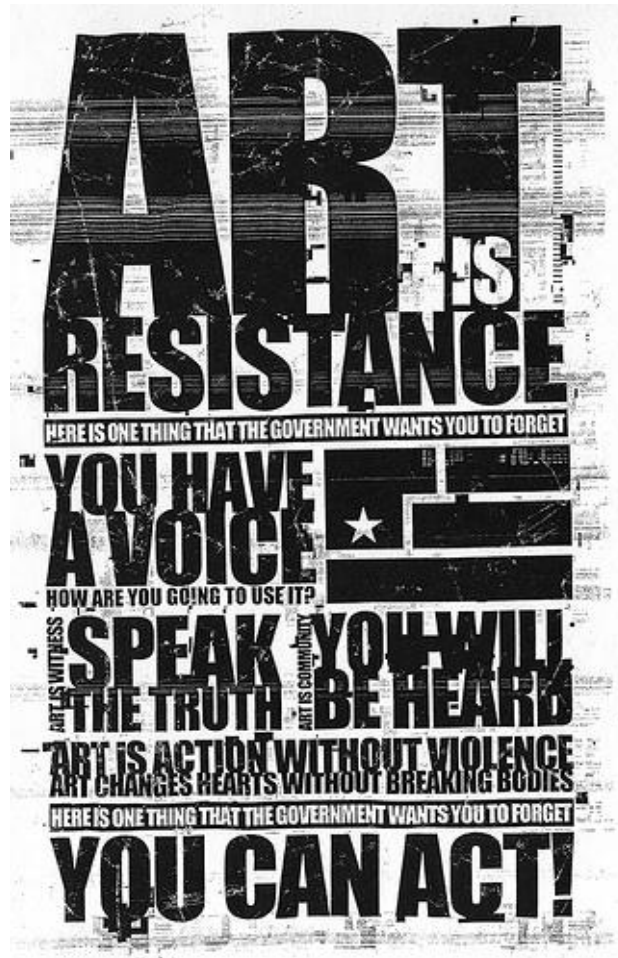
forces of government in the story attempt to wipe away that past in their reset of the calendar to year zero. The audience is drawn into this debate through the virtual reality game that is much less virtual than it might first appear. While the future dictator is called Capital G, supposedly in a suggested reference to **Capitalism** and **Greed**, it is no coincidence that many of Capital G's traits resemble the U.S. President at the time, George W. Bush.

The websites, rebellion rallies, and guerrilla warfare actually happened. A series of modernist references were woven into these real world events, especially a connection to the early twentieth century modernist movement Dada. Nine Inch Nails pulled from Dada's artistic principle that art should be about action and not about an object – the concept that art can function as resistance. Nine Inch Nails scheduled actual promotional events that were staged as resistance rallies, supposedly planned by the time traveling rebels, where they handed out AIR Ammo boxes (Art Is Resistance Ammunition) filled with posters, books, and graffiti stencils among other things. The poster in example 1.1 shows one such item that acts as a call to action, asking rally participants to use art as a weapon in the battle against unseen forces.⁴ Industrial bands typically position the “system” as the enemy and not any one specific entity. While the material in the AIR Ammo boxes appear to speak about the fictional future of *Year Zero*, it uses the language of early 20th century Dada manifestos to do so, and audiences were most likely to connect its message to feelings they had about terrorism and the war in Iraq that the United States was involved in at the time. These connections were not lost on members of the Industrial music subculture who expected this manner of communication. Jurek even ends his

⁴ One of the *Year Zero* sites called Open Source Resistance contains tons of WWII inspired images (see: <http://www.opensourceresistance.net>.) The AIR poster is taken from <http://www.flickr.com/photos/rydka/458432099/in/set-721576000942916>. It is possible that this is a fan site collecting photos of *Year Zero* related items that were given out at concerts and promotional events. It appears that the AIR poster itself may have been part of the Open Source Resistance “AIR Ammo Box” material given out at a promo event in Melrose, LA on April 18th, 2007.

allmusic.com review by saying, “[*Year Zero*] becomes a kind of manifesto, a Jeremiad prophecy of what may arrive, however metaphorically, if these shadows do not change.”⁵

Example 1.1
AIR Ammo Box Poster



The *Year Zero* project deploys harsh electronic sounds, a science fiction storyline, references to modernist works, and Dada artistic techniques as part of the history making/excavating project of Industrial musicians. These sounds, methods, and actions are pulled from the long history that the Industrial music subculture created. This chapter provides the background and history of the non-musical tools, materials, and methods used by Industrial musicians. While each band wrote its own history using a specific set of modernist references,

⁵ Thom Jurek, “Year Zero review” on www.allmusic.com (accessed 5/15/09).

over time the ideas were refined into a series of touchstones that came together to form the core of the subculture.

The Industrial music subculture built its own history from a set of modernist ideas that already shared a series of connections. This chapter begins by creating a working definition of the term *modernism*. I will then investigate the works of Marx and Nietzsche to set up a philosophical grounding that finds artistic applications in modernist movements such as Futurism and Dada. The implications of reactionary modernism in the political movements of the mid-twentieth century, such as fascism and National Socialism, are very important to the hyper-political first generation Industrial musicians who also look to literary models for a useful methodology to represent the idea of a society pushed to its extremes. The use of far ranging and varied materials by first generation Industrial musicians was not a postmodern mixture of everything and anything in a pool of meaninglessness – they chose particular references that were purposefully combined to create meaning. The music and its accompanying cultural artifacts are designed to teach us something, and they are all carefully constructed using modernist techniques.

Toward an operational definition of Modernism in the 20th Century

A study of the term *modernism* and modernist ideology reveals that the historical boundaries of the label are unclear at best. This is especially true when it is regularly pronounced dead only to be replaced by its nameless descendant post-modernism, which is best understood not as a separate *-ism* but as another set of responses to the same group of modern problems and challenges. These responses combine to produce a particular collection of ideas,

values, and practices. As such they form a coherent ideology that guides the artistic, scientific, philosophical, and social developments of the Modern era.⁶

To call something modern is to imply that it is of the present, original, and of the latest artistic or intellectual trends. One's experience of this moment in time can be referred to as "modernity," the state or quality of being modern. Thus to be modern implies a sense of the new, of power, and a chance for renewal; however, it also contains its own opposite, a sense of displacement, the destruction of traditions, and the loss of the self. This paradox, containing the new in the ashes of the old, is frequently referred to as the "modern crisis." The modern crisis is a particular state of mind in which humanity views aspects of modernity itself as problematic. The rapid pace of progress and change within the Modern era unhinges us from traditional ways of life and replaces it with a sense of fear and doubt regarding the unknown. We can no longer expect life to consist of a finite number of experiences for ourselves and future generations. In fact we may not even be able to say with any degree of certainty that our own lives will meet with a definitive amount of stability. This is compounded by a growing attitude of religious doubt that causes humanity to lose a sense of itself within the grander scheme of things. Science and reason begin to replace faith and the afterlife in the global outlook. Concepts of good and evil lose their ultimate value and we are forced to deal with the vagaries of our own consciousness. This sentiment is perhaps most famously expressed in William Butler Yeats' poem "The Second Coming" from 1919: "Turning and turning in the widening gyre / The falcon

⁶ It is difficult to pinpoint a beginning of the modern era, and the time period defined by the term varies greatly within various disciplines and texts. Most suggest that the modern era begins with the passing of the Middle-Ages c. 1450, or the rise of the enlightenment in the seventeenth century. Others pinpoint the mid-nineteenth century with the rise of "modern" philosophy and literature, or the early twentieth century with the rise of "modern" art and music. Depending on one's particular viewpoint and agenda the answer can be one or all of the above. Many concepts that arose during the Renaissance began to coalesce in the seventeenth century and found their apex in the late nineteenth and early twentieth centuries. More recently it has become common for historians to refer to the modern era in three distinct periods; the early modern (1450-1650), the Enlightenment and the Industrial Revolution (1650-1850), and the more contemporary modern era (late 19th and 20th centuries). It is this last period that produces the social and political elements central to the creation of the Industrial music subculture.

cannot hear the falconer; / Things fall apart; the centre cannot hold; / Mere anarchy is loosed upon the world, / The blood-dimmed tide is loosed, and everywhere / The ceremony of innocence is drowned; / The best lack all conviction, while the worst / Are full of passionate intensity.” Within this vision social structures appear to disintegrate and anarchy is the order of the day as signs of the second coming of Christ, the time when all on this mortal plane is lost.

In contrast to Yeats’ apocalyptic vision it is also possible to find within the feelings of fear a sensation of excitement in the knowledge that our lives are no longer mapped out for us, that the future is wide open, and that almost anything is possible. In many ways the paradox of the modern crisis is similar to the legend of the phoenix. The mythical creature was said to live in the desert for five hundred years only to consume itself in flame as a form of rebirth; continuing forward into its next life cycle. The destruction of old values and ways of life simultaneously represents the possibilities for rebirth and new ideas. The sensation of a crisis is littered throughout the history of the twentieth century in the physical and the metaphysical, the material and the symbolic. Modernity is not only the state of being in a time of change but of also being self-aware of that change. The experience of modernity has not only altered the physical world around us but also our own perception and understanding of that world. Various factors during the 19th and 20th centuries have contributed to the growth of the modern crisis such as the rapid changes in class structure, the means of communication and warfare, and social institutions, as well as changes in scientific, religious, philosophical, and political belief systems.⁷ The crisis is manifested within the catastrophe of two world wars, massive labor

⁷ Cinzia Sartini Blum, *The Other Modernism: F.T. Marinetti’s Futurist Fiction of Power* (Los Angeles: University of California Press, 1996), 3.

struggles, the emergence of feminism and civil rights movements, the deconstruction and rematerialization of various empires, and the modernization of the Third World nation states.⁸

It is only within the twentieth century that elements of the modern crisis begin to emerge within societies around the globe and concurrently race forward at a breakneck speed in the name of progress. Marshall Berman calls this twentieth century experience of modernity a “maelstrom” that keeps society in a perpetual state of flux, which is achieved by a constant destruction and continual becoming which he calls “modernization”—or the process of becoming modern.⁹ It is our awareness of these fundamental changes that defines modernity and breeds numerous human responses to the central crisis as modes of modernization. Together, these specific responses are labeled “modernisms”: modern practices, trends, ideas, and/or aesthetics that are developed within artistic, scientific, political, economic, philosophical, and social arenas.

The arts frequently contain creative reflections of the crisis and various attempts to struggle with an understanding of our place within the circumstances of our own making. The term *avant-garde* has frequently become a surrogate for the idea of modernism within the arts. It is meant to imply a more specific sense of the vanguard or forefront of an artistic ideal being taken to its extreme, proactively pushing the boundaries of modernism. The avant-garde artist presents his/her work of art as being opposed to the accepted views of the masses—the lowest common denominator of the large general populace—as well as the more traditional aspects of high culture. This mindset is closely tied to the ideas of neo-Marxist cultural theorists such as Adorno who would suggest that the popular contains views that are watered-down and predigested for consumption by the masses. As such, the avant-garde defines itself as an artistic culture in which members can willingly challenge the status quo to see past the belief system of

⁸ Michael Levenson, introduction to *The Cambridge Companion to Modernism*, ed. Michael Levenson (Cambridge: Cambridge University Press, 1999), 4.

⁹ Marshall Berman, *All That Is Solid Melts into Air* (New York: Penguin, 1988), 16.

the popular. To accomplish this, the avant-garde artist uses a set of principles that necessitates that the artwork shock its audience by abandoning traditional techniques of representation in favor of structures and systems that are self-reflexive. Reality is only represented as a construction of power systems in all their various forms: political systems, class systems, racial and gender boundaries, etc. For the purpose of this dissertation the avant-garde will be understood as the artistic response to the modern crisis and a part of the broader concept of modernisms, and avant-garde music is connected to the twentieth-century concert tradition. The overall artistic aesthetic of Industrial musicians and the Industrial subculture as a whole sits at the tipping point of the modern crisis, equally consumed with the past itself and its eventual destruction through assimilation. The Industrial subculture reveres progress and yet is deeply fearful of the consequences that progress suggests for the future of humanity.

Another pitfall in dealing with the concept of modernism is that it manifests in so many different ways. Modernism is not a single unified movement even within music, art, theater, literature, or philosophy. It is a large number of individual movements that all draw upon a rather wide variety of ideologies, and are only held together through the experience of modernization and the modern crisis. It is in fact always *modernisms*.¹⁰ New modernist movements incorporate and assimilate older ones, tying themselves together in the creation of new modernist histories. Modernist histories are created by looking backward and forward from a particular point in time and then actively weaving together various ideas, artworks, and philosophies. Modernist history is *active*, and is constantly rebuilt as it moves forward.

¹⁰ A similar claim is made by Bernard Gendron in *Between Montmartre and the Mudd Club* (1990), except that Gendron claims there was no central core of ideals that bound the various forms of modernism together – an idea I will refute here. In *Making Music Modern* (2000) Carol Oja suggests that the beauty of musical modernism was its ability to embrace many styles, which I will investigate further in the next two chapters.

If we study the way that modernist histories are constructed and how different histories share points of contact, we can begin to decode the cipher of its language and reveal four interrelated core characteristics of modernism. These characteristics appear in the Industrial music modernist strand examined in this dissertation and have the greatest importance to Industrial music and its subculture. These are: industrialization, progress, originality, and the rejection of Romantic pastoral sentiments. Industrialization involves economic and technological development but also includes the alteration of societal concerns and the way in which a group of people view the world around them. The study of Industrial music must also consider how the technological revolution continued to expand and change in the late twentieth century—a process in which social and economic organization of society begins to revolve around advancements in computer technology and communication. Progress includes the rejection of traditional values and the fascination with the future. Progress is the characteristic of modernism that is most frequently viewed with a critical eye by modernist works. Much of this discussion revolves around the idea of progress gone awry such as the actions of the Nazi party or the development and use of the atom bomb by the United States of America during WWII. Originality encompasses the creation of the new but also the process of destruction and assimilation as modernism burns up the old to make the new. The rejection of a Romantic pastoral sentiment and the “human” for the mechanical and robotic includes a fascination with new technologies. All four of these core concepts relate to one another as a set of responses to the modern crisis and all four continually fuel modernism to push forward to the brink of the very crisis and destruction they attempt to move away from.

To understand a particular form of modernism such as Industrial music, one must attempt to cast a new light on the various modernist characteristics that have the most direct bearing on

its creation. Industrial music weaves multiple modernist works together with the history of popular music—as shown in *Year Zero*—in order to create a unique subculture and ideology with a particular musical style and performance practice. The resulting twentieth-century experience of the modern crisis becomes the foundation upon which all of Industrial music and culture is built. The Industrial music subculture places importance on its own history and development, spurring the larger discussion of modernism here. An understanding of how the core modernist concepts developed within works of philosophy, art, literature, and music during the late nineteenth and early twentieth centuries allows us to understand how they were viewed, and eventually assimilated, by the Industrial music subculture in the process of defining itself.

Philosophers of Modernism

While there are many philosophers whose work may be considered modernist in thought and concept, and many more who worked within the modern philosophical era (from the enlightenment to the present), the works of Karl Marx and Friedrich Nietzsche directly impact the Industrial music subculture. Their philosophies are cited within Industrial music and there is a more general assimilation of their ideology into the modern psyche. It is their interest in the ever-changing and developing modern industrial society that draws them together in this study. In her book *Marx, Nietzsche, and Modernity* Nancy S. Love suggests that even though their work may be philosophically distinct, they both shared an important set of central concerns

To show man that the conditions which frustrate his creative powers are his own creations, Marx and Nietzsche question the premises of modern society. Marx asks of that society why labor—men’s productive activity—assumes an alienated form as commodity exchange. Nietzsche asks why the will to power—men’s value-creating power—assumes a life-denying form in ascetic ideals.¹¹

¹¹ Nancy S. Love, *Marx, Nietzsche, and Modernity* (New York: Columbia University Press, 1986), 5.

Both men grappled with the modern crises, and found that what humanity created in the name of progress also pushed us further towards the precipice of self-destruction. Humanity's productivity becomes nothing more than a form of exchange and our own creative power crushes the very spirit needed to value that creation. While Marx believed there were ways we could correct this situation, Nietzsche felt that it was only through the nihilistic rejection of everything that we would eventually rise from the ashes – born again as the superhuman, for humanity is “a bridge and not a goal.”¹² What follows here is a presentation of the most commonly accepted twentieth-century interpretations of these two philosophers and a representation of how they are understood from within the Industrial music subculture.¹³

Karl Marx

Much of the basic philosophical and political framework of the Industrial subculture is created from the work of Karl Marx; although the understanding of his work within the subculture frequently varies from that of other social spheres. The use of Marx's philosophy within Industrial music comes from three primary areas: 1) his critiques of philosophy and religion, 2) his theories regarding systems of control and alienation, and 3) his late period writings on political economy and class struggle.

During the twentieth century there was a growing trend of religious doubt that caused humanity to lose a sense of itself within the grander scheme of things. Marx's work in this area acts as a foundation for Industrial musicians' engagement with religion, and his conception of societal delusion provides a guide for Industrial musicians who view the world as a series of

¹² Nietzsche, *A Nietzsche Reader*, ed. and trans. by R.J. Hollingdale. (New York: Penguin Books, 1977), 239.

¹³ The works of Marx and Nietzsche are multilayered, and their ideas tended to take shape over the course of several major works in different times during their lives. As such many later philosophers debate what it is that they might mean, and how their concepts might be applied to the present day. At the same time there arose populist and political variations of their work, eventually leading to wildly varying interpretations of the original concepts.

control devices that attempt to hide the realities of life from the masses. Marx's early philosophical work suggested that philosophy should not examine God for answers but instead study "mankind" as its primary subject. Towards this end, Marx became a member of the Young Hegelians in an organization called the *Doktorclub*, an alliance of philosophers interested in the works of Georg Wilhelm Friedrich Hegel (1770-1831).¹⁴ In his *Critique of Hegel's Philosophy of Right, Introduction* (1844), Marx claims that religion was the product of a distorted society and was used as a tool to hide the deficiencies of that society, hence any real critique of religion must also be a critique of society and this suggested the path modern philosophy must take. Marx attempted to identify the elements of modern society that force us into the comfortable delusion of religion:

Man makes religion, religion does not make man. . . . Religion is the sigh of the oppressed creature, the heart of a heartless world and the soul of soulless conditions. It is the opium of the people. The abolition of religion as the illusory happiness of the people is the demand for their real happiness. . . . It is the immediate task of philosophy, which is in the service of history, to unmask self-[alienation] in its [secular] forms, once the [sacred] form of human self-[alienation] has been unmasked.¹⁵

Marx saw our reliance on religion as a result of the alienation of labor and the desire for a human community. The same human desire for community demands our participation as citizens of a state, for just as religion portrays us as equal in the eyes of God, so does the modern state in the eyes of the law. By adopting Marx's philosophy the Industrial subculture developed a viewpoint

¹⁴ Marx's friend and fellow Young Hegelian Bruno Bauer believed that the Bible was not a historical record but one of human fantasies and emotional desires, and was created to fill the emptiness of a life spent looking towards an imagined afterlife, and he encouraged Marx to work toward this end. While Marx was interested in Bauer's writings and lectures he also found many problems with them.

¹⁵ Karl Marx, "Critique of Hegel's Philosophy of Right, Introduction" in *Early Writings* trans. Rodney Livingstone and Gregor Benton (New York: Vintage Books, 1975), 244. It was originally published in the *Deutsch-Französische Jahrbücher*. I have altered several words in this translation in order to connect the passage with more recent conceptions and translations of Marx's works; they appear in the quote in brackets. For example Livingstone and Benton's use of "self-estrangement" fails to connect this sentence to Marx's larger concepts of "alienation" which he uses in his discussions of historical materialism. Also the antiquated "holy" and "unholy" have been altered to "sacred" and "secular" in order to keep with my larger points on this matter.

that placed the state and organized religion as forces of power in modern society: the state as the system of control and religion as a form of pacification (or opium as Marx calls it). The application of these ideals can be seen in *Year Zero* through the representation of the forces of power as Capital G (the state) and the Church of Plano (religion).

The politically minded Industrial music subculture used Marx's theories concerning social control and subliminal method as a means to study the world around them but also as a blueprint to use the very same methods as a means of guerilla warfare within the system itself. Marx believed that the laws of economics dictated much of society's structure, leading to a conflict between the people and the state. His middle period writings examine issues of social classes and labor in a historical context of "stages," a concept he referred to as *historical materialism*. The ruling class is able to control society without the use of force by placing itself *in control* through the creation and manipulation of ideas. It maintains that ideology through a complex system of state apparatuses.¹⁶ Marx, with his friend and writing partner Frederick Engels, makes this clear in their first important endeavor together, *The German Ideology* (1846):

The class which has the means of material production at its disposal has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it.¹⁷

In the Marxian formula control leads to power, and power guarantees control. In order to break the cycle one must create an alternative form of transmission for information allowing a new schema of control to undermine the dominant social ideology. The Industrial music subculture absorbed Marx's views on the systems of control and funneled it into concerns over the transfer

¹⁶ The term *state apparatuses* is from Althusser; see Louis Althusser, "Ideology and Ideological State Apparatuses (Notes towards an investigation)" in *Lenin and Philosophy and Other Essays*, trans. Ben Brewster, 127-186 (New York: Monthly Review Press, 1971).

¹⁷ Karl Marx and Frederick Engels, *The German Ideology: part one, with selections from parts two and three and supplementary texts*, ed. C.J. Arthur (New York: International Publishers, 1970), 64.

and control of information in modern society – the information war of the twentieth century. As a result, the lyrics of many Industrial songs revolve around the power struggles over overt and subliminal forms of social control and dominance.

The Communist Manifesto (1848) sets a clear agenda for the European communist party and is grounded in Marx's concept of historical materialism. During his discussions on the political economy of the Modern era Marx describes the industrialization of modern countries along with the rise of the bourgeoisie and the subjugation of the working class (the proletariat). He saw that modern industry was replacing the trade unions of the past with machines and factories, "steam and machinery revolutionized industrial production."¹⁸ Marx suggests that modern industry and machinery have altered the face of the planet forever, and for Marx these machines are to be feared and challenged. The world has changed. Industry will continue to develop and alter the world even further in a process of modernization. Marx predicted that modernization would sweep the globe rushing all nations into "civilization" and cementing a deep divide between the classes even as it simultaneously preached humanity's salvation.

The manifesto's vision describing the negative effects of an industrialized society in decline was a lived experience for the young men and women of the working class in England during the 1970s, and it is this connection that drew the Industrial music subculture to Marxism. It is no coincidence that Industrial music, which takes as its own name the ever growing effects of industrialization, was born in London and Sheffield over one hundred years after Marx and Engels described the cities' landscape and future in the *Manifesto*. Marx's statements relating the condition of factory workers in the 1840s could just as well be a manifesto for Industrial musicians of the 1970s; from the *Communist Manifesto*:

¹⁸ Karl Marx, *The Communist Manifesto*, ed. Frederic L. Bender (New York: W.W. Norton and Company, 1988), 56.

Masses of laborers, crowded into the factory, are organized like soldiers. As privates of the industrial army they are placed under the command of a perfect hierarchy of officers and sergeants. Not only are they slaves of the bourgeois class, and of the bourgeois State; they are daily and hourly enslaved by the machine, by the over looker, and, above all, by the individual bourgeois manufacturer himself.¹⁹

Marx predicted that everyone would eventually be pushed down the social ladder and become part of the laboring class, distinguished only by their value based on age and sex. He also suggested that the world was already on the inevitable course of the proletarian battle, and that this battle was one that would not be won easily, if at all.

In one of Marx's great late-period works focusing on economics, *Das Kapital: Volume One* (1867), he claims that the mechanisms of a capitalist society are hidden from the masses by the ruling class. Capitalism is essentially a "deceptive object," with a discrepancy between essence and appearance. The final stage of communism as he presents it is a type of utopia in which the struggle between ownership and production will eventually lead to the rise of socialism as a political alternative. Unfortunately he has very little to say about how that might actually happen. One thing is clear—it will require a revolution that is not afraid to see blood spilled: "They [the communists] openly declare that their ends can be attained only by the forcible overthrow of all social orders up to now. Let the ruling class tremble at a Communist revolution. The proletarians have nothing to lose from this but their chains. They have the world to win. WORKING MEN OF ALL COUNTRIES, UNITE!"²⁰ It is no wonder that the manifesto upset and enraged so many who held seats of power. For Marx this moved from philosophy to politics, and most of all it must become action. This call to action held particular relevance to Industrial musicians in the 1970s who were living in a post-Vietnam world filled with a major economic recession, unemployment, street violence, and rising costs. They

¹⁹ Marx, *Communist*, 61-62.

²⁰ Marx, *Communist*, 86. Caps are Marx's.

prepared to be part of an insurrection that would take place in the belly of the capitalist beast—entertainment as information and revolution.

Friedrich Nietzsche

“He dreamed a god up, and called it Christianity, God is dead and no one cares. If there is a hell, I’ll see you there.”

Nine Inch Nails, “Heresy” from *The Downward Spiral* (1994)

The lyrics of the 1994 Nine Inch Nails song “Heresy” describe a man who feels condemned by society’s values. Yet he is aware of the lies that those moral values are built upon, and the system of control they continue to propagate. Because of this realization, the song’s narrator is free from those constraints, no longer threatened by the repercussions of a false god. The “he” in “He dreamed a god up…” refers to a generalized sense of men in power within societies. Nine Inch Nails declares that Christianity is nothing but a control system and the death of God has laid its workings bare. Yet, in the end, no one seems to care since modernism has already devalued the concept of God destroying any sense of what that loss might mean. The sentiment “God is dead” and the song’s particular portrayal of religion as a system of control is a clear reference to Friedrich Nietzsche’s philosophy and the concept of nihilism that can be seen throughout Industrial music.

The work of the philosopher Friedrich Nietzsche is most commonly referenced within the Industrial music subculture focusing around two of his major philosophical concepts: nihilism, and the will to power. While one might attribute his status in the subculture to the depth and breadth of his philosophical thought, it is also in some measure due to Nietzsche’s position outside of the conventional thinking of the late nineteenth century, frequently earning him the description “ahead of his time,” and more recently the peculiarity of being seen as of “our time” over 100 years later. Nietzsche’s apparent timeliness bestows his writings with a sense of danger

that rarely appears in other philosophical writings. The danger of these ideas is compounded by the historical fact that Nietzsche himself went insane during the latter half of his life. While this was most likely not due to his involvement with dangerous ideas, it is nevertheless a story which lends credence to the menace of his philosophical viewpoint. His writings were later connected to one of the most ferociously evil displays in modern history, the German National Socialist party during WWII. This seemed to be proof enough that his philosophy consisted of equal parts of transcendent vision and horrifying breakdown.²¹ The dark temptations suggested by his philosophy often make it fascinatingly and perversely attractive even when it is employed in a more reasonable context. Much of Nietzsche's early work invites an examination of the chaotic and sinister elements of human nature, and his often intense and brutal depictions of the modern crisis still resonate with readers at the start of the twenty-first century, but the world has changed. Over the years Nietzsche's writings have been subjected to multiple and disparate interpretations, resulting in the understanding of his words within the Industrial music subculture being influenced by these transformations.²²

The questioning of morality and progress in the face of the developing modern crisis is the starting point for many of Nietzsche's basic philosophical beliefs, a result of his assertion regarding the death of God and the advent of nihilism. For Nietzsche, the death of God is not a literal event but a hermeneutical one resulting from the fact that modern society has outgrown what Nietzsche refers to as the "cult of religion." It is a metaphor for the cultural events that have displaced the Christian idea of God as a structuring force within Modern Western culture. Like Feuerbach and Marx, Nietzsche observed a philosophical contradiction between the nature

²¹ The connection of Nietzsche's philosophy to the Nazi party is discussed later in this chapter. The dark tendencies of his writings were also displayed within the modernist artistic movements of Surrealism and Expressionism in the early twentieth century although without the subsequent actual atrocities committed in their name.

²² This is discussed in more detail later in the chapter.

of a god in the metaphysical sense and the nature of the physical world. Although Nietzsche and Marx never had any direct contact, the similarities in their work point out a particular trend in German philosophy in the mid- to late-nineteenth century, and it is this line of thought that serves as the philosophical foundation for Industrial musicians in the late twentieth century.

Nietzsche did not suggest that humanity adopt a complete lack of morality. In fact, he often bemoaned the loss of a moral code that would help to guide human behavior, believing that our current moral sense was flawed from the outset due to its reliance on the perceived metaphysical truth of a falsely created God. The Christian god, Nietzsche claims, was intended to be all that we are not. Because of this our own actions always measure up as unworthy and imperfect. If this god is a falsehood that we dreamed up, then the structure of modern society is based on a lie and is detrimental to the future development of society. Nietzsche asked us to consider if any action is truly “good” or “evil,” or are actions merely given that status by human tradition, religion, class concerns, etc. In *Human, All Too Human* (1878), Nietzsche examines the origins of these designations and the confusion between an action itself and its resulting Christian morality:

First of all, one calls individual actions good or bad quite irrespective of their motives but solely on account of their useful or harmful consequences. Soon, however, one forgets the origin of these designations and believes that the quality ‘good’ and ‘evil’ is inherent in the actions themselves, irrespective of their consequences: thus committing the same error as that by which language designates the stone itself hard, the tree itself as green – that is to say, by taking for cause that which is effect.²³

In a single stroke, Nietzsche brought uncertainty to the entire set of ethical principles of modern society. The problem created by the “error” results when mankind places the accountability of these actions onto the motives of the one who enacts them; hence the action and the motive

²³ Friedrich Nietzsche, *Human, All Too Human* (1878), in *A Nietzsche Reader*, ed. and trans. R.J. Hollingdale (New York: Penguin Books, 1977), 71.

become tied together in a single moral justice. Are some evil acts justifiable, and if so, then why are these actions designated evil in the first place? He thus inverts cause and effect.

If religious values are left behind following the realization that God is dead, then humanity is placed into a void of nothingness without any moral standing. Nietzsche was not endorsing or claiming authorship for these ideas. They were, he insisted, symptoms of a disease present in modern Western society.²⁴ He presented them as a prophecy he envisioned for humanity's future. Nietzsche believed that the death of God actually occurred earlier in history but had only become apparent to society during the late nineteenth century, and only to the select few. He predicted that it would be a very long and painful period of time before society in general was able to see what had happened. In his later writings Nietzsche hoped humanity might be able to weather the coming storm believing that it was already too late to avoid it. He describes the advent of nihilism, already deemed an unstoppable force in his own time, in his posthumously published *Der Wille zur Macht* (The Will to Power, 1901):

What I relate is the history of the next two centuries. I describe what is coming, what can no longer come differently: *the advent of nihilism*. . . . This future speaks even now in a hundred signs, this destiny announces itself everywhere; for the music of the future all ears are cocked even now. For some time now our whole European culture has been moving as toward a catastrophe, with a tortured tension that is growing from decade to decade: restlessly, violently, headlong, like a river that wants to reach the end...²⁵

This is a truly apocalyptic vision for the near future of humanity, and becomes a trope in the arts throughout the twentieth century including its use as a central theme in the Industrial music subculture. Nihilism is seen as an unstoppable energy that will tear down all aspects of society, destroying any and all interpretations of the world until all is meaningless and without morality,

²⁴ Nietzsche frequently refers to religion as a poison that inflicts a sickness on humanity.

²⁵ Friedrich Nietzsche, *The Will To Power*, trans. Walter Kaufmann and R.J. Hollingdale (New York: Vintage Books, 1968), 3.

value, or content. This concept is linked to what theorist Jean Baudrillard will later call a simulacra: a semiological condition caused by consumer culture in which signifiers no longer connect to their signified, resulting in a world in which any sort of meaning is dead. For Baudrillard, all distinctions have already imploded and the social masses have become a “black hole which engulfs the social,” making everything meaningless.²⁶

Nietzsche’s own understanding of nihilism is more optimistic than is often understood. There can be no doubt that he believed humanity would pay a horrendous price for the advent of nihilism: however, if humanity could eventually progress beyond it, then it might be possible to chart a new course. For Nietzsche the moment when the past is wiped away means that there is also the possibility for a new future in its place.²⁷ Nietzsche’s formulation of the philosophical will to power addresses how humanity could empower itself to create this future.

The will to power is a philosophical concept that Nietzsche labored over for years, refining its meaning and application. He developed the concept out of his studies of Schopenhauer, who had adopted the eastern philosophy that life was driven forward by a vast

²⁶ This is a condition that Baudrillard calls “Post-modern,” a rather bleak period in the late twentieth century when the modern crisis is almost complete and Nihilism is all that is left. See: Jean Baudrillard, “On Nihilism,” in *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: U of Michigan Press, 1994); and *In the Shadow of the Silent Majorities or, The End of the Social and Other Essays*, trans. by Paul Foss, John Johnston, and Paul Patton (New York: Semiotext(e), (1978) 1983).

²⁷ The connections between this view of nihilism and late twentieth-century culture are often quite intense. Chuck Palahniuk’s novel *Fight Club* (1996), a popular book within the Industrial subculture, is a mixture of Nietzsche and Baudrillard, with the characters living in a world that is dominated by simulacra. It eventually turns out that the two main characters are in fact one person, split in two by his engagement with the modern world. At the end of the novel Palahniuk writes, “We’re going to break up civilization so we can make something better out of the world” (Palahniuk, *Fight Club*, 208). The intense sensation (or more accurately “non-sensation”) of Nihilism that pervades the novel’s every moment is reversed and comes to represent something positive, a future within the destruction. The 2000 film version of *Fight Club*, directed by David Fincher, lets the audience experience the decline of the lead character into a world of nothingness where everything (including his own mental state) is in question. The ending reveals a moment—just as the complete destruction of his own bourgeois world occurs, and unlike in the book the actual breakdown of civilization has already started—when the lead character turns to his girlfriend and says, “Everything is going to be fine.” Again, the future possibilities are present in the very moment of destruction. The film was scored by the Dust Brothers (who produced records for the Beastie Boys, Beck, and the Industrial band White Zombie), and makes use of an Industrial/Electronic musical style, suggesting that within the world of the film, Industrial music represents the last struggle and the final moments of modernism.

blind “will to life” (which accounted for humanity’s drive for survival) and the ancient Greeks who, Nietzsche determined, established that a battle for power was at the center of all human nature. By combining these two ideologies, Nietzsche came to the conclusion that will drove all human life. The will to power is not a will to dominate others but an inner drive to dominate one’s self and achieve self-realization. As with many of his philosophical concepts, the will to power constitutes an aspect of humanity that can benefit us or ultimately destroy us. Any form of the will to power that involves the control of others is a perversion of this basic universal Will. Industrial musicians became intrigued by this concept and its connections to uncovering elements of mass control and power in modern society.²⁸

Industrial musicians were more than willing to confront the harsh realities and dark places where this philosophy was invoked. From these extensive philosophical concepts industrial musicians derived some very practical modes of thought. From Nietzsche’s conceptions of good and evil they developed strong skepticism of religion and a worldview that questioned simple black-and-white understandings of morality. They believed that they were already living in the era prophesied by Nietzsche’s apocalyptic visions of the future, but they also believed (like Nietzsche) that it was still possible for the human race to break from the cycle of control systems and reinvent itself as something new. The will to power served as a system for understanding how mass control was achieved in modern society, and suggested a method for how it could be broken. In the next section, I will examine the adoption of basic philosophical ideals from both Marx and Nietzsche within an artistic context in the early twentieth century.

²⁸ This also hints at the application of Marxist ideals on societal control and revolution previously mentioned.

Understanding Modernisms – Artistic Aesthetics and Political Systems

During the early twentieth century modernist artistic movements and political agendas incorporated the philosophies developed by Nietzsche and Marx, which in turn were embraced by Industrial musicians during the 1970s. The implicit adoption of modernist philosophy occurred throughout numerous artistic disciplines in the early twentieth century, each one interpreting the basic ideology in a particular fashion. These multiple manifestations were viewed as alternate and overlapping movements, as modernisms, and not as contradictory. Many of these artistic interpretations of modernist philosophy soon made their way into the political sphere and connected to some of the most violent and oppressive governments of the mid-twentieth century. This shift altered the creation and reception of modernist artworks but also helped to shape particular positions of Fascism and National Socialism. When a number of these political ideals moved back into the artistic realm there was yet another shift in the understanding of the philosophies of Marx and Nietzsche. Each of these layers of varied interpretation were later viewed and manipulated by the Industrial music subculture at the end of the century. This section of the chapter looks at particular modernist philosophical concepts that moved back and forth between artistic, aesthetic, and political systems, and examines how the philosophy was understood and altered in each instance and ultimately became an element of the Industrial music subculture.

Industrial music assimilated much of its modernist artistic aesthetic from Futurism and Dada, two major early twentieth-century modernist strands that developed from Symbolism, a late nineteenth French literary movement. Based on a rejection of realism and an attempt to express ideas, emotions, and attitudes through the use of symbolic meaning, Symbolism represents a moment in history when artists begin to grapple with ideas and issues centered on the modern crisis. Symbolist poets such as Stéphane Mallarmé and Charles Baudelaire ushered

in a new use of language that questioned the representation of words, embraced the modernist aesthetic of the “new,” and focused on the more taboo subject matter of human behavior (satanism, exoticism, and eroticism), and on what they considered to be the “sublime.”

Baudelaire’s work often moved away from traditional Romantic subject matter and embraced the complexities of life in modern cities changed by modernization and the industrial revolution. His poems confronted feelings of suffering and isolation that he saw present there. The poem “The Seven Old Men” from the collection *Flowers of Evil* (1857) conveys the activity of the city with its wandering, teeming crowds, choking yellow smog, noise sounds, and the swell of urban sprawl:

O swarming city, city full of dreams,
Where in a full day the spectre walks and speaks;
Mighty colossus, in your narrow veins
My story flows as flows the rising sap.
[. . .]
. . . shaken by the jar
Of rolling wheels, where the fog magnified
The houses either side of that sad street,
So they seemed like two wharves the ebbing flood
Leaves desolate by the river-side. A mist,
Unclean and yellow, inundated space—²⁹

This poetic depiction of the emerging modern city projects a sense of loss. The city is a twisted rendering of nature, an unattainable past. Baudelaire tempts the reader with nostalgia for the countryside, while raising questions about the development of industrial urban centers, and society’s attempts at God-like powers of mechanical creation. The city is swamped with activity, noise, industrial pollution, and the disenfranchised people who live there. Yet within this pessimism, Baudelaire renders the scene with a sense of beauty, as if there is something alluring

²⁹ Charles Baudelaire, *The Flowers of Evil*, “The Seven Old Men” reprinted in James Huneker (ed. and trans.), *The Poems and Prose Poems of Charles Baudelaire* (New York: The University Press, Cambridge, 1919), 47.

about it all that he is not willing to embrace. While Baudelaire roots sentiment in Romantic ideals, his subject matter, poetic technique, and method show the first developments of the modernist aesthetic within the arts.

The poems contained within the collection shocked Baudelaire's contemporary audience, questioning commonly held beliefs on morality by looking at the "beauty" contained within objects, acts, and ideals that were traditionally considered "evil" (hence the title of the collection, *The Flowers of Evil*).³⁰ His desire was to examine life and its components without merely accepting preconceived, predefined notions of the world around us. This examination of the intrinsic value of existence—the core spirit life, regardless of issues of human morality—is a major tenet of modernism in the twentieth century and eventually leads to the more radical artistic forms of Futurism and Dada.

Machines and Manifestos – Futurism and Dada

Both Futurism and Dada provided major sources of inspiration and artistic techniques for Industrial musicians, and both served as an example of how the ideals and philosophies of the Modern era could be used in an artistic realm as a response to the modern crisis. From Futurism, Industrial musicians appropriated ideas about noise sounds and the use of boisterous, and often violent, action as a form of artistic expression. They also used elements of Futurism's graphic style, its machine images, its obsession with the future, and its conception of the act of artistic creation as a form of work. In some cases Industrial musicians used these ideas to conceive of how they presented themselves (their own public image and voice), and in others they used elements to represent the unseen forces of capitalist society. The futurist artworks embodied the contradictions and vagaries of how Marx and Nietzsche would be understood throughout the

³⁰ Six of the poems in the collection were arraigned for offences to religion or public morality, and after a trial it was ordered that they be removed from the book.

twentieth century; progress and violence, history and the future, and the Industrial subculture employed those very contradictions to create their own music and art.

The relationship between Dada and Industrial music was more direct. Industrial musicians used Dada artistic techniques such as cut-up and shock tactics as well as a rather problematic sense of audience interpretation. This goes hand in hand with the Industrial subculture and its sense of satirical humor and parody as a form of social criticism that they also drew from the Dada work of art. Just as the Dadaist viewed their “anti-art” as a representation of the modern crisis, so too did the Industrial subculture seek to employ its methods of a secret club that allowed for a particular and more informed understanding of art in the twentieth century.

Futurism

Futurism developed out of a circle of symbolist authors and artists in Italy in 1909, and became much more severe and violent than Baudelaire’s collection of poems about the “beauty within evil.” Life in the early twentieth century was different from what it had been only ten years earlier and it seemed as if long held beliefs were being altered on a daily basis. The aspects of the changing industrial city that Baudelaire saw as a sad beauty in 1857 became the ultimate goal of Futurist magnificence. Compare the mood of Baudelaire’s “The Seven Old Men” to that of Antonio Sant’Elia’s *Manifesto of Futurist Architecture* from 1914:

We must invent and rebuild the Futurist city like an immense and tumultuous shipyard, agile, mobile and dynamic in every detail; and the Futurist house must be like a gigantic machine. . . . [The city] must soar up on the brink of a tumultuous abyss: the street will no longer lie like a doormat at ground level, but will plunge many stories down into the earth, embracing the metropolitan traffic, and will be linked up for necessary interconnections by metal gangways and swift-moving pavements.³¹

³¹ Apollonio, 170.

This proclamation is remarkable not only for its rather vivid description of a world that was to come in the next century, but also for its complete acceptance of progress, no matter how dirty, destructive, and violent it appeared. For Saint'Elia these images represented the might and unstoppable forces of modernism and the ability of those in power to remake the world into a mechanical metropolis.

Industrial musicians would later use these very images and sentiments but in reverse, believing that our praise for and faith in modern industry and technology would also be our downfall. At the same time Industrial music and imagery integrated the awe and praise of modern progress, a contradictory stance that frequently lead to confusion of the part of audiences. One example of this is given at the head of this chapter in the lyrics of the track “Metal Machine Music” [1992] by the first generation band Die Krupps: “An operation soulless, we're heartless and godless / We're synchronized and seamless, in worship of success. / Why do we act like machines?” While the lyrics present the subject as worshipping success and progress it also brings those very same qualities into question, asking the listener to consider why we act like machines – and at that point it is clear that Die Krupps also includes the listening public as a part of the pronoun *we*. The modernist machine mentality has removed our souls.

The Futurist's reaction to the atmosphere of change in the early twentieth-century was a violent and aggressive one, but it was also totally accepting of it and the modern crisis. This contradiction lay at the heart of the Futurists' work. Its violence and anger sat side by side with its visions of a technological Utopian future. Its endorsements of chaos and rupture pushed against its fascist control and order. Its rejection of the past, sentimentality, and artistic judgments were in opposition to the artists' own creative nature and a subconscious desire for acceptance. As Cinzia Sartini Blum discusses in her book, *The Other Modernism*:

[Futurism] was programmatically attuned to modernity and sought to bridge the gap between currents of irrational thought—in particular, Nietzschean anarchist irrationalism and Sorelian theories on the function of myth and violence in modern society—and what appears to be a positivistic faith in progress.³²

Their faith in progress led Futurists to convictions that their art was for the future and not from the past. Speed, dynamism, and change were all major elements of their work, and the modern cities of the world became breeding grounds for this new vision. They no longer attempted to hide the mechanisms of industrial progress away but instead wore them as their very essence.

The Futurists embraced the technological innovations of the time by basing their ideology on the idea of “work” – contained both within the “work” of the artist and the “industrial” nature of their subjects. In a 1914 Futurist manifesto by Bruno Corradini and Emilio Settimelli entitled “Weights, Measures and Prices of Artistic Genius,” they call for the disappearance of intellectual sentimentality and the related concept of inspiration: “It is more than justified to work lucidly, coldly, even with indifference and laughingly on a particular theme.”³³ Corradini and Settimelli go on to suggest that a human being functions as a machine, and therefore art may be created through work, with no care for the traditions and judgments of others. This leads them to the breakdown of preconceived conceptions of art. “Art” will no longer be bound by the limitations of music, literature, painting, etc. but will flow freely between all disciplines and beyond all disciplines. Whereas the nineteenth century saw attempts at the convergence of the various artistic disciplines in such concepts as Richard Wagner’s *Gesamtkunstwerk*, the Futurists called for the abandonment of disciplines all together. Therefore the last defining factor for any work of art becomes the creation of the new; “. . . every artist will be able to invent a new form of

³² Blum, 16.

³³ Apollonio, 145-146.

art.”³⁴ This ideology drew heavily on Nietzschean philosophy, which held that the artistic work had a social value that was more than simply a pleasurable one. The artist should be on the cutting edge of thought, setting the pace for the rest of society and becoming a true avant-garde. The Industrial subculture adopted this mode of thought by suggesting that their art existed in several forms simultaneously (music, artwork, performance, theater, and writing) and that the art was a part of social change. Music and art were actions designed to provoke thought.

As a last example I turn to the official beginning of the Futurist movement, and an article published in the Paris newspaper *Le Figaro* (February 20, 1909) by the Italian writer/poet Filippo Tommaso Marinetti. “The Founding and Manifesto of Futurism” energized an entire generation of Italian artists, poets, and musicians—giving birth to a form of modernism that embraced various modes of fascist thought and often engaged in violent and misogynistic exploits in the name of progress.³⁵ Marinetti’s 1909 futurist manifesto opens as a semi-autobiographical story, a tale of revelation, and a moment of recognition. This awakening is appropriately prompted in the story by an automobile excursion that ends in a violent crash.³⁶ Lying in a roadside ditch full of muddy water, Marinetti realizes that his previous joyride (in what appears to be a stolen car) has instilled in him a sense of speed and danger, and a love for the mechanical, industrial, and technological.

³⁴ Apollonio, 146.

³⁵ Marinetti was well versed in the works of French philosophers including Henri Bergson and Georges Sorel (1847-1922), and several German philosophers including Karl Marx, Frederick Engels, and Friedrich Nietzsche (who had recently been published in French [1893] and Italian [1898] editions). Marinetti’s immersion in the thought of these philosophers dramatically shaped his own endeavors, and he sculpted the works of these philosophers into a new ideology that served his own artistic goals.

³⁶ This is an interesting moment that seems to contain the future. Not only would the automobile become a central part of modernist culture in general, but it would also inspire J.G. Ballard to write *Crash*, a novel about deviant sexual behavior and car accidents. The book inspired numerous Industrial music songs about the power of the automobile. This was not Marinetti’s first attempt to connect the automobile with his feelings on modern society. In an earlier poem entitled *A mon Pégase* he portrays the car as a demon he can not contain. “Vehement god from a race of steel, / Automobile drunk with space / Trampling with anguish, / Biting with strident teeth!”

O maternal ditch, almost full of muddy water! Fair factory drain! I gulped down your nourishing sludge. . . . When I came up – torn, filthy, and stinking – from under the capsized car, I felt the white-hot iron of joy deliciously pass through my heart! . . . And so, faces smeared with good factory muck – plastered with metallic waste, with senseless sweat, with celestial soot – we bruised, our arms in slings, but unafraid, declared our high intentions to all the living of the earth.³⁷

Marinetti indicates that this is meant to be a moment of transformation and rebirth. When he and his friends were previously sitting at home on their Oriental rugs under electric lights and “blackening many reams of paper with our frenzied scribbling,” they were attempting to comprehend the new world that they perceived before them, but they were unable to identify with it. It is only after the accident, when he and his friends rise from their symbolic baptism in the sludge of industrial modernization, that he articulated his new position in a primal scream to the world. His rise from the ditch is meticulously designed. The “good factory muck” has covered him in metallic waste – he now wears a metal shell created of industry. It mixes with his now senseless sweat, the cleansing waste of the human body. Both man and metal rise up to the heavens along with the factories’ celestial soot, unafraid of their transformation. This story openly utilizes the common tropes of transformation and establishes many of the aspects of man-machine imagery that would develop in the latter part of the twentieth century. This story also draws substantially on Nietzsche’s *Übermensch*, the one who will rise above the human form into a new level of consciousness; however, here it is represented as a fusion with the non-human and the industrial.

In his manifesto, Marinetti calls for the burning of museums, libraries, and academies, and declares them nothing more than cemeteries holding on to the artistic dead and the past. He admits that by his own manufacture he himself must one day be tossed into the wastebasket in order to allow new ideas to surpass his own. The future is for the young. In this manner

³⁷ Apollonio, 21.

Marinetti seems to have anticipated the youth movements of the later twentieth century.³⁸

Marinetti pronounced that for those who came before him and those who will come after, “Art, in fact, can be nothing but violence, cruelty, and injustice.”³⁹ The eleventh and final declaration in the manifesto (a portion of which is quoted at the start of this chapter) is an acceptance of all that the world was becoming: its violence, its energy, its power, its nightmares, and its industry. Much of the art generated by the Futurist movement failed to live up to these standards, and it was not always the fault of the individuals involved. Some of their goals, especially those that were more technologically oriented, were almost impossible to achieve within their lifetime. Others were simply the victim of historical persistence, for even if the Futurists could imagine what the art of the future might be, they found themselves relying on the tools of the past, and rooted in the limitations of the present.

In the whirlwind of futurist creativity, the authors discarded all tradition and artifacts of the past. The movement placed spontaneity of expression, dynamism, and the assault on all the senses above any consideration of predetermined form, structure, constraints, or traditional artistic concerns; and it did all of this through the acceptance and admiration of a world that was dominated by progress and technology. This was not to be an artistic movement for museums, libraries, and history, but a dynamic art created in, concerned with, and designed using elements of, the living Modern world.⁴⁰

³⁸ Particularly in popular music, each new style of music seeks to supplant the old. The rebellion of Rock and Roll is replaced by Rock, by Progressive Rock, by Punk, by Industrial, by Rap, and on and on and on. Futurism believed that Art must continually evolve, never at rest or silent. Each young artist must create anew without considerations for tradition or contemporary critique.

³⁹ Apollonio, 23.

⁴⁰ I will return to the Futurist moment and Luigi Russolo’s *The Art of Noise* in the next chapter in relation to musical modernism.

Dada

If Industrial music draws much of its general visual aesthetic grounding from Futurism, then it learned much of its artistic technique from a related modernist movement that began in 1916 and was self-labeled *Dada* by its practitioners. There were major Dadaist factions in Zurich, Switzerland; Berlin, Germany; Paris, France; and New York, United States; however, it was the Zurich Dadaists that had the most important influence on Industrial music. The Zurich Dadaists, including Hugo Ball and Tristan Tzara, were closely connected to the ideals of the Futurists, documented through the inclusion of futurist art, literature, and music in their work. While both Futurism and Dada shared an understanding of the basic modernist characteristics of industrialization, progress, originality, and a rejection of the pastoral, the two movements differed on how these ideals were to be accomplished and represented in art. Futurism centered on the idea of great works of art that pushed the modernist agenda ahead at all costs; Dadaism represented modernism as a breakdown of the codes of society as seen in their works of “anti-art” and their use of parody and irony.

The Dada movement was even more radical than Futurism in its disavowal of the past and its declaration of the eradication of social norms. This is often referred to as the negative or nihilistic aspect of the Dadaist movement. It pushed for the removal of all pretension to and statements of authenticity from the world of art, so much so that one of its defining aspects was the attempt to erase the idea of Art from the planet entirely. This led them to the creation of anti-art that aimed to present anti-naturalistic images and to shock and subvert through “violently satirizing human pretensions, the established social order, and the ideological means by which that order seeks to legitimize itself.”⁴¹ Dada’s violent and shocking intentions were tempered by

⁴¹ Richard Sheppard, *Modernism–Dada–Postmodernism* (Evanston, Illinois: Northwestern University Press, 2000), 201.

its sense of humor and an overall desire to not take itself too seriously. This mixture of antagonistic and humorous attitudes gave the movement a particularly eccentric spin, an aspect that was later adopted by the Industrial music subculture.

The connection between the methods of the Dada subculture and the Industrial subculture stands as a direct historical link that has been explicitly documented by numerous Industrial musicians. Industrial musicians read and studied the Dada works and actively modeled their own philosophy and artistic techniques after them including the theory that art should be action, and the formation of an ambiguous relationship to modernism.⁴² Industrial musicians employed many of the same artistic techniques such as a satirical sense of humor, the use of chance elements and shock tactics, the creation of anti-art, the presentation of art in a public forum as performance art, and the creation of a subculture in which an awareness of meaning developed.

The Zurich Dada movement most famously carried out its activities at the now infamous Dada nightclub, the Cabaret Voltaire. Opened on February 5th, 1916, by Hugo Ball and his wife Emmy Hennings (who had fled Germany together in 1915 due to their political anti-war stance), the Cabaret Voltaire was simultaneously an artists' club, exhibition room, bar, and performance theater. It was set up in the Holländische Meierei café (owned by Jan Ephraim) and consisted of a small stage with a piano and room for approximately fifty audience members seated at tables. The original press release read, "Cabaret Voltaire. Under this name a group of young artists and writers has been formed whose aim is to create a center for artistic entertainment."⁴³ The cabaret

⁴² The most direct example of this can be seen in the name and artistic strategies of one of the major first generation Industrial bands, *Cabaret Voltaire*, who is discussed in detail in Chapter 5.

⁴³ Hugo Ball, *Flight Out of Time: A Dada Diary* (New York: Viking Press, 1974), 50. The evenings were not as anti-art as the Dadaist writings seemed to describe but consisted of a mix of more traditional performances side-by-side with futurist works. During the first few months Ball kept a record of performances in his diary, some of which were: a Totentanz; a balalaika orchestra of Russian patrons; cabaret performances by Hennings; poems by Werfel, Lichtenstein, Ball, Tzara, Max Jacob and various Futurist poems; lectures by Huelsenbeck and Arp; music by Liszt, Debussy, Scriabin, and Rachmaninoff; and paintings by Kandinsky, Picasso, Apollinaire, and Marinetti.

avored new art welcoming all forms of modernism, and the atmosphere inside soon became wild, especially when mixed with drugs and alcohol. By the 26th of February 1916 Ball would write, “The little cabaret is about to come apart at the seams and is getting to be a playground for crazy emotions,” and on March 15th he proclaimed, “With all the tension the daily performances are not just exhausting, they are crippling. In the middle of the crowds I start to tremble all over. Then I simply cannot take anything in, drop everything, and flee.”⁴⁴ The desire to shock its audiences drove the Dadaist further and further from the kinds of performances seen in the rest of Zurich and deepened their connections to the Futurists as fellow moderns despite their philosophical differences.

On May 15th, 1916, Ball published an anthology entitled “Cabaret Voltaire,” and it is in this publication that the term Dada was used for the first time as a name for the kinds of activities Ball and the Zurich Cabaret wished to promote. The book contained works by Ball and the other Dadaists along with Apollinaire, Picasso, Kandinsky, Marinetti, and Cendraras. Taken together, both the nightclub and the book series (along with the later 1917 publication Ball produced by himself called *Dada*) helped to form the Dada subculture that would soon spread across the globe. The cabaret fell apart only six months after it began but the publications and manifestos produced by futurist artists passed on valuable information regarding these events, allowing others to begin similar groups or make use of those artistic tactics—including the Industrial musicians sixty years later. The Dada message could be transmitted, understood, and re-created by many who were unable to attend the physical club in Zurich.

⁴⁴ Ball, 52, 57.

The Zurich Dadaists did not conceive of their artifacts as symbols of reality, but instead as momentary, flawed perceptions of one possible reality.⁴⁵ This allowed them to create artistic statements without claiming any connection to a universal truth or suggesting a privileged place of greatness for their work. Their attitude reflects the modern crisis in which society's changing perceptions of what is considered real affects how each of us perceives any event/object and implies meaning. As Tristan Tzara wrote in his 1918 *Dada Manifesto*, "Everything we look at is false."⁴⁶ Hugo Ball wrote in a November 1915 diary entry that the physical action, the moment of creation, was the most important aspect of an artwork, and that the artist should not attempt to constrain this creative flash to an absolute sense of reality:

The activity of any art (painting, writing, composing) will do [people] good, provided that they do not pursue any purpose in their subjects, but follow the course of a free, unfettered imagination. . . . all living art will be irrational, primitive, and complex; it will speak a secret language and leave behind documents not of edification but of paradox.⁴⁷

Ball clearly positions the groundwork for Dada's own paradoxical nature, its dualistic sense of complexity and irrationality. Ball also implies the development of a subculture, a "club" in which a secret language is spoken, in which each artist speaks his/her own language. It is a space in which there is no "correct" meaning—a concept that was created by what Ball calls the "filth that clings to this accursed language, as if put there by stockbrokers' hands, hands worn smooth by coins."⁴⁸ The work of anti-art is something made at a particular time and exists in and of that time with meaning created by the audience and the artist serving as an instigator.

Dadaists valued creation over observation and action over criticism.

⁴⁵ Richard Sheppard, in his book *Modernism–Dada–Postmodernism*, describes seven major facets of the Dada works of anti-art, and what follows is a summary of Sheppard's work with my own additional commentary and citations from primary sources.

⁴⁶ Tristan Tzara, "Dada Manifesto 1918," reprinted in *Tristan Tzara, Seven Dada Manifestos and Lampisteries*, trans. Barbara Wright (London: John Calder, [1963] 1977), 8.

⁴⁷ Ball, 49.

⁴⁸ Ball, 221.

Elements of chance were encouraged in both the selection of materials and in the construction and presentation of anti-art. This allowed the Dadaist to move beyond Romantic conceptions of the artist as genius or sole creator, and allowed for the ebb and flow of nature to guide them. Tristan Tzara, in his 1921 “Dada Manifesto on Feeble Love and Bitter Love,” part VIII, explains his method for composing what he calls a Dadaist poem:

Take a newspaper.
Take some scissors.
Choose from this paper an article of the length you want to make your poem.
Cut out the article.
Next carefully cut out each of the words that makes up this article and put them all in a bag.
Shake gently.
Next take out each cutting one after the other.
Copy conscientiously in the order in which they left the bag.
The poem will resemble you.⁴⁹

This simple suggestion for a cut-up technique allows for an output directed by elements of chance and the deconstruction of the work of art as a vessel of some greater meaning. The meaning of a cut-up poem *must* be interpreted by the reader since it may contain nothing but paradox and irrationality on the surface. The fact that certain moments yielded seemingly profound statements was a testament to what they believed were the underlying constructions of language and society that were uncovered in the assembling of the pieces of paper. A number of New York City artists used this same modernist concept during the middle of the twentieth century also utilizing various chance techniques or “indeterminate” elements and forms, including the artwork of Marcel Duchamp, the music of John Cage, and the literary works of the New York Beat Poets such as Allen Ginsberg and William Burroughs.

⁴⁹ Tristan Tzara, “Dada Manifesto on Feeble Love and Bitter Love,” reprinted in *Tristan Tzara, Seven Dada Manifestos and Lampisteries*, 39. Originally published in “La Vie des Lettres,” no. 4, 1921.

The Dadaists had an ambiguous relationship with both modernism and technology. Many of their artistic techniques (collage, montage, photomontage, etc.) had been used by other modern artists. And while the Dadaists often employed current technology in art or as art, they exploited these very techniques and technologies in order to critique much of what they believed modernism had come to represent, such as nationalism, warfare, consumerism, artistic genius, and ownership. They perceived formalized modernism as an illness within society and proposed that the only cure was the destruction of those things and ideas that contained it. So while the Dadaists criticized some aspects and forms of modernism, in the end their solution was the same as the one reached by the Futurists—wipe the slate clean and begin anew. Modernist artists begin to use their own techniques and ideals to criticize the very concepts that they support, becoming self-reflexive. This ideal becomes central to many Industrial bands that discerned major problems with society in the 1970s and then used the mechanisms and techniques of modernism as a commentary and critique of modernism itself.

Many Dada manifestos published after 1916 illustrate the ambiguous relationship of Dada to modernist technique. To create a manifesto of artistic ideals, even when one is advocating the denial of all artistic formulas, is an act of modernism in and of itself. There was a need to disseminate information about the Dada objectives and artwork even as they attempted to destroy the walls all around themselves. To publish a manifesto about the denial of artistic technique embodies the ambiguous nature of the Dada movement—to do something while simultaneously denouncing it. This fact may account for the confusion Dada anti-art caused in its audiences. Contradictory artistic statements are common to both Dada and Industrial music where musicians attempt to destroy what they contain. As I will later show, Industrial musicians often met with the same level of audience confusion that Dadaists had found sixty years earlier.

Dada is an art form that is designed to be carried out in public, among the people. It models itself on older public forms such as the carnival, street performance, rituals, the circus, etc. This public performance-art aesthetic manifests itself in the shock tactics used by many Dada artists, so that the work is immediate and present. The viewer does not have time to assimilate the initial shock or to fully understand how it might comment on society. Combined with the chance operations and distorted temporal aspects of Dada artwork, it creates an art object that is often aggressive and hostile towards its audience. Since there is little or no time for private contemplation and a consideration of values, audiences are left with outrage over the undigested pieces. One's response becomes instantaneous. Ball was well aware of the fact that this forced them to continually raise the bar for Dada performances in order to maintain the shock of the new, as he wrote in his diary on March 2, 1916:

Our attempt to entertain the audience with artistic things forces us in an exciting and instructive way to be incessantly lively, new, and naïve. It is a race with the expectations of the audience, and this race calls on all our forces of invention and debate. . . . The artist as the organ of the outlandish threatens and soothes at the same time. The threat produces a defense. But since it turns out to be harmless, the spectator begins to laugh at himself about his fear.⁵⁰

Dada called for art to be an action and not an object. The idea of an artistic genius is flatly rejected and in the process Dada tended to favor techniques that allowed for anyone and everyone to participate, e.g. collage. The act of saying something, producing, and performing outweighs any vision of the artist as a creator of some eternal object to be studied and captured. Dada places a final stress on the response of the audience, suggesting that the meaning is in the eyes and ears and senses of the beholder. What has supreme meaning to one group of people may seem without meaning to another. The Dada aesthetic calls for the removal of social

⁵⁰ Ball, 54.

constraints and the past, urging us to hear the voices of the present—not voices that are locked away in museums for polite and casual consumption on the weekends but for art as an action and confrontation in one’s daily life.

Modernism and Politics from 1920 to 1945

Throughout the twentieth century politics and political action become increasingly engaged with modernist philosophy. The ideals of Marx and Nietzsche increasingly influenced the world of political action, but this process is not without its own peculiarities. The artistic movements such as Futurism and Dada misread much of modernist philosophy in order to better serve their own ideals. The philosophy affected their artistic creation generally but not always explicitly. When they connected their ideology with the political world, they made changes to help serve those in power. As ideas flowed from the artistic to the political, a secondary layer of mistranslation soon worked itself into the public consciousness and understanding of those very ideals. Tracing the process of this translation in the first half of the twentieth century allows for an understanding of the multitude of perspectives on modernist thought that existed during the 1970s when Industrial music first began to form its own strand of modernist thought. Because these mistranslations of modernist philosophy were so widespread, Industrial musicians internalized much of it, but the Industrial subculture simultaneously used the mid-twentieth century political manifestations of this mistranslation as a foil against the current social and political issues.

Futurism and Fascism (Marinetti and Mussolini)

During the early years of the twentieth century, Futurists embraced the idea of war. In his 1909 Futurist Manifesto, Marinetti maintained that war was one of the primary guiding interests of the Futurist movement: “We will glorify war—the sole hygiene of the world—

militarism, patriotism, the destructive gesture of freedom-bringers, beautiful ideas worth dying for, and scorn for women.”⁵¹ Marinetti and the Futurists viewed war as a cleansing process for the world and a step forward in the glory of men and machines in action together. War posed the possibility of wiping the world of the past away in one violent stroke, taking Nietzsche’s call to the future to its most violent and inappropriate conclusion. This early proclamation and the Futurist’s actions during 1915 exposed their underlying ideals of extreme nationalism and misogyny.

In July 1915, during WWI, many Futurists, including Marinetti, Boccioni, Russolo, Piatti, and Sironi, were swayed to join the Italian army as members of the Lombard volunteer motorcycle battalion and saw action in the fighting at Trentino.⁵² They would continue to produce Futurist artworks from the front, including paintings of military might and action, manifestos supporting the war, and poems based on war action and sounds. The poems made use of onomatopoeia and typesetting fonts that attempted to display the meaning and actions of words on the page in a visual manner (i.e. the word *boom* written as if it were exploding, or the word *fall* with each letter lower on the page than the last, as if falling). One such manifesto, Giacomo Balla and Fortunato Depero’s “Futurist Reconstruction of the Universe 1915,” predicts a great future war in the form of fiery robot battles along with the rather prophetic idea of these robots shouting and dancing. They compare these future battles to the gore of the current conflict in WWI. The robotic future was represented as a Utopia in the manifesto by drawing on the futurist acceptance of brutality, war, and progress. In their manifesto Balla and Depero

⁵¹ Apollonio, 22. I have altered the phrase in the original translation “the world’s only hygiene” to the now more commonly used “the sole hygiene of the world.” Marinetti also expanded this idea in a short leaflet he handed out at pro-war demonstrations at the start of WWI. The ominous use of the word “hygiene” pinpoints the seeds of the radical and horrible acts of genocide committed by the Italians and Germans only years later during World War II.

⁵² Boccioni was KIA near Verona in 1916 after producing one of his last paintings, a portrait of the composer Ferruccio Busoni.

describe the future landscape and the “metallic animals” that will inhabit it – an image that predates Industrial music and the first *Terminator* film by more than half a century:

The Metallic Animal–Fusion of art and science, chemistry, physics, continuous and unexpected pyrotechnics all incorporated into a new creature, a creature that will speak, shout and dance automatically. We Futurists, Balla and Depero, will construct millions of metallic animals for the vastest war (conflagration of all the creative forces of Europe, Asia, Africa and America, which will undoubtedly follow the current marvelous little conflagration).⁵³

Within the manifesto the visions of a robot future contain what can be seen as a social preparation for the beginnings of a Fascist state in which even the human beings become cogs in the great machine of governmental order and military control. Within this system the machines will eclipse even the men who created them. The human disappears, and in the service of capitalism and imperialism everyone is equalized to the status of worker, in the war-machine’s pursuit of world domination.⁵⁴ The extreme ideals of the pre-WWII avant-garde, which included Futurism and Dada, often called for a destruction of culture in which, as Igor Golomstock suggests, “Only that art has the right to exist which is an effective instrument for the transformation of the world in the necessary direction, while everything else is counterrevolution or bourgeois reaction: to the revolutionary avant-garde this was an absolute and unshakeable truth.”⁵⁵ Benito Mussolini, who very rarely publicly acknowledged the influence of Italian

⁵³ Apollonio, 200.

⁵⁴ See Alan Woods, “Italian Futurism and Fascism: How an artistic trend anticipated a counter-revolutionary tendency,” published online at http://www.marxist.com/ArtAndLiterature/italian_futurism_and_fascism.html.

⁵⁵ Igor Golomstock, *Totalitarian Art in the Soviet Union, Third Reich, Fascist Italy and the People’s Republic of China*, trans. Robert Chandler (London: Icon Editions, 1990), 21.

cultural movements, once stated, “I formally declare that without Futurism there would never have been a fascist revolution.”⁵⁶

Mussolini was originally very interested in Marxism, as well as the works of Nietzsche and Georges Sorel (just as Marinetti did), and served as the editor for the Italian socialist paper *Avanti!* (1913-1914) and the journal *Utopia* (1914). He was widely recognized as the head of the revolutionary Left of the socialist party by such Italian intellectuals as Antonio Gramsci, who was a well-known Communist. Mussolini’s vision of Marxism was a skewed one and was shaped by his interest in Sorel’s philosophy and by his friends Arturo Labriola (the founder of Italian theoretical Marxism and a major influence on Gramsci) and Enrico Leone (author and publisher of the leading journal of Italian revolutionary syndicalism *Divenire sociale*). Mussolini engaged in an extensive reformation and reinterpretation of the basic tenets of Marxism and frequently endorsed proletarian violence as the only acceptable force for changing the social status. But Mussolini turned against his socialist background in the summer of 1914 when he decided to support Italy’s entrance into WWI on the side of the Allies (something that the socialists were against) and began to publish his own paper *Il Popolo d’Italia* in support of the war efforts. This soon drew Marinetti to him and the two met in Rome at a pro-war demonstration in April of 1915.

Between the two world wars most of the Futurists still connected to Marinetti were involved in a brief period of alignment with leftist politics, and became obsessed with the production of “Machine Art,” which was based on the concepts of mechanical rhythms, functional form, and architectural pursuits. This shift in the artistic aesthetic of the Futurists to a more rigid set of forms is a result of their rising fascist ideologies. The Futurists’ connection to

⁵⁶ Francesco Perfetti (ed.) *Taccuini mussoliniani* (Bologna: Il Mulino, 1990), 425. Quoted in Emilio Gentile, “The Conquest of Modernity: From Modernist Nationalism to Fascism,” trans. Lawrence Rainey, *Modernism/Modernity* 1 no. 3 (1994): 55.

the rising political party changed their aesthetic in some small ways based on content yet in some drastic ways when the ideology behind those shifts is considered. While the earlier works described a relationship between man and machine that would lead to a new future for humanity, the machine art of the Futurists preached of a world ruled by machines. In this vision the human component is only a small cog in the much greater machine, and the use of excessive violence is called upon more and more. This vision of a future filled with malevolent machines becomes one of the most constant images used in Industrial music to represent humanity's quest for progress and change gone astray.⁵⁷ The Futurist machine art projected their political sensibilities onto the machines of destruction and presented them as a positive force in the cleansing of the Earth in order to make way for the future utopia. The Industrial musicians, on the other hand, take the literal image of warring machines and present them as a completely caustic force sent to destroy humanity—our own ambition and cruelty taken to its ultimate end, self-destruction.

The rise of fascist governments seemed to signal an end to modernism since these political bodies were incompatible with ideas of progressive cultural forms, and especially the avant-garde. Recent studies in the fields of literary criticism, art history, and sociology have labeled the continued engagement of modernism by fascist governments in the mid-twentieth century as “reactionary modernism” or “alternate modernism.” Emilio Gentile has suggested in his many studies of fascism and modernism that in order to understand modernist movements and their participation in the Fascist regimes one should include an examination of how the two were able to co-exist as part of a “modernist nationalism.” These various forms of modernist

⁵⁷ These new futurist works included a number of ballets by Depero and Prampolini who focused their work on the “interpretation and reproduction of the movements and noises of machines.” Giovanni Lista, *Futurism* (New York: Universe Books, 1986), 76. This work included such pieces as the *Propeller Dancer* by Prampolini, in which women dressed as airplane propellers and moved in a mechanical fashion; *New York New Babel* by Depero, who envisioned the total mechanization of the stage, which was designed to be a machine with all of its parts in motion together; and the *Mechanical Ballet* by Paladini and Pannagi, which used colored lighting and a musical score consisting of noises made by two motorcycle engines. The Futurist musician Luigi Russolo participated in the showings of the film *Machines on the March* created by Eugène Deslaw in Paris.

nationalism were not conservative reactions to modernization but instead an acceptance of industrialization into society and human sensibility allowing for a revolution of mind to accompany the one occurring in the field of industry. While we may be able to understand forms of fascist architecture, literature, music, and propaganda within the larger framework of twentieth-century modernism, it is also important that we do not lose sight of the terribly vicious totalitarian governments they supported. Fascist artists frequently participated in these governments and were not simply misled into their participation. Drawing on the work of Marshall Berman, Emilio Gentile maintains:

Futurism and Fascism are both . . . manifestations of political modernism that belong to a common cultural terrain. The ‘conquest of modernity,’ as we may call the aspiration to have the capacity and the power to master the processes of modernization, did not follow a single path. Political antagonism among the ideal alternatives of modernity has been perhaps one of the most disquieting, ambiguous, and tragic features of the twentieth century. Many, and not just the Futurists, have believed that the surest and most rapid path toward the ‘conquest of modernity’ was that proposed by totalitarian movements.⁵⁸

The marriage of modernity and totalitarianism became increasingly more common in the post-WWII period. Thinking that the process of modernization could best be achieved via totalitarian means also allows one to feel a sense of control over the modern crisis—for as the structures of the old world crumble one may attempt to replace them with new ones that stop the flood, or at least allow those in power to believe that this is the case. Many aspects and ideals of WWII-era Futurism become important elements in the Industrial subculture such as the imagery of a future ruled by machines, and the attempts of humanity to control the modern crisis via totalitarianism. Industrial musicians used the images of WWII-era fascist governments as a real world representation of the dystopian possibilities of modernism and humanity’s attempt to stall the

⁵⁸ Gentile, 57-58.

coming crisis. In this regard, the most dramatic representation of “fascist modernism” that was used by the Industrial subculture to critique modernism gone astray can be found in the German National Socialist (or Nazi) Party.

Modernism, Technology, the National Socialist Party, and Hitler’s utopian Mein Kampf

The Industrial music subculture frequently framed its discussion of the evils of the twentieth century in a fascination with the German Nazis of World War Two. The Industrial subculture paints a dystopian vision of the future that is heavily based on the Nazi’s separation of modernization and the rational ideals of the Enlightenment. Industrial musicians believed that after the Third Reich the promise of a mighty technological future was tainted by the overtones of fascist control, brutal dictatorships, humans replaced by machines, and the dark soulless pit of a Romanticism made of steel (i.e. Die Krupps’ statement, “Why do we act like machines?”). Industrial musicians used the shocking imagery of Nazi propaganda and references to its perverse social policies as an analogy for the hidden evils within the modernist social systems we find around ourselves all the time. They even used it to discuss the more “harmless” forms of propaganda used by twentieth-century corporations such as the British food chain Tesco (a constant target of Throbbing Gristle’s parody). By looking back to the terrible actions of the Nazis, Industrial musicians hoped to enlighten audiences about the dangers that surrounded them everyday.

It has often been suggested that the German sense of a tangible modern crisis allowed Adolf Hitler to take control of the country in 1933. Germans believed that the only way to escape the anxieties of the post-WWI years was to march forward in a flash of reinvention.⁵⁹ Hitler and the Nazis incorporated a vibrant sense of modernism into their political and

⁵⁹ For an excellent summary of this concept see: Peter Fritzsche, “Nazi Modern” in *Modernism/Modernity* 3 no. 1 (1996), 1-22.

philosophical doctrines in a manner similar to Mussolini's use of Futurism. The Nazis claimed a legitimization for many of their modernist ideologies within and through the writings of Nietzsche.⁶⁰ They accomplished this in part by selectively editing Nietzsche's works and republishing them in official Nazi volumes. It was this "Nazified Nietzscheanism" that was used in the German school system as part of the Reich educational policy and by numerous other special interest groups.⁶¹ Nietzsche was viewed within the Reich as a genius who was able to envision the developing modern crisis and to suggest a solution to it. As a Nazi spokesman once stated, "I am convinced, that only a conscious National Socialist can fully comprehend Nietzsche."⁶²

The Nazi party turned Nietzsche into an intellectual Führer for the new German culture and used a Nazified version of his philosophy to endorse the sweeping changes proposed by Hitler. Steven E. Aschheim in his book *The Nietzsche Legacy in German 1890-1990* explains how the Nazi conception of Nietzsche's philosophy assumed a position of importance within the official culture of the Third Reich:

An appropriately fashioned Nietzsche was diffused not only explicitly but also subliminally—and thus, perhaps, more powerfully—through the integration of Nietzschean slogans into everyday Nazi rhetoric. National Socialist vocabulary was saturated with a suitably transfigured Nietzschean phraseology. Since Nietzsche was often not mentioned as their author, the slogans could assume a natural, taken-for-granted quality.⁶³

⁶⁰ This is not to say that the writings of Nietzsche, in their basic philosophy or intent, were somehow a precursor of National Socialism. In fact many post-WWII authors and philosophers have suggested that Nietzsche would have been entirely opposed to the philosophical interpretations and totalitarian methods of the Nazi party; yet the Nazis found it easy enough to assimilate and transform his work so that it appeared to prophesy the coming of the Third Reich.

⁶¹ Steven E. Aschheim, *The Nietzsche Legacy in Germany 1890-1990* (Los Angeles: University of California Press, 1992), 245.

⁶² Heinrich Härtle, *Nietzsche und der Nationalsozialismus* (Munich: Zentralverlag der NSDAP, 1937), 6. Quoted and translated in Steven E. Aschheim, *The Nietzsche Legacy*, 237.

⁶³ Aschheim, 236.

By working their own version of Nietzsche's philosophy into the very fabric of German society, the Nazis developed it into a naturalized set of vocabulary and ideas within the German public. Hitler would claim to be *der Führer* not by divine appointment but by the German people's "will to power" which would bind them together in the ideals of the *Volksgemeinschaft*, unified by blood, place, history, and language. The German people were given confirmation of this unification within Nietzsche's own words: "We are *more* than the individuals: we are the whole chain as well, with the tasks of all the futures of that chain."⁶⁴

One of the interesting aspects of Hitler's *Mein Kampf* is that it essentially presents the reader with a modernist Utopian view for the future of Germany and the lasting spirit of the German people. All of the negative rhetoric presented in the text is phrased in order to make it appear as a positive affirmation. This is a basic technique of propaganda—the promise of a better future through work and commitment to the Reich—which Hitler and Joseph Goebbels would use throughout WWII in order to keep the German public, the military, and the governmental officials in line with the basic Nazi party ideology.

In 1933 Joseph Goebbels (1897-1945) became the Nazi Minister in charge of the *Reichsministerium für Volksaufklärung und Propaganda* (Reich Ministry for Public Enlightenment and Propaganda—RMVP). His ability to present rousing and comforting propaganda speeches was a major part of the Nazis' maintenance of power, and he often attempted to "guide" the German public to beliefs that served the policies of the state. He insisted that the twentieth century was to be the century of *stählernde Romantik*, or steel-like Romanticism. This phrase was a calculated one and contained an obvious reference to the powerful German steelworks such as Krupps, which formed the industrial backbone of the

⁶⁴ Nietzsche, *Will To Power*, 366. Italics are in the original.

country. Goebbels devoted a great deal of effort to explaining to the German public how their souls were “compatible with modern technology.”⁶⁵ Several of his speeches regarding technology were reprinted in the German journal *Deutsche Technik*, including one from the opening of the Berlin Auto show in February 1939. The cover of that issue features images of Goebbels, Hitler, and a Volkswagen automobile.

We live in an era of technology. The racing tempo of our century affects all areas of our life. There is scarcely an endeavor that can escape its powerful influence. Therefore, the danger unquestionably arises that modern technology will make men soulless. . . . We live in an age that is both romantic and steel-like, that has not lost its depth of feeling. On the contrary, it has discovered a new romanticism in the results of modern inventions and technology.⁶⁶

Like the Futurists, the Nazis saw themselves at the doorstep of a modernized future world; however, the Nazis did not wish to throw away the past. Instead they wanted to assemble the future on the foundational spirit of the German people and forge a new Reich from the industrial power of the German steel mills and factories. Through Nazi propaganda the German people were able to connect their past and their future in a single functional present. This connection is strengthened in the remainder of Goebbels’ Berlin Auto Show speech by referencing advances in the Volkswagen automobile and the Autobahn highway system. These were technological victories that people could see, understand, and use every day.

In their search for Nazi material to represent the negative corrupting influence of modernism the Industrial musicians keyed in on Goebbels’ dynamic image of soulless technology animated with the rhythm and hot impulses of our time. Sometimes the material is directly quoted without commentary, but as I will show in chapter five, it is more frequently assimilated and presented as a modernist vision gone horribly wrong. The Industrial bands based

⁶⁵ Jeffrey Herf, *Reactionary Modernism* (Cambridge: Cambridge University Press, 1986), 195.

⁶⁶ Joseph Goebbels, *Deutsche Technik* (March 1939), 105-106. Quoted and translated in Herf, 196.

much of their lyrical vocabulary, visual imagery, and overall dramatic effect on elements of Hitler's and Goebbels' propaganda and used it as representations of the modern crisis in its most intense personification (i.e. the name of the band *Die Krupps* shows connections to German industrial might and the Krupps steel mills). It has been said that after the atrocities of the Third Reich the idea of a true Utopian society is no longer possible and that any vision of the future must contain both the promise of itself and its own negation—the philosophical crisis made harsh reality. In its search for methods and techniques to represent these various forms of Utopian and Dystopian futures, the Industrial subculture draws heavily on Science Fiction and its depiction of our future as a tool to understanding our present.

Modernism, Utopia and Dystopia in Fictional literature and film before 1950

The fictional story of the Nine Inch Nails album *Year Zero* discussed in the opening of this chapter not only makes reference to a large number of literary works, it also utilizes particular literary devices from these works. Industrial musicians assimilated manifestos and machine art from Dada and Futurism, and used the twisted modernist imagery and ideals of WWII-era political modernism as a reflection of all that had gone wrong in the world. At the same time they looked to twentieth-century literary models for examples of storytelling and social satire, especially those works considered science fiction. Novels such as Aldous Huxley's *Brave New World* and Hermann Hesse's *The Glass Bead Game* serve as a model of how to incorporate elements of modernist thought dealing with the modern crisis into a fictional framework that functions as real world warnings, allowing Industrial musicians to develop their own version of a populist grassroots modernism. Fritz Lang's silent movie *Metropolis* is one of the earliest attempts to represent the future on film, and the Industrial musicians used its images of modern wonders and perils as a framework for much of the visual style of the subculture.

Beginning in the nineteenth century the literary genre called *science fiction* became one of the primary places in which a populist aesthetic of modernism developed. Although the majority of scholars, critics, and writers of science fiction frequently disagree on issues such as a concise definition of the literary genre, or on what it should officially be called (Sci-Fi, SF, Speculative Fiction), most seem to agree that it began with Mary Shelley's 1818 novel *Frankenstein*. Shelley did not conceive of *Frankenstein* as a science fiction novel. The term was coined in a later 1851 text and only became a common designation in 1929 when Hugo Gernsback used it to describe the type of story that was appearing in his magazine *Amazing Stories* (founded in 1926).

The reason Shelley's horror story about Victor Frankenstein, the "Modern Prometheus," is often cited as the beginning of a new literary genre is due to the shift of focus from the "supernatural" to the "scientific." Unlike most fantasy or gothic literature of the time that dealt with ghosts and vampires, Shelley's tale is grounded in the possibilities of science. Shelley has Victor Frankenstein accomplish his reanimation of dead flesh through scientific method, and not by the use of potions, spells, or talismans. At the core of Shelley's novel is a message about scientific and technological advancement and its consequences for human morality, ethics, and progress. The style of socially conscious warnings and cultural commentary initiated by Shelley will find itself repeated many times throughout the twentieth century. This particular form of social commentary developed particular literary methods that would later be translated into the filmic medium in movies such as *Metropolis* (1926), *The Planet of the Apes* (1968), *Blade Runner* (1982), and *The Terminator* (1984). It would also become a major force in the image, lyrics and music of almost every Industrial band.

Paul Alkon states in his book *Science Fiction Before 1900: Imagination Discovers Technology* that “[Jules] Verne...[H.G.] Wells, and Mary Shelley . . . [use] science as a springboard to [the] creation of powerful myths allowing novel points of view to the imagination.”⁶⁷ These new viewpoints are one of the most powerful aspects of science fiction, allowing the reader to experience his/her own world from an outside perspective (e.g., as an alien visitor to the planet Earth). This technique is particularly effective when it stresses the consequences of the destructive use of science and technology alongside the potential advancements it might produce. One of the most common alternate viewpoints is accomplished by setting the story in the future, creating what is often called a *futurist* novel. This allows the author to examine the current state of humanity through the use of fictional hindsight. At its core this style of science fiction wrestles with the problems and possibilities present within the modern crisis.

The future temporal setting of science fiction frequently causes audiences to dismiss the genre as a proposed fantasy world. Isaac Asimov, one of the most successful and well-respected of twentieth century science fiction writers, explains that what may seem at first glance to be prediction or fantastic conjecture is really only an “extrapolation of the present” and that science fiction writers typically attempt to forecast a “clear and obvious result” of what one already sees “in embryo.”⁶⁸ Another variation on this theme was to locate the utopian future in a society that had been rebuilt after an apocalyptic disaster. The post-apocalyptic future utopia follows the basic premise of the Christian Apocalypse itself, as contained in the book of Revelation of St. John within the Bible. It is only after the complete breakdown of all that has gone wrong in the

⁶⁷ Paul Alkon, *Science Fiction before 1900: Imagination Discovers Technology* (New York: Twayne, 1994), 7.

⁶⁸ Isaac Asimov, *Asimov on Science Fiction* (Garden City, NY: Doubleday, 1981), 82.

world that the true Utopia can rise from the ashes; things start anew and without the original sin of the fall.⁶⁹

When the post-apocalyptic future utopia is remade in secular fictional literature, it makes possible an entirely new type of social commentary, for not only can the author suggest a possible future utopian model as before, but can also explain specifically why the apocalypse occurred. The main objective is to suggest action now in order to alter the future for the better. This is crucial to the way in which the Industrial subculture assimilates the literary techniques of science fiction, developing its own version of dystopian futures based on the works of H.G. Wells, Aldous Huxley, and Herman Hesse. The Industrial music subculture makes frequent use of dystopian models, or presents what appears to be a utopian setting that is slowly revealed to be a nightmare. This is a particularly effective method for Industrial musicians who want to educate their audiences and enable them see that the world they are living in is in fact already the nightmare of the dystopian future.

Aldous Huxley, Brave New World (1932)

Huxley's 1932 novel *Brave New World* uses the idea of a post-apocalyptic future utopia to show us a world that is controlled by a single World State, with all traces of nationalism abolished. This fictional future develops after both a "Nine Years War" and a great Economic Collapse have destroyed much of the earth. Huxley writes of the choice humanity had following the apocalypse: "There was a choice between World Control and"⁷⁰ He leaves the reader to imagine what the horrifying alternative might be. During the early part of the novel the reader is

⁶⁹ In this scenario one should see some connection to the ideas of the Futurists and the Dadaists, both of whom wanted to create the new by rejecting the past.

⁷⁰ Aldous Huxley, *Brave New World* (New York: Perennial Press, [1932] 1998), 48. What is particularly chilling about reading this book in the post-September 11th, 2001 world is that Huxley does not have his fictional Nine Years War end with a Nuclear disaster (after all the atomic bomb had not been used yet in his time), but with poisoned water supplies and Anthrax bombs. We are also on the verge of seeing both genetic engineering and cloning (Huxley's "solution") becoming a reality.

led to believe that things are less than perfect, despite the fact that the majority of the novel's characters think it is ideal. One of the main characters, Bernard Marx, does not fit in. There are many rumors suggested by the other citizens as to why, but despite the sleep hypnosis, the soma (a drug used to calm the population much like Nine Inch Nails' Parepin from *Year Zero*), and the daily routine, Bernard does not feel at home in the system and as a result is isolated and alone.

Huxley's world seems stagnant, and we soon discover that world state wants it that way. Towards the end of the novel one of the world controllers named Mustapha Mond explains the future world's ideology to two rebel members who have attempted a small "revolution" in which no one else would participate:

The world's stable now. People are happy; they get what they want, and they never want what they can't get. They're well off; they're safe; they're never ill; they're not afraid of death; they're blissfully ignorant of passion and old age; they're plagued with no mothers or fathers; they've got no wives, or children, or lovers to feel strongly about; they're so conditioned that they practically can't help behaving as they ought to behave.⁷¹

From Huxley's position the entire social project is presented as an almost Nietzschean nightmare fantasy, in which the "Will to Power" permits the rulers of the world to step beyond the traditional religious and moral boundaries and into a realm in which ethical questions are reassessed from a "modern" standpoint. This new society attempts to suppress anything old, claiming that they no longer have meaning—one might imagine that these things are only simulacra (a concept used directly in Nine Inch Nails' *Year Zero*). The lessons of the Bible are irrelevant when each citizen is conditioned to be happy in their place and to perceive death as a simple part of the life cycle and part of their job. In Huxley's fictional world, the revolution does not happen, and it will never happen since everyone is already forcefully under the illusion that they are happy. While Huxley frequently claimed that there was no direct social commentary in his

⁷¹ Huxley, 220 - 223.

novel, the links to the rising National Socialism in Germany should be rather obvious including the contentions between the ideals of Marx and Nietzsche—including the fact the main character and leader of the attempted rebellion is named Marx. This form of social commentary and a focus on issues of veiled political control become major components of Industrial music in which the audience is asked to look at the world around them to see below the surface where things are rife with social injustice and decay. Political stability and “happiness” is a cage of repression and control.

When the novel was first written many people did not understand Huxley’s strong message, including the famous German novelist and poet Hermann Hesse. In a review of *Brave New World* printed in *Die Neue Rundschau* (Berlin) in May of 1933, Hesse criticized the novel for its lack realism and the weak characters that are painted in black and white. Hesse felt that a novel filled with “good ideas” was weakened by the utopian element.⁷² Nine years later Hesse would write his own novel that more directly characterized the work of modern philosophers and the modern crisis.

Hermann Hesse, The Glass Bead Game (1942)

The Glass Bead Game, like Huxley’s work, presents a future that on the surface appears utopian. During the course of the novel the main character learns that the world is still concerned with politics and money, although it takes quite some time before the reader becomes aware of this fact due to the manner in which the society conceals its own inner workings. Since Hesse wrote the *Glass Bead Game* during the final years of WWII, the path of human development he observed at the time looked bleak. In Hesse’s utopian future, the arts and sciences came together and produced an enlightened human race. Hesse does not dwell on the

⁷² Hermann Hesse, “Review of Aldous Huxley’s *Brave New World*,” trans. G. Wallis Field and reprinted in Donald Watt, *Aldous Huxley: The Critical Heritage*, ed. Donald Watt (London: Routledge, 1975), x.

details of the novel's fictional "past," and only refers to it as the "Century of Wars," in which the apocalypse takes place. At the end of the novel the reader is left to consider if the path to the Utopian future presented by Hesse is justified or is reprehensible. Throughout the novel, during the reader's journey to understanding, he/she is asked to contemplate how one might possibly create a utopian society or if it is possible at all.

In the novel, Hesse attempts to link one particular character's absurd misunderstanding and misuse of philosophy to the misinterpretation or misappropriation of Nietzsche by the German National Socialist party during the Second World War. The author made the clearest connection through the character Fritz Tegularius, based almost entirely on Friedrich Nietzsche's philosophical ideas and personality.⁷³ While the main character of the novel Joseph Knecht is amazed by his friend Tegularius' ideas, he also sees a significant difficulty with the attempt to incorporate them into people's daily lives. Through the relationship between Knecht and Tegularius, Hesse examines what he believes is the end result of Nietzsche's nihilism: "Not everyone would have [Tegularius'] precious gifts, his melancholy genius . . . rather, the majority of them would have only his unreliability, his tendency to fritter away his talents, his lack of any discipline or sense of community."⁷⁴

The novel influenced several modernist composers whose works later inspired the Industrial music subculture. The attraction Hesse's novel had for the post-WWII avant-garde composers such as Karlheinz Stockhausen is related to the idea of the glass bead game and its focus on the fusion of music and science into a new artistic form. In the novel, the rediscovery of music's beauty and complexity allows humanity to finally recover from the Age of Wars.

⁷³ Nietzsche is not the only contemporary of Hesse to appear in the novel; it also includes characterizations of the author Thomas Mann and historian Jakob Burckhardt.

⁷⁴ Hermann Hesse, *The Glass Bead Game* (New York: Owl Books, [1943] 1990), 271-272.

Music and musicology become two of the most important academic pursuits and appear at the center of the glass bead game, seen as the symbol of all that represents refinement and meaning in the future society. Hesse never fully described the game but he clearly indicates that its use of mathematics, science, and literature allows the players to take musical ideas and create elaborate performances within the game system. It seems as if artistic techniques used by late twentieth-century composers such as integral-serialism, game theory, and stochastic music have arisen from Hesse's novel. But Hesse portrays his vision of the future and the glass bead game players so that we never witness any new works of art being created; the game only uses old artworks in combination. Art only serves a purpose through analysis, combination, and social function. At the novel's end, Joseph Knecht realizes that the new utilitarian nature of art has led to society's stagnation. Hesse suggests that a constant reevaluation of artistic and academic pursuits is needed to continue the development of knowledge and that a "golden age" of pure knowledge is just as dangerous as one in which worldly concerns dominate.

Modernist film before 1950: Fritz Lang's Metropolis (1926)

Austrian-born German director Fritz Lang's 1926 film *Metropolis*, based on a novel by his wife Thea von Harbou (who also wrote the *Metropolis* script), shows us a world that is an anti-utopian masterpiece of its time. It is one of the first major epic science fiction films. It continues to be one of Lang's most famous films and a major influence on science fiction films and Industrial music. Industrial musicians used *Metropolis* as one of the primary inspirations for their own version of an anti-utopian future and closely adopted its visual style. In 1926 the film had been a tour-de-force of new artistic techniques and ideas for silent film.⁷⁵

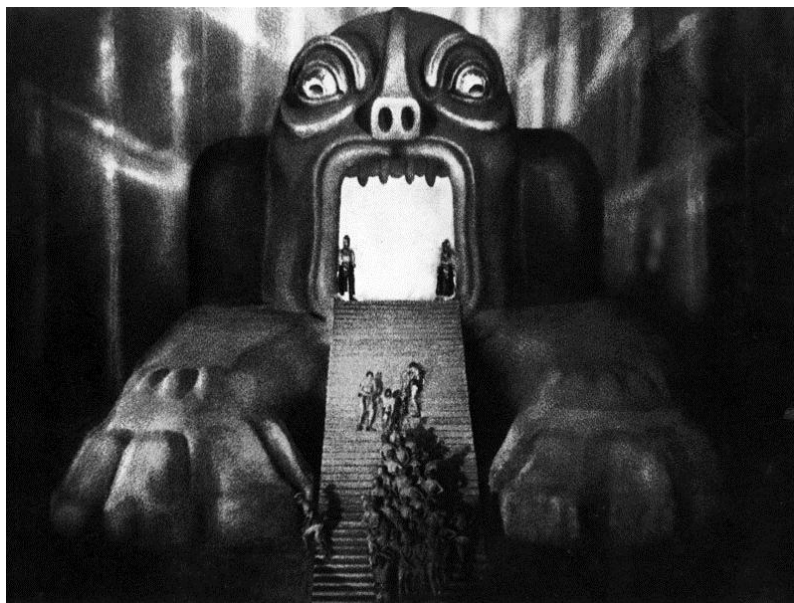
⁷⁵ It has been re-released in many different versions (restored, remastered, with longer running times), including a "colorized" version in 1984 with rock music soundtrack produced by Giorgio Moroder.

The film shows a futuristic utopia that cleverly obscures a terrible secret in a world so out of balance that most people living in it are not aware of its real plight. The film engages concerns over technology as an important catalyst for the future, and it portrays man and machine linked in their destiny together. *Metropolis* is set in 2026, exactly one hundred years after the film was made, and we see a world that is terribly unsteady in its Marxian-inspired anti-utopia. The ruling capitalists in the city of Metropolis live high up in the skyscrapers in comfort, enjoying stadium-style entertainment and lush gardens, while the workers live deep under the city, well out of sight of the upper class, fueling the technological and social progress but not taking part in it. The workers are slaves to the machines that run the city and the precise clocks that set the labor shifts. The male lead character Freder imagines in a hallucination that the city is a monstrous machine demon called Moloch that devours the lives of the working class as fuel to keep the technology of the upper city running (as seen in example 1.2). Lang claimed that his vision of the future city was inspired by his 1924 trip to New York City (although it seems he had actually begun production of the film before his trip). During the early twentieth century American super-cities begin to represent a future world of extreme capitalism and technology. These same images will find themselves made more and more intense in the Industrial music subculture and in films such as *Blade Runner*, *The Terminator*, and *Brazil*.

Fearing an uprising, the City master Joh Frederson decides to have his head scientist Rotwang replace Freder's love interest Maria with a robot, and then have the robot infiltrate and undermine the workers' resistance movement. At the climax of the film, the robot Maria goes into the lower city and incites the workers to riot and revolution. This eventually causes the workers' own destruction as the underground factories begin to collapse and unleash a massive flood. One of the workers yells, "Who told you to destroy the machines, and thus yourselves?"

Both man and machine are so intricately linked in their underground destiny that they are unable to separate and thus the fate of one is the fate of both. The robot Maria continues to entice the workers onward in their revolution from a balcony, a prophetic vision of the future WWII leaders' social platforms. She tells them it is all for their own good while they simultaneously tear themselves apart. In the destruction, the upper city falters, losing its power and structure.

Example 1.2
The Machine Demon Moloch in Fritz Lang's *Metropolis*



It is too late to smash the machines and return to the pre-industrial pastoral utopia. The entire system is interdependent. The city master Joh has been equally mistaken in his attempts to subjugate the workers, and his robot Maria causes the city to fall about him. He realizes that they are bound to the same social system that binds the working class to the machines of the underworld. Joh's lack of understanding regarding the implications of his own actions has doomed the entire system. Maria tells Freder at the end of the film, "There can be no understanding between the hands and the brain unless the heart acts as mediator." The underlying message of the film revolves around class struggle and social divide. The ending

suggests that all members of a society must do their part in building a better way of life. The notion of building a single unified social system suggests hints of Marx, but also shares many points with Hitler's proposed German utopia of *Mein Kampf*.

Metropolis suggests that the connection between humanity and machine can lead to disaster or greatness.⁷⁶ The film has gone on to become a symbol of modernization gone astray and a cautionary tale about the modern crisis told in Marxian terms. The film was continually re-released on video throughout the 1980s and many Industrial dance clubs showed the silent film on their walls to the pulsing beat of bands like Ministry and Cabaret Voltaire. The visual language of the film along with its message became a central part of the Industrial music vocabulary.

Inside Industrial Music

This chapter has explored in detail several different forms of modernism that developed from the late nineteenth century to the mid twentieth century, from the philosophical to the artistic and the political. An understanding of these connections is vital to comprehending the creation of the Industrial music subculture in the 1970s. Industrial musicians did more than simply take one idea or concept from each area discussed; they attempted to assimilate broad concepts as well as concrete techniques, and were aware of the moments when the diverse modernisms rubbed against one another, creating multiple layers of meaning and understanding. It is for this reason that simply stating that the band Cabaret Voltaire utilized Dada ideals is not

⁷⁶ This is the same message as Goebbels' and Hitler's steely Romanticism and was a viewpoint held by many German filmmakers in the Weimar years. Goebbels was so taken by *Metropolis* that he asked Lang to oversee the production of Nazi films as part of the National Ministry for Public Enlightenment and Propaganda. At some point in 1925-26 Lang did support the ideas of the National Socialist party, but drifted away from it as the level of violence increased. As a result he did not accept Goebbels' offer and instead fled to Paris and then Los Angeles. Later in his life Lang would produce a number of anti-Nazi films in the US and would often claim in a dramatic fashion that he barely escaped Germany with his life.

enough, for their understanding of Dada and its techniques was also influenced by other connected modernist ideals.

Industrial musicians, and the growing subculture, rooted themselves in the philosophies of Marx and Nietzsche and their conceptions of the modern crisis. The two philosophers' ideas about systems of control, government and religion, morality, and modernization formed the basis of how Industrial musicians viewed the world around them. It also positioned their awareness of devising a plan of attack to fight back against systems of control. From Futurism, Dada, and Science Fiction, Industrial musicians learned specific modernist artistic techniques including chance methods, shock tactics, the ideas of anti-art and machine art, and a way to represent the evils of current society within a fictional future world. But Industrial musicians also had the knowledge of how these artistic methods had been subsumed into some of the most evil actions of the twentieth century, and recognized that the modern world was equal parts salvation and destruction. From the evils of the Nazis and Fascists of the WWII era, Industrial musicians learned about propaganda, control, and an understanding that one must always be aware of how control mechanisms were functioning in our world. By taking these ideas and methods into themselves, Industrial music hoped both to reveal and embody the contradictions of the twentieth century: progress/violence, history/future, art (meaning)/anti-art (creation). They also continued mining the past by looking for forms of musical modernism that were related to these artistic and philosophical ideas, particularly forms of music that drew on technological innovation and the creation of noise.

Musical Modernisms and the Post-War Avant-garde Chapter Two

It was a common practice here, at a fairly young age, to go and hear Stockhausen. The art scene and the music scene, especially electronic music, were quite accessible; there were several radio shows of strange electronic music. So we had access to all of that, it was part of our upbringing, our education. We always considered ourselves the second generation of electronic explorers, after Stockhausen.

Ralf Hütter (Kraftwerk)¹

I think we grew into it, rather than having a reservoir of influences behind us. We didn't start off with [a] reservoir of ideas filtering through from people like Can, John Cage, Stockhausen or whoever. It started off in very purist terms – it was just a very simple thing, the idea of messing about with a tape recorder. It was only as we developed that we picked up on people like Can, Velvet Underground, Burroughs, or Kraftwerk, and seeing how they related to what we were doing.

Stephen Mallinder (CabaretVoltaire)²

In 1979 Cabaret Voltaire released a full-length cassette on the original Industrial Records label entitled *Cabaret Voltaire 1974-76* [IRC35, 1979], which eventually became an important recording in the history of Industrial music. In some ways, the project represents the end of an era since the cassette was one of the last major recordings produced by Industrial Records before they closed their doors in 1981.³ The album also harkens back to the very beginning of Industrial music. It presents a series of sonic compositions created by Cabaret Voltaire before their first Rough Trade album, *Extended Play* [Rough Trade, 1978].

1974-76 represents the band at their most experimental and raw, but these were not demos or rough mixes like the music released on the 2002 boxed set *Methodology '74/'78 Attic Tapes* [Mute, 2002]. The tracks on *Cabaret Voltaire 1974-76* are fully worked out pieces of

¹ Mark Dery, "Kraftwerk" *Keyboard Magazine* October 1991. This is an interview with Ralf Hütter.

² M. Fish and D. Hallbery, *Cabaret Voltaire* (Harrow, England: SAF, 1989), 19-21.

³ *Cabaret Voltaire 1974-1976* was the very last cassette release. The last LP was IR0016 William Burroughs, *Nothing Here Now but the Recordings*, 1981.

instrumental music made while the group experimented with their tape recorders, drum machines, guitar, bass, and synthesizers.

One of the most interesting compositions on *1974-76* is the eight-and-a-half-minute opening track “The Dada Man.” This experimental piece pays obvious homage to the Dada movement in its title, and the band name itself is taken directly from Hugo Ball’s Zurich nightclub. But the group makes even deeper connections to Dada artistic technique by cutting and pasting together various sonic elements to create a pulsating whole. It makes use of many early tape experiment techniques created by composers such as Pierre Schaeffer and John Cage. Tape-manipulated piano melodies, drum machine rhythms and whistles, constantly changing tempos, synthesizer timbre explorations, turntable scratching, and tape recorder techniques such as looping, speed control, reverse, cutting and splicing, and flutters all swirl through the piece.

Some of these editing techniques are even used *as* sounds rather than as methods to create new timbres. For example, the tape machine often speeds up and that action is heard as sonic phenomena within the piece. This can also be heard in the constant rewind and fast-forward sounds towards the end of the track that are processed with heavy delay making them echo and overlap. “The Dada Man” highlights the depth of Cabaret Voltaire’s experimentation and their attempts to develop a method for tape manipulation composition that mirrored the work of twentieth-century modernist composers both in its performative nature, and as a deeper quest for new timbres to use in the creation of a musical language of noise.

Cabaret Voltaire created the percussive rhythms of “The Dada Man” with one of the early Roland rhythm machines, the CR 78. This drum machine became a standard piece of technology for first-generation Industrial bands and other musicians in the 1970s including Genesis, Blondie, and Gary Numan. Cabaret Voltaire felt it to be one of the most mechanical and industrial

sounding of all available devices, partially due to the CR 78's ability to alter the percussion sounds with a ring modulator, giving them harsh metallic overtones (in fact the front panel of the CR 78 calls it "metallic beat").

The machine was pre-programmed with 34 rhythms and "The Dada Man" uses the "beguine" pattern throughout. The pattern features a 4/4 bar that is subdivided into a 3+3+2 figure shown in example 2.1. Many early drum machines were designed to function as accompaniment for home model electric organs so they feature a large number of popular Latin dance beats such as the beguine, the rhumba, and the tango. As strange as it may seem these Latin percussive rhythms become a common element of the first-generation Industrial music sound, and they are quickly accepted within the subculture.

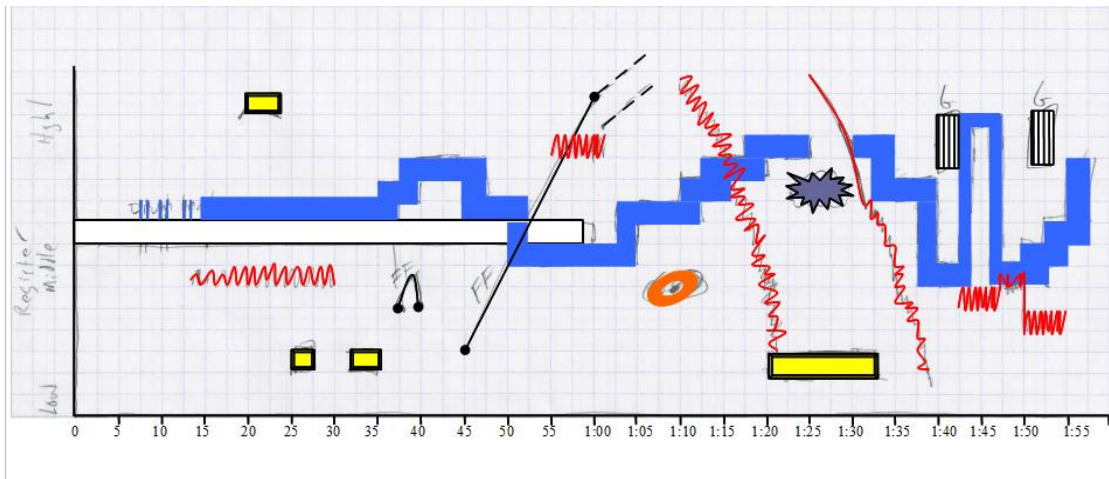
Example 2.1
Beguine rhythmic pattern in "The Dada Man"



Cabaret Voltaire manipulated the CR 78 beguine pattern by using a series of tape music techniques including the frequent alteration of tempo and pitch. If Cabaret Voltaire had simply changed the tempo on the CR 78 drum machine it would only affect a change in tempo and the pitch would not be altered. But within "The Dada Man" each time the tempo changes, the relative pitch also raises or lowers accordingly, a side effect of changing speed on the tape machine playback. Sometimes these changes are gradual, gliding from a slow 80 BPM up to a frantic 180 BPM over the course of fifty seconds. At other times the tempo/pitch shifts wildly from one section to the next. These tape recorder manipulations are used in tandem with alterations that were possible on the CR 78 itself, including the ability to alter the tempo (without

changing the pitch), muting particular elements of the rhythmic pattern (bass drum, high-hat, snare, etc.), changing the amount of “metallic beat” (ring modulation), and increasing or decreasing the amount of emphasis for rhythm accents in the drum pattern.

Example 2.2
Sound map of the opening section of “The Dada Man”



Sound Map Key

White block:	Geiger Counter	Blue blocks:	Beguine rhythm
Yellow blocks:	Recorded Piano	Red Lines:	Wobble synthesizer
Black line:	Fast-forward sounds	Dotted line:	Fast-forward echoes
Grey spikes:	Alarm sound	Orange circle:	Turntable scratching
White w/lines:	Distorted guitar blasts		

Example 2.2 illustrates a listening guide to the opening section of the track and shows how the various musical layers are placed within the soundscape (the x-axis represents time and the y-axis register). The track has a very haphazard character that gives the listener the impression that sounds are simply jumbled upon one another in a careless manner, but a detailed analysis reveals that Cabaret Voltaire were carefully mapping out the music, experimenting with ways to relate the noise elements, synthesized sounds, and tape manipulations. Nine unique sounds are used in the first two minutes and each of the sounds is manipulated via tape techniques or treated with a number of effects including delay, reverb, and distortion. The track begins with a Geiger counter sound that ticks away the opening moments activating the musical

space. The foundation of the track is the almost constant beguine rhythmic pattern that is altered on a regular basis. The graphic representations in example 2.2 show how sounds are related and balanced through musical techniques like call and response, and dimensions such as register and timbre. For example, the two fast-forward tape machine sounds (black lines) that push into the upper register are balanced by the motion of the wobble synthesizer (red lines) diving from the high into the low register creating a bomb-like sound. Both of the diving wobble synthesizer lines trigger a response sound. The first time it is the beginning of a tape-manipulated low-register piano rumble (yellow block) and the second time it is the first appearance of the high-register distorted guitar blasts (white box with lines).

Throughout the rest of the track cascading sheets of sound and siren-like wails follow the synthesizers' clipped blips and bleeps. In quiet moments, ghost-like tones float softly behind acoustic piano melodies. Above the fluctuating rhythmic pattern appear overdriven and distorted vocal samples that rise out of the texture with unrecognizable yet emotionally energetic and angry speech. The only snippet of text that can be clearly understood is the final statement at the end of the track, "This isn't right and you know it," a bit of the Dadaist joke on the anti-art nature of these experiments. Throughout the album *1974-76 Cabaret Voltaire* never makes any explicit statements or attempts to present a unified message.⁴ As is consistent with the Dada philosophy of anti-art, the listener is left to interpret the bits and pieces of sampled sounds, synthesizer blasts, drum machine rhythms, and vocal fragments, and decide what they mean—if anything at all.

⁴ I include in this category the only "song" on the album, "Do the Snake" which is such a blatant parody of early 60s rock and roll dance songs done with a completely straight face that it could mean almost anything. It does however reveal the frequent use of humor within the subculture, and serves as a step along the path that leads Cabaret Voltaire to the much darker and politically relevant "Do the Mussolini (Headkick)" discussed in chapter five.

While Cabaret Voltaire drew from elements of twentieth-century art and electronic music, they did not appear immediately willing to admit that it constituted an inspiration. The quote from band member Stephen Mallinder at the opening of this chapter constructs the band's beginnings in the truest modernist sense, as experimentation. He suggests that once the band members created these early experiments and listened to the world around them that they discovered others who had been on the same journey, including Can, the Velvet Underground, and William Burroughs. They also went back further to the music of Stockhausen, Cage, Varèse, and Schaeffer, and began to build a history for the Industrial music subculture. Claiming that they began their work in a naive artistic vacuum allows Cabaret Voltaire to draw a connection between themselves and the composers discussed here, while simultaneously allowing them the freedom to claim complete originality. They suggest that their music is not merely a populist repetition of earlier musical modernist discoveries, but a true analogue to them from within the popular music world.

While the exploration of the modernist ideologies discussed in the previous chapter took us into the middle of the twentieth century, we must now return to the beginning of that century to follow similar developments within music. This chapter traces a progression of specific musical ideas from the modernist avant-garde art music at the dawn of the twentieth century to the works of minimalist composers in the nineteen-sixties. A series of short music-historical vignettes ties the social, musical, and intellectual history of the twentieth century discussed in chapter one to specific musicians. This sort of history of musical modernism is not unheard of, and in fact a similar history of early twentieth-century art music is presented by Robert Morgan in his article, "A New Musical Reality: Futurism, Modernism, and the Art of Noises," in which he examines the writings and music of Ferruccio Busoni, the Futurists, and Luigi Russolo.

Morgan concludes the article stating that while Russolo's "vision of a new kind of music, offering materiality as a replacement for its lost spirituality, has proved remarkably fertile," Russolo himself remains "a largely forgotten figure in music history."⁵ This is true when one considers that the focus of Morgan's history is twentieth-century concert music. Russolo's vision, however, became vibrant and important within the world of avant-garde popular music where musicians still revere him as a pioneer of noise composition and fans of Industrial music frequently cite him as the first Industrial musician.

Throughout this chapter I make explicit how particular concepts of musical modernism related to noise and technology were adapted into the world of popular music, and how those concepts were then incorporated in the history of Industrial music by groups such as Cabaret Voltaire and Throbbing Gristle. The avant-garde concepts then served as musical stylistic cues within Industrial music and helped to establish a musical vocabulary and a compositional method. Because the musical cues remained connected to philosophical ideals of modernism they also contributed to the formation of the Industrial music subcultural ideology.

At the same time I suggest a rethinking of the trajectory of musical modernist thought in order to gain a new perspective on the history of art music composition in the twentieth century—one that places new importance on the sounds of electronic and tape music, rhythmic-based music, the use of noise, an aural tradition of sound, and marginalized movements such as Futurism. As such, some considerations of the art music composers may vary from the way they are typically discussed in relation to concert music traditions in order to present how they were understood within the Industrial music subculture. The decision to begin this exploration of musical concepts with early twentieth-century musicians emanates from my desire to study how

⁵ Robert P. Morgan, "A New Musical Reality: Futurism, Modernism, and *The Art of Noises*," *Modernism/Modernity* 1 no. 3 (1994), 145.

members of the Industrial subculture actively reached back to the art music circles of the early twentieth century in the process of building its own history, and in chapter three I will link these ideas to the popular music styles that incorporated these ideas in the 1960s and 1970s.

Luigi Russolo

“We must break out of this limited circle of sounds and conquer the infinite variety of noise sounds.”

Luigi Russolo, *The Art of Noises* (1913)

In 1913 the Italian painter and Futurist Luigi Russolo published his Futurist manifesto entitled *The Art of Noises*. This short document reveals a distinctive new aesthetic for both musical composition and musical listening by proposing that if music is “sound” then it should employ all possible varieties of sound. In Russolo’s view, the new scales and pitch organizations proposed by previous composers such as Ferruccio Busoni were merely tinkering with an established tradition of sonic exclusion.⁶ The “infinite variety of noise sounds” offered a far more valuable path for the future of music. At the end of his essay Russolo delineated eight directives regarding the creation of futurist music that fall into three general categories: the decision to include noise as a component of musical sound, the creation of new “noise mechanisms” to replace traditional instruments, and the study of sound using the science of acoustics.

Many Industrial musicians turned to Russolo when exploring the past, and the subculture frequently references his work in band names (The Art of Noise), album covers (the inside cover of Information Society’s *Peace and Love Inc.* [Tommy Boy, 1992]), and discussions about his

⁶ See Ferruccio Busoni’s 1907 writing entitled the *Sketch of a New Esthetic of Music*. In it Busoni suggests that music, as an established artistic tradition in the West, is only a “child of approximately four hundred years,” yet composers and musicians adhere to rules and theories that confine music to a finite number of possibilities. Busoni questions the reluctance of many of his peers to expand the borders of music, stating that “Music was born free; and to win freedom is its destiny.” He appeals for a change in the most basic musical thinking to envision a truly *modern* era in which the almost limitless possibilities of sound are utilized, but unfortunately later retreats from this bold suggestion by proposing new systems of pitch organization.

place as the godfather of Industrial music (as seen in the online posts discussed in the introduction). Musicians often cite Russolo as a sonic prototype for Industrial music, a fact that contains a certain level of irony since they were unable to listen to his music and only read about it in *The Art of Noises*. It is also interesting to note that Russolo was not a trained musician and only possessed a mediocre grasp of music theory. Nonetheless, the decision to place him as the starting point for Industrial music was a fitting and worthy one that had specific ramifications for how Industrial musicians shaped their understanding of music and noise.

Russolo was the first modern composer to examine and classify the opposing yet connected ideals of silence and noise, with musical sound existing as a very narrow category between the two. While all sounds should be available to the composer there was a distinct difference between the sub-categories of sound: silence, musical sound, and noise.⁷ He differentiated noise from musical sound on an acoustical basis by building on the work of the eminent scientist Herman Helmholtz who developed much of the modern field of acoustics. Russolo eventually settled on a practical definition of noise for use in composition: “Noise is generally much richer in harmonics than sound. And the harmonies of noise are usually more intense than those that accompany sound.”⁸ Noise sounds are therefore more interesting and complex than the previously accepted musical sounds and listeners must approach them with an open ear and a willingness to find joy in the irregular vibrations of the harmonic spectrum. The vibrations and overtones of traditional instruments are controlled and regular which translates to defined pitches (regular vibrations and frequencies) and defined timbres (familiar waveforms and

⁷ Luigi Russolo, *The Art of Noises* (1913), trans. Barclay Brown, *Monographs in Musicology*, no. 6 (New York: Pendragon Press, 1986), 24-25.

⁸ Russolo, 39.

steady overtone patterns). Noise sounds are made up of random occurrences of all frequencies which produce undefined pitch and timbre.⁹

Russolo's definition of noise allows for almost anything that does not belong to the category of accepted musical sounds including but not limited to “. . . thunder . . . wind . . . a waterfall . . . a brook . . . leaves . . . and the full, solemn, and white breath of a city at night.”¹⁰ Russolo proclaimed noise as the basis for the future of music and stated that intense, prolonged, and varied noise sounds were only possible in the modern era due to the proliferation of machines: “Ancient life was all silence. In the 19th Century, with the invention of machines, Noise was born. Today, Noise is triumphant and reigns sovereign over the sensibility of men.”¹¹ In typical Futurist fashion, this statement places machines at the center of modernity with noise as its sonic consequence, tying them to the progress that Futurists simultaneously prophesied and desired. Composition then became the combination of any and all sounds; however, it is clear that what most excited Russolo was the idea of a music based on city sounds, machines, and the sounds of warfare. Industrial music drew from the same sonic palette, adopting not only Russolo's noise but more importantly his philosophy about sound. The harsh, violent, and mechanical noises of the twentieth century are front and center in Russolo's conception of the “art of noise” and find their eventual personification in the music of bands such as Cabaret Voltaire, Throbbing Gristle, DAF, and Einstürzende Neubauten.

Harsh noise sounds became the basis for Russolo's now infamous machines, which he called *Intonarumori* (Noise Intoners). Unfortunately, these instruments were all destroyed during WWII. One distorted 78 rpm recording of the instruments exists, featuring a background

⁹ Joel Naumann and James D. Wagoner, *Analog Electronic Music Techniques: In Tape, Electronic and Volatge-Controlled Synthesizer Studios* (New York: Schirmer, 1985), 115-116.

¹⁰ Russolo, 25-26.

¹¹ Russolo, 23. Capitalization is in the original text.

of traditional orchestral instruments. As such, only Russolo's text and two photographs of him and Ugo Piatti (his friend and sometime assistant) with the machines remain.¹² His machines were the result of Russolo's belief that the most important step forward for Futurist music was the replacement of traditional musical instruments with noise mechanisms. His research led him to work on the design of a scientific/mechanical means to produce, control, and alter noise sound. Ultimately, these devices predicted the modern digital sampler used by Industrial musicians, a device that can play back and manipulate any recorded sound.

The *Intonarumori* produced six families of noises as part of a "Futurist orchestra."¹³ These six families include aggressive loud sounds (e.g., explosions), wind sounds (e.g., hissing), semi-vocal soft sounds (e.g., murmurs), life activity sounds (e.g., creaking), percussive sounds created by banging on various surfaces, and human and animal vocalizations (a category that includes the rather morbid, yet somewhat prophetic for the dystopian future of Industrial music, death rattles). The instruments are mechanical in nature, and they became the first instruments in the development of noise music. Russolo carefully described the kind of detailed control that the user had over the sonic aspects of the noise being produced by each instrument such as pitched elements, rhythm, and, especially, timbre.

These noise sounds and their application were rather limited; however, the instruments gave Russolo a way to begin the process of creating actual music. Russolo envisioned a musical system whereby others could then compose Futurist music, instead of developing noise music as

¹² These pictures show up repeatedly in various print aspects of Industrial music and related styles. For example the picture is used on the inside of the CD booklet for Information Society's 1992 album *Peace and Love Inc.* and a recreation is featured in the music video for the Einstürzende Neubauten song "Blume." The pictures also have a more generalized effect in that their laboratory look is replicated in almost every picture of an Industrial music recording studio which often showcases instruments that the band themselves have made.

¹³ It is rather amazing when one realizes that he only invents these machines after he describes them in the 1913 manifesto, and that by the expanded 1916 edition of the manifesto he claims to have built a total of twenty-one *Intonarumori* of nine kinds.

an isolated endeavor. His methods were more systematic than those suggested by other Futurists, but he managed to remain true to the Futurist philosophy of originality, setting a foundation for Industrial musicians in the late twentieth century. Russolo created a workable art of noise and began the developments that led to new instruments such as the sampler, synthesizer, and the drum machine in the mid- to late twentieth century. For the Industrial musicians of the 1970s already fascinated with the Futurist movement in general, Russolo's *Art of Noises* operated as a blueprint, and his philosophy of sound functioned as a model within the growing subculture. But Russolo's writing also painted a vivid picture of the future that Industrial musicians embraced, one where large, violent machines created raucous sounds from thin air. Russolo's work was taken up by other musicians in the early twentieth century who believed in his call for a future of noise music, and who would attempt to find new ways to explore these concepts in a musical context, such as Edgard Varèse and his concept of organized sound.

Edgard Varèse and Organized Sound

“Indeed, to stubbornly conditioned ears, anything new in music has always been called noise. But after all, what is music but organized noises?”

Edgard Varèse, *The Liberation of Sound* (1962)

Edgard Varèse, like Luigi Russolo, spent much of his life considering the future possibilities of music. He was convinced that the early twentieth century was a turning point for music and that the way forward could be found in the exploration of new sounds produced through mechanical and electrical devices. He read many of the Futurist writings upon their initial publication and made the acquaintance of Luigi Russolo in the fall of 1928. Varèse believed that Russolo's *Intonarumori* were a positive advance in the invention of new sounds but were limited by their ability to create only a single timbre and Russolo's reliance on recreating

the noises he perceived in the natural world such as hissing, thunder, and anvils. Varèse's conceptions of sound are close to the Futurists', yet he wanted to move beyond imitative techniques into compositional sound design. He attempted to incorporate the sound and feel of modern industrial society into his music without the direct imitations of those sounds. Varèse published only fifteen musical works, but each presents a major step forward in the conception of composition with non-pitch-oriented systems of organization and the use of noise sounds. His desire to create a new musical language led to his designation of modern composition as the "organization of sounds."

Varèse was interested in early attempts to create electronic instruments. When he finally attempted to compose with some of the electrical musical instruments that had been developed in the early part of the twentieth century such as Thaddeus Cahill's Telharmonium, the Thermin, and the Ondes Martenot, the composer was disappointed in the limited possibilities that they offered. It was at this point that he decided to compose music primarily for percussion instruments.¹⁴

His first major composition to that end was *Hyperprism* (1922-23), which is scored for winds, brass, and a large section of non-pitched percussion instruments such as tambourine, slapstick, sleigh bells, snare drum, bass drum, cymbals, tam-tam, and anvils. *Hyperprism* is one of the first major compositions of twentieth century music that relies more on timbre and rhythm than on pitch, leading musicologist Carol Oja to assert that the composition "challenges longstanding conventions of form, texture, instrumentation, and dynamic pacing."¹⁵

¹⁴ It was only at the end of his life that Varèse was finally witness to the invention of the technology that would allow his dream to become a reality. It was a fellow Frenchman, Pierre Schaeffer, who allowed Varèse to compose his most famous electronic work, *Poème électronique* (1957-58). Schaeffer had built one of the most respected electronic music studios of the 1950s and he invited Varèse to Paris to work there.

¹⁵ Carol Oja, *Making Music Modern*. (New York: Oxford University Press, 2000), 35.

Textures like the one at the three minute mark (m. 59-62), shown in example 2.3, point forward to Industrial music with its instrumentation of cranked ratchets, sextuplet anvil rhythms interlocking with slap-stick and Chinese block accents, and snare drum fills. Even the pitched instruments used in these textures drop into a low register and combine with the sound of the siren or the lion’s roar to create a bass rumble that is almost unrecognizable as pitch.

Example 2.3
Measures 59-62 of *Hyperprism* (1923) by Edgard Varèse
 (Reduced score shows only essential percussion instruments)

Sleigh Bells

The musical score for measures 59-62 of *Hyperprism* by Edgard Varèse is presented in a reduced format, focusing on essential percussion instruments. The score is written in 4/4 time and consists of 12 staves. The instruments and their rhythmic patterns are as follows:

- Tamb.**: Measures 59 and 60 are silent. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Bass Drum**: Measures 59 and 60 are silent. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Snare**: Measures 59 and 60 feature a rhythmic pattern of eighth notes. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Susp. Cymbal**: Measures 59 and 60 are silent. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Ratchets**: Measures 59 and 60 feature a rhythmic pattern of eighth notes. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Ratchet 2**: Measures 59 and 60 feature a rhythmic pattern of eighth notes. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Siren**: Measures 59 and 60 feature a rhythmic pattern of eighth notes. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Slap Stick**: Measures 59 and 60 are silent. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Anvil**: Measures 59 and 60 are silent. Measures 61 and 62 feature a rhythmic pattern of eighth notes.
- Cymbal**: Measures 59 and 60 are silent. Measures 61 and 62 feature a rhythmic pattern of eighth notes.

In moments like the one in example 2.3 each percussion instrument performs its own set of rhythmic patterns, allowing the overall sound of the music to arise from the interlocking parts—an important musical characteristic of Industrial music. The distinct timbres are also used to create

the attack, sustain, and decay of a larger “sound-mass” that is composed of the individual gestures.¹⁶

Sounds with a sharp attack, such as the bass drum and ratchets, introduce the sound mass which is then sustained by sounds such as the anvil, cymbals, snare drum, sleigh bells, tambourine, and siren, and the final decay is achieved through the tail of the siren along with the sleigh bells and bass drum. Varèse manages to create shifting timbres within the sound masses by using the pitched instruments to create what Robert Morgan calls “timbral transference.” A sounding pitch in one instrument will migrate to other instruments in a series of decrescendos and crescendos.¹⁷ This allows a single sound to vary its color to be more complex than what a single instrument is able to produce. For example the tone created at the opening of *Hyperprism* begins as a trombone note, is sustained by a French horn, and ends as a combination of the two sounds. The instruments work together to create one tone that shifts its color, a technique that Industrial musicians adopted to create evolving electronic timbres with synthesizers and found-sound manipulations with tape recorders.

Another piece from six years later, *Ionisation* (1929-31), leaves behind almost all trace of pitched instruments in favor of a full percussion orchestra. The piece consists of thirteen percussion players who are each assigned instruments with a particular sound quality such as metal, membrane, snares, wood, rattle, friction, and mallet. The percussion instrumentation is even more extensive than in *Hyperprism*, and includes anvils, tam-tam, gongs, cowbells, snare and bass drums, bongos, wood blocks, and slapstick, among others. Chou Wen-Chung has suggested that the piece is structured into several sections based on distinct textures, and that

¹⁶ Varèse discusses the ideas of moving sound-masses in *The Liberation of Sound*, reprinted in *Contemporary Composers on Contemporary Music*, ed. Elliott Schwartz and Barney Childs, 196-208 (New York: Da Capo, 1998), 197.

¹⁷ Robert Morgan, *Anthology of Twentieth Century Music* (New York: Norton, 1992), 218.

more traditional compositional ideas are replaced with new yet similar techniques.¹⁸ Rhythmic motives replaced melody, and timbral modulation replaced harmonic modulation. Chou Wen-Chung's concept of timbral modulation, an idea similar to Morgan's timbral transference, demonstrates a clear attempt to replace the structures of the past that were based around pitch and harmony with a new focus on timbre and rhythm. Both Chou Wen-Chung and Morgan have focused on alternate methods of composition and structure in the music of Varèse and the same must be done for the sounds and structures at work in Industrial music.

The idea of structured sound-masses and an emphasis on percussion instruments has influenced many avant-garde composers and popular musicians—including John Cage and Frank Zappa.¹⁹ The large percussion ensembles used by Varèse served as inspiration for the metallic percussion ensembles of Industrial artists such as Einstürzende Neubauten and Test Department. These bands composed their music using concepts similar to timbral modulation and sound-masses; using small-scale changes in timbre as a method of musical phrasing, and using transitions between blocks of sound to generate musical form. The electro-musical ideas of Russolo and Varèse eventually became a realistic possibility for musical composition during the late 1940s in the new musical techniques created by Pierre Schaeffer that allowed the recording of sound to become a creative musical force.

¹⁸ Chou Wen-chung, "Ionisation: The Function of Timbre in its Formal and Temporal Organization," in *I.S.A.M Monographs: Number 11, The New Worlds of Edgard Varèse: A Symposium*, ed. Sherman Van Solkema. (New York: Institute for Studies in American Music at Brooklyn College, 1979), 27-74.

¹⁹ Frank Zappa (1940-1993) played rhythm-and-blues and rock guitar until he became interested in the music of contemporary Art music composers such as Edgard Varèse, Igor Stravinsky, and Karlheinz Stockhausen. It was especially Zappa's love for Varèse and percussion music that pushed him in a direction that moved away from typical Rock structures and sounds and into the experimental music and Free Jazz. "The Return of the Son of Monster Magnet" from Frank Zappa's 1966 Mother's of Invention album *Freak Out!* began as a free-for-all jam session at midnight in the TTG Recorders studio on Sunset Boulevard. For the session Zappa rented \$500 worth of percussion equipment and called all of his "freaks" into the studio to do their best—or worst. The mixing engineer was taking acid at the time, thinking it would be an easy session, and was blown away by the event—hence the track was mostly recorded live straight to tape with very little engineering. The piece is Varèse-inspired, but through the filter of California psychedelic music, with just a touch of John Cage's ideas on indeterminacy.

Pierre Schaeffer and Musique Concrète

“Certainly the idea of a concert of locomotives is exciting. Sensational.”
Pierre Schaeffer, *A la Recherche d'une Musique Concrète* (1952)

Russolo's *Intonarumori* and Varèse's percussion orchestras both served as ways to expand the boundaries of what could be considered musical sound, but it was the development of new sound recording technology that allowed musicians to actually engage sound in a very material and visceral manner. As audio play back devices such as the turntable improved in quality and the magnetic tape recorder/player was invented, composers created and manipulated sound in ways that previous composers had only speculated about or developed in a very basic manner. The first compositions to utilize these new musical technologies were created in Paris, France in the late 1940s by the sound engineer Pierre Schaeffer (1910-1995). Schaeffer's *musique concrète*, his self-proclaimed musical style/compositional method, realized the Futurist dream by capturing the noise sounds of the modern world. He attempted to accomplish this through scientific research, the development of new technology, sonic experimentation, and the systematic organization of timbre.²⁰

In Schaeffer's oeuvre we detect a particular nuance of modernism that is later developed by musicians in the Industrial music subculture, based around the core concepts of progress and originality. Schaeffer took an interest in the social ramifications behind drastic changes in the artistic method, and he expressed these changes in a manner that was both philosophical and scientific. He insisted that the foundation for all of his work must be guided by what the listener actually heard and with acoustical make-up of the sound itself, what he called the *objet sonore*;

²⁰ Interestingly, Schaeffer would change his mind back and forth several times over the following years as to whether it was better to compose with noise/natural sounds, which are typically referred to as “found” sounds in literature on the subject, or sounds that already had a traditional musical basis, such as instrumental sounds, voice, and previous musical recordings.

the basic sound event.²¹ This was an important concept for Schaeffer that placed the physically heard sound at the center of compositional concerns as opposed to the idea or a plan for a sound that would eventually be produced by a performer. The concept of the *objet sonore* reframed the composer as someone who could work directly with sound in a physical manner. This understanding of sonic manipulation connects Schaeffer to the music theoretical work being done around the same time that draws on the philosophical discipline of phenomenology.²² His training as an electrical technician led him to engage in scientific research to substantiate his ideas, and this research later became a major factor in his development of a new musical practice that bordered on a philosophy of musical composition.

In early 1948 Schaeffer began researching sonic properties by using the phonograph and its ability to manipulate sound. He wanted to determine the specific building blocks of sound, how they functioned, and how they could be manipulated through modern technology. Basing his approach on the previous work of the scientists Helmholtz and Fourier, Schaeffer discovered that both the attack and decay of sounds could be altered by changing the speed of a record or playing it backwards.²³ These changes affected the pitch as well as the sound's envelope and timbre. He then applied his research to the creation of a compositional method he called *musique concrète*. Schaeffer explained his concept in the 1952 manual for *musique concrète* entitled *A la Recherche d'une Musique Concrète*:

This determination to compose with materials taken from an existing collection of experimental sounds, I named, *Musique Concrète*, to mark well the place in which

²¹ Peter Manning, *Electronic & Computer Music* (Oxford: Clarendon, 1993), 23.

²² For more on the connection to phenomenology see Brian Kane, "L'Objet Sonore Maintenant: Pierre Schaeffer, Sound objects and the phenomenological reduction," *Organised Sound* 12, no. 1 (2007): 1-10. This understanding of sound would soon become a major point of contention between Schaeffer's Paris-based school of thought and the school of thought spearheaded by Herbert Eimert and Karlhienz Stockhausen based in Cologne, Germany (discussed in the next section).

²³ The initial onset of a sound and the subsequent decrease in energy are aspects that we now consider part of the *envelope* of a sound.

we find ourselves, no longer dependent upon preconceived sound abstraction, but now using fragments of sound existing concretely and considered as sound objects defined and whole²⁴

Here Schaeffer describes the particular elements of his musical philosophy that became important to Industrial musicians. *Concrète* sound is sound that has become a physical object through the action of recording it to tape. In Schaeffer's process any sound can be recorded, stored, and used as sonic material in a manner previously impossible. The process allowed the *objet sonore* to become an actual specific sound and not an abstract idea, resulting in a major shift in the entire method of composition and musical transmission. Within *musique concrète* a musician composes by physically touching the tape or record, cutting and splicing tape with a razor blade, pushing the record with the fingers—finding a level of direct interaction between physical touch and sonic result. Of course, one might argue that this is the nature of musical performance on almost any traditional instrument, but in Schaeffer's method this same practice can now be applied to the performance of the sound of a dump truck. Industrial musicians adopted this philosophy as the basis for the way they think about and create music, as an intellectual venture that is contained in an embodied world.

Traditional Western music notation could not illustrate the millions of possible timbres that recording technology could capture and play back; thus recording technology opened up a new world of sonic possibilities. The inherent problem in composing with this method was, as Schaeffer suggested, “how to imagine a priori the thousand unpredictable transformations of the concrete sound, how to choose from among a hundred samples, if neither a classification nor a

²⁴ Pierre Schaeffer, *A la Recherche d'une Musique Concrète* (Paris: Editions du Seuil, 1952), 18-19; quoted and trans. in Joel Chadabe, *Electric Sound: The Past and Promise of Electronic Music* (Saddle River, NJ: Prentice Hall, 1997), 26-27.

notation has yet been defined.”²⁵ Schaeffer found his answer in the very technology he used, technology that allowed the *concrète* composer to store a large number of sonorous objects for possible transformation and use in composition. Like Russolo before him Schaeffer suggested that what was required was the cataloging of these various sounds in a way that made the multitude of colors and moods available to the composer. The composer then used technological manipulation of sounds and a process of aesthetic choice to develop a piece of music through experimentation. This method allowed the composer to have ultimate control over every aspect of the work down to the most subtle timbral inflections. Many of Schaeffer’s methods formed a major part of the Industrial music subculture’s concept of work and experimentation in the 1970s.

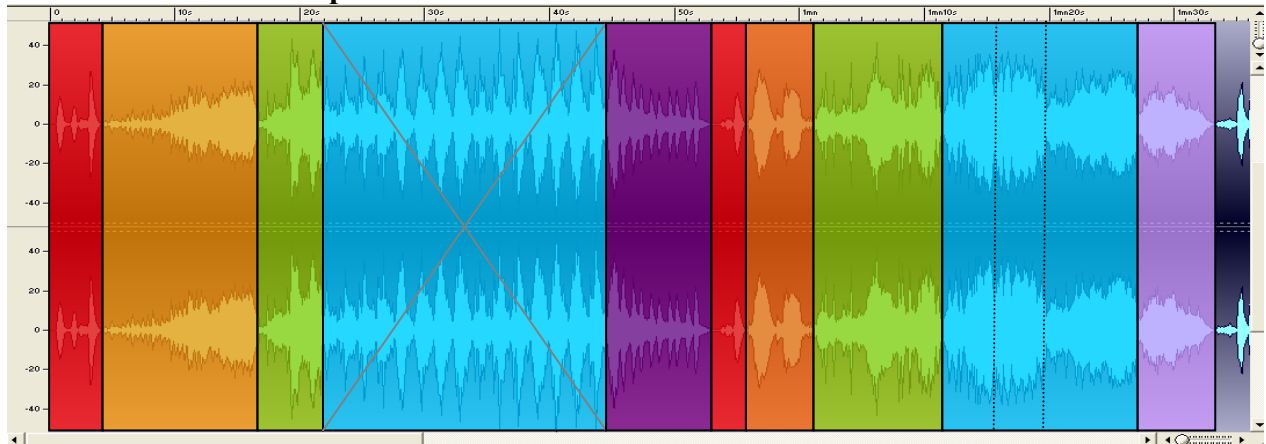
One of Schaeffer’s first compositions, the *Etude aux Chemins de Fer* [1948], or railroad study, became an important musical work in the history of Industrial music. Schaeffer created the piece by using sounds made by locomotive engines recorded at the Batignolles railway station in Paris—the exact kinds of sounds Industrial musicians were interested in working with.²⁶ These sounds were then cut into short sound objects and transferred to record so that they could be manipulated on turntables. The train sounds elicit an immediate aural connection to industrial society, factories, and production. The mechanical sounds of the trains lend themselves easily to the types of manipulation Schaeffer was creating with turntables. Schaeffer referred to the

²⁵ Pierre Schaeffer, *A la Recherche d’une Musique Concrète* (Paris: Editions du Seuil, 1952), 87; quoted and trans. in Carols Palombini, “Machine Songs V: Pierre Schaeffer—From Research into Noises to Experimental Music,” *Computer Music Journal* 17, no. 3 (Fall 1993): 14-19.

²⁶ On October 5, 1948 the Studio broadcast its first major radio concert titled the *Concert de Bruits* (Concert of Noises) in which Schaeffer presented his newly composed *Cinq études de bruits* (Five études of noise). They include: *Etude aux Chemins de Fer*; *Etude aux Tourniquets*; *Etude Violette*; *Etude Noire*; and *Etude Pathétique*. The first compositions ever created with 78 rpm record turntables showcased the possibility of working with noise sounds in a direct physical manner. It is interesting to note that Schaeffer chose to call the pieces *études*. The pieces were composed as concert works; however, Schaeffer felt that they were still in the developmental stage of his technological and compositional aspirations. He was often dismayed by the fact that the listener could easily identify the sonic source material of the études.

process of composing the piece as “casting in a smelting furnace,” an image commonly found in Industrial music visuals.²⁷ After an initial segment of train whistles and the sounds of an approaching engine, the piece develops into a study of rhythm and noise. A sound map of the first two minutes of the piece is shown in example 2.4.

Example 2.4
Sound map of the first two minutes of *Etude aux Chemins de Fer*



The sound of different metal wheels on metal tracks repeats in alternating and juxtaposed rhythmic figures. Schaeffer shapes these into musical phrases complete with rhythmic cadences composed with brake and steam sounds. In example 2.4 the amplitude soundwave graph of *Chemins de Fer* has been colorized to show how the different train samples have been used to create phrasing. Each box represents a different sound sample (*objet sonore*) and the color of each box shows how the timbral phrasing is articulated through movement between the blocks of sound, starting with red, moving through orange, green, and blue, and ending with violet. Because Schaeffer was also attempting to develop a working musical language he used specific types of sounds to create each part of the musical phrase. I have used colors to represent his organizational system; red represents whistle sounds, orange is steam sounds, green represents

²⁷ Schaeffer, 23.

clanking sounds, light blue features moving train sounds, and the violet blocks are braking sounds or trains fading into the distance.

Within the piece the majority of samples are played back as a stable sound; i.e., they do not undergo any manipulation as we listen (speeding up or slowing down), although they may have been previously altered from the way they were recorded. The one place where the listener is privy to “real-time” manipulation is in the blue sections that represent the sounds of moving trains. The first blue block shown in example 2.4 contains a cross-fade between two different samples. The sounds are so similar that the listener can barely perceive them as two separate sounds and they function more as shifting elements within a single sound. In the second blue block of example 2.4 Schaeffer uses three different train sounds sequentially (marked off with grey lines), but again the manipulation is so subtle that it sounds like a single sound altering its rhythm and tone.

In the remainder of the work new sonic figures combine and alternate to create polyrhythms, always maintaining a sense of musical phrasing. In his original program notes for the 1948 concert, Schaeffer called the piece a “Theme and Variations.” The etude, with its industrial sounds and rhythmic/timbral focus, brings about the music Russolo envisioned in his Futurist manifesto. While recordings of Schaeffer’s music were difficult to find they were often played on the radio in France, Germany, and England during the 1950s. Schaeffer remixed them in 1971 and they were once again played on radio at that time, allowing an entire generation of musicians to marvel at the early sounds of industrial music.

Schaeffer’s early tape music techniques such as echo, delay, cutting and splicing, were used by Industrial musicians in connection with his philosophy of sound. While a number of these techniques were also used by popular music recording engineers to edit and change a

recorded performance, Industrial musicians viewed the use of tape machine editing as a form of composition, a way to create new sounds. Schaeffer's suggestions for how sound could be manipulated thus informed Industrial musicians' understanding of modernist compositional method and also suggested how sound could serve as a powerful connection to the physical world. For example, Schaeffer's concept of timbral phrasing was used by Cabaret Voltaire, in a modified form, to generate structure in "The Dada Man."

Schaeffer's instruction and guidance influenced numerous composers in the mid-twentieth century that flocked to the recording studio at the *Radiodiffusion Télévision Française* (RTF) in order to experiment with the new technology and the compositional possibilities of *musique concrète*.²⁸ In the early 1950s one of the studio's most frequent patrons, Pierre Boulez, suggested that the compositional method called total serialism should be applied to the creation of electronic music. The debate over issues of compositional organization and the kinds of sound to be used (recorded versus synthesized) divided the electronic music scene in Europe for years and gave birth to an entirely new philosophy of electronic composition called *Elektronische Musik*.²⁹ Two German composers, Herbert Eimert and Karlheinz Stockhausen, adopted and further developed this new method. The two opened their own studio for Electronic music in Cologne, Germany. It was Stockhausen's involvement in the budding electronic music scene would eventually lead to the music's direct crossover into popular culture.

Karlheinz Stockhausen

"Nowadays any noise is musical material..."

- Karlheinz Stockhausen, *Four Criteria of Electronic Music* (1971)

²⁸ Manning, 40.

²⁹ Herbert Eimert firmly believed that *Elektronische Musik* could (and should) be nothing other than serial music. See Chadabe, 37 and Timothy Taylor, *Strange Sounds* (New York: Routledge, 2001), 41-71. Also see Stockhausen's comments on electronic sound in *Stockhausen on Music: Lectures & Interviews*, ed. Robin Maconie (New York: Marion Boyars, 1989), 58.

“It all started with Stockhausen.”

- Boyd Rice, AKA Non, *Forgive Us Our Synths* (1981)

In popular music publications, interviews, and histories Karlheinz Stockhausen (1928-2007) is by far the most often mentioned and cited of the post-war avant-garde composers, yet his music appears to be the most elusive. Space-Rock, Krautrock, and Industrial musicians all mention Stockhausen as one of the major influences on the sound and structure of their music, yet very few of them are ever able to say exactly what about his music or compositional systems they have used in their own work. Stockhausen’s music explored sounds that were of interest to the 1960s counter culture, such as the use of extreme electronic timbres, atonal pitch organization, and the mixing of synthesizers with manipulated found sounds and voices. These kinds of sounds can be heard in the music of the Grateful Dead and the Beatles who were looking to expand their musical possibilities. Stockhausen served an important role as a teacher and spokesman for the avant-garde and several of his composition students later started rock bands such as Can. Because of the radio airplay his music received in England and Germany, the marketing of his music on Deutsche Grammophon, and his various concert appearances, Stockhausen’s music influenced many musicians who had little or no classical training such as Julian Cope and the British space-rock musicians Pink Floyd. His musical systems are not important in this context, especially since much of it would be difficult to assimilate into a popular music methodology, but late twentieth-century popular musicians gravitated toward the sound of his music, and the creation of intense electro-sonic noises and soundscapes.

Stockhausen’s student years are infrequently discussed in studies on his music, yet it was a formative time that resonates in the music he composed during the 1950s and 1960s, the period that is important to the history of Industrial music. As a student Stockhausen read the writings of Friedrich Nietzsche and Herman Hesse, and took a particular interest in *The Glass Bead Game*.

Christoph Von Blumröder reveals in his book *Die Grundlegung der Musik Karlheinz Stockhausen*, that there was a written correspondence between Stockhausen and Hesse.³⁰ In one letter Stockhausen writes about *The Glass Bead Game* saying, “In the distance the ‘ability’ is given to me, you have called me with your thoughts, with your world of the music-master and with Knecht’s withdrawal from the order. Allow me to confess that you have remained human and have left open a door, for me and perhaps many others”³¹ Stockhausen was stimulated by Hesse’s elevation of music in the novel, and his own interest in music and literature found validation in the story of Knecht.³² Stockhausen sees the character’s ability to move beyond the stifling confines of the false utopia as a doorway out of the social confines of Nazi-era Germany in which he was raised, and the personal confines of his own tragic youth.

Stockhausen's interest in Nietzsche and Hesse is an important element for understanding how his music was received by Industrial musicians because it shows that they were responding to modernist connections that had already been made during the twentieth century between philosophy, literature, art, and music. Stockhausen’s conceptions of originality in music were not as severe as the “slash and burn” ideology of the pre-war moderns (Futurism and Dada). In his discussions of sound objects Stockhausen believed that traditional musical sounds could be heard as new again if they were recontextualized for the modern experience: “It can be magical

³⁰ Christoph Von Blumröder, *Die Grundlegung der Musik Karlheinz Stockhausen*, Beihefte zum Archiv für Musikwissenschaft 32 (Stuttgart: Franz Steiner Verlag, 1993). The first chapter has been translated to English by the author and reprinted as “Orientation to Herman Hesse” in *Perspectives of New Music* 36, no. 1 (Winter 1998): 65-96.

³¹ Blumröder, “Orientation to Herman Hesse,” 73-74.

³² After 1950 Stockhausen would begin to take his musical studies more seriously, and his interaction with Hesse would forever shape his artistic vision. It has been suggested by both Blumröder and Robin Maconie (*The Works of Karlheinz Stockhausen*) that Stockhausen’s later interest in total serialism was an extension of the musical-scientific nature of the glass bead game described in Hesse’s novel and that he often tried to model his life on the principles set forth by the main character.

to discover something familiar in an unfamiliar setting, the more so when the context is completely abstract or informal.”³³

Stockhausen experienced his own musical revelation in 1952 when he traveled to Paris to attend a course with composer Olivier Messiaen. While there he was invited to Pierre Schaeffer’s recording studio by Pierre Boulez. The music that was being composed there did not initially impress Stockhausen, yet he was intrigued by Schaeffer’s study of sound and the science of acoustics. In November, Schaeffer offered Stockhausen studio time to create his own tape music using *musique concrète* methods. The tape experiment he composed, *Etüde*, lasts only three minutes but exhibits a very different musical result than that previously achieved by Schaeffer and his colleagues.

Stockhausen used serial techniques to compose *Etüde* [1952] and created a pre-compositional system that related time and timbre so that the length of each sound was determined by the overtone series of its harmonic spectrum. He created each sequence by splicing together various “attack” sounds in quick succession. While he may not have intended it, the piece has a very machine-like quality to it. Because the sounds are only created from the attack portion of a sonic envelope they never settle down into the more stable sustain portion of a natural sound. This keeps the ear activated and the mind waiting for the expected remainder of each sonic event. The numerous gritty attack sounds create rhythms evocative of a machine about to come undone. The harsh timbres, the wide dynamic range, and the rhythmic ferocity make *Etüde* a precedent of the early Industrial music style. This piece showcases the difference between compositional methods and intent and the reception of the music’s sonic features. One could not be expected to hear on the surface how the controlled process of altering 32nd note

³³ Stockhausen, 58-59.

slices of noise sound were related. What resulted was a massive, yet sculpted, wash of sound and noise. This is especially true for an audience that might be unaware of the compositional methods used and/or an audience that was not be classically trained—such as the many Industrial musicians who modeled their sound on Stockhausen’s music.

Stockhausen was not opposed to an understanding of his music strictly through recordings. In 1971 he envisioned that his music might have a great impact on a new aural tradition of music, because his electronic music took timbre as one of its primary structural features. This is very similar to the ideas of Russolo and Schaeffer who wanted, above all else, for timbre and sonic effects to be the primary motivator in all new music. Stockhausen explains:

I want to build a new tradition, an aural tradition, transmitted via the ears. . . . I consider a record I make as important as the score. Many of them contain music that is not determinate. So the records are models for musicians. The musicians refer to the recordings and learn from them, and develop their own new approaches to creating sound worlds. This new aural tradition which I have started means that our musical knowledge will come to be based more and more on direct experience of working with sounds, rather than on writing on paper.³⁴

In this statement Stockhausen indicates the importance of electronic sound production and reproduction as the primary media for the creation and comprehension of music in the future.³⁵

Like Russolo and Schaeffer before him, Stockhausen envisions a new musical tradition that is based on the sound itself, on the heard sound as opposed to the musical score—the primary means of transmitting musical sound in the Western concert music tradition. Stockhausen believed that

³⁴ Stockhausen, “On the Musical Gift” (1971), quoted in Stockhausen, 27.

³⁵ Academic art music world would only accept this new aural tradition as a fairly marginalized sideline. Many electronic/computer music courses at academic institutions teach using a similar method, yet this has done almost nothing to shake the hold of notation and traditional performance methods from the majority of curricula. Yet the popular music world had already accepted the record as the primary musical document since the 1950s. Bands such as the Beatles and the Rolling Stones, and artists such as Elvis Presley and David Bowie, had all learned about music from recordings and not from musical scores. As such Stockhausen’s claims of inventing a new musical tradition are more accurate when connected to popular music.

others could learn from the sound of his music without knowing the pre-compositional methods he used to create it, and this is what many Industrial musicians did.

How Stockhausen's music influenced popular music encourages us to realize that within this context the sound is ultimately more important than the technique. Even musicians who studied with Stockhausen, such as Holgar Czukay of Can, attempted to replicate the sonic aspects of Stockhausen's music rather than the compositional systems at work. Stockhausen created music that used many kinds of sounds, but within the modernist history created by Industrial musicians the ones that are the most important are the noise sounds. The harsh noise sounds created by Stockhausen set a timbral standard for sounds used by Industrial musicians, ones that are not simply noise by its most basic definition, unwanted sound, but are noise in an aesthetic manner. Harsh sounds are unpleasantly rough or sharp and are purposely grating to the ear and can even be offensive to the mind. They have changing occurrences of multiple frequencies that blur their perception as a clear pitch or timbre. Particular white noise based sounds may activate numerous high-end partials that are painful to the ear, and as such they can be heard as brutal or painful as if the sounds themselves were violent and ruthless.

The concept that the composer can control all sounds, their placement in the stereo field and in distance from the listener (due to reverb and dynamic changes), is a crucial compositional innovation that provided a model for later electronic musicians to consider themselves sonic sculptors. The last musical works of Stockhausen to be considered here are his 1964-65 compositions *Mikrophonie I* and *Mikrophonie II*. These compositions resulted from his purchase of a large tam-tam (a 1.55 m. gong) for use in his composition *Momente* (1962-1964). After the performance of *Momente* Stockhausen installed the tam-tam in his backyard and experimented

with the various sounds it could produce.³⁶ Stockhausen decided to create a live electronics performance piece in which the only instruments used were the tam-tam and a microphone. He described his first recorded experiments with the two instruments:

I took a basket, went into the kitchen and gathered together all sorts of implements—spoons, tumblers, rubber articles. I remember a clockwork egg timer in a plastic case, wooden spoons and other wood objects, and several small plastic utensils. I walked to the tam-tam with that basket, took a microphone in my hand . . . and then started taking the various articles one by one out of the basket and scratching, rubbing, every so often hitting them against the surface. At the same time I moved the microphone . . . and what I was doing and picking up with the microphone was being recorded in the living room fifteen yards away by the technician.³⁷

Like so many of Stockhausen's innovations, this piece connects two major cornerstones of the sound of Industrial music—metallic percussion and everyday sounds. Stockhausen changed household items into musical instruments by using them to create sound on the tam-tam, thus transforming them into clanging, scraping, and ringing percussion instruments.³⁸ His treatment of the microphone as an instrument in itself is also critical to the development of electronic music.³⁹ There is a reason that Boyd Rice of the Industrial group Non claims it all started with Stockhausen. The complex and harsh electronic music composed by Stockhausen served as an archetype for an entire generation of musicians who sought to create their own experiments in

³⁶ Robin Maconie suggests that he was inspired by a piece of music he heard while in Paris at the RF in 1950 by Pierre Henry called *Tam-Tam IV*. This Henry composition was a tape piece that manipulated several recordings of the instrument to create various soundscapes. Robin Maconie, *The Works of Karlheinz Stockhausen* (Oxford: Clarendon Press, 1990), 139.

³⁷ Karlheinz Stockhausen, "Mikrophonie I" (1971), quoted in Stockhausen, 77-78.

³⁸ The "score" for *Mikrophonie I* and *II* makes no use of traditional notation but instead features a graphic system designed by the composer. Stockhausen designed a scale of 36 possible timbres ranging from the darkest sounds to the lightest. Once again there are various connections to Russolo's noise orchestra categories, Schaeffer's sound object groups, etc. It is interesting that Stockhausen abandoned a more detailed and complex system that he originally created for the piece claiming that it simply became too cumbersome for the performer. The massive amount of possible actions and timbres needed to be narrowed down to a more precise list, and the eventual method of production for each of these sounds could be left up to the performer.

³⁹ For most audiophiles, the objective is to use the microphone to capture the sound in the most "natural" manner possible so that the entire process of recording is essentially rendered transparent.

small home studios. They used the sounds of the environment around them and manipulated it with electronic devices to create brutal sonic soundscapes.

John Cage – Silence, Noise, and Indeterminacy

“I believe that the use of noise to make music will continue and increase until we reach a music produced through the aid of electrical instruments”

John Cage, *The Future of Music: Credo* (1940)

The music of John Cage (1912-1992) is seldom ever discussed in print by Industrial musicians, but they frequently discuss his musical philosophy and his concepts of noise/silence, indeterminacy, and chance (or aleatoric) composition. Many popular musicians heard his music at concerts and festivals (especially the many musicians living in Europe), but in the 1960s and 1970s Cage’s writings were easier to obtain than his recordings. As a result his philosophy and writings published within *Silence* (1961), *A Year from Monday* (1967), and *M* (1973) were read and reread by musicians and had the most meaningful impact on the Industrial subculture.

Many of the concepts Cage developed were applied across various artistic disciplines such as music, literature, the visual arts, and in general philosophical terms. His methods were often misunderstood by other musicians, critics, and scholars, and the transfer of these complex and allusive ideas into the world of experimental popular music offered some interesting adaptations. In the process of translation particular intricacies of Cage’s musical concepts were disregarded in favor of a more universal understanding of composition and sound. It is within this framework that his musical and philosophical concepts are discussed here as they relate to Industrial music. This allows for a study of how Cage’s music and ideas were received outside of his direct circle of composer/performer friends and the ways his music has been analyzed within musicology.

At its core Cage's musical philosophy was a logical extension of the ideas previously mentioned in this chapter, a philosophy in which noise was not something to be separated as either good or bad, but as much a part of sound as musical tones were: "ways must be discovered that allow noises and tones to be just noises and tones."⁴⁰ Cage wanted to open up the timbral palette of music to all kinds of sounds, but was intrigued by how noise might be harnessed. He worked to create a compositional method that would allow the composer to produce, capture, manipulate, and reproduce noise sounds. In 1940 he presented a lecture entitled "The Future of Music: Credo" that bears more than a passing resemblance to the structure and language of the Futurist manifesto:

Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating. The sound of a truck at fifty miles per hour. Static between the stations. Rain. We want to capture and control these sounds, to use them not as sound effects but as musical instruments. . . . Whereas, in the past, the point of disagreement has been between dissonance and consonance, it will be, in the immediate future, between noise and so-called musical sounds.⁴¹

Cage drew on Russolo's *The Art of Noises* in the creation of his musical philosophy, a fact he did not try to hide.⁴² Like his predecessors, Cage's overall interest in noise skews towards the sounds of modern society such as trucks and radio static, and towards the more violent sounds from the world of nature such as rain and wind. Cage suggests that the ability to harness these sounds for composition will arise in the "immediate" future, and like Russolo he actively sought out the means to make it happen.

⁴⁰ John Cage, *Silence* (Middletown, CT: Wesleyan University Press, 1961), 69. Originally from "History of Experimental Music in the United States."

⁴¹ Cage, 3-4. Originally from "The Future of Music: Credo."

⁴² In the late 1930s Cage was presenting various lectures on the creation of "new sounds" in what he called "experimental music." One such lecture was given at the Lial music store in Monterey, California in 1939 and entitled "Art of Noise," in which he played compositions by Cowell, Harrison, and himself.

In the 1930s Cage began composing percussion music as a path to a new musical exploration of noise in the manner of Edgard Varèse. His interest was twofold. First, like Varèse, the use of percussion instruments allowed him to incorporate sounds that were not intimately connected to Western art music traditions and second, he wanted to move into the creation of complex non-pitched sounds.⁴³ Aside from traditional percussion instruments Cage also found new instruments in places like junk yards including items such as brake drums from automobiles, pipes, tin cans, sheet metal, and steel rings. This once again shows Cage's affinity for metallic sounds, particularly those that were discarded parts of modern industrial society and machinery, and these musical compositions had a sonic influence on Industrial musicians who frequently performed and recorded various metallic objects, industrial tools, and household objects.

Several of Cage's early percussion compositions such as "First Construction (in metal)" (1939), use his Square Root form, but on the surface they are very much about timbre.⁴⁴ The title forecasts the language of Industrial music in its use of the word *construction*, which could be viewed as another word for composition yet also recalls a literal construction site. The designation *in metal* creates a vision of metal machine music, particularly when considering how mechanical and factory-like Cage's rhythms were during this time period. Then there are the

⁴³ In connection with his concerns over pitch, harmony, and his teacher Arnold Schoenberg, Cage once commented, "After I had been studying music with him for two years, Schoenberg said, 'In order to write music, you must have a feeling for harmony.' I explained to him that I had no feeling for harmony. He then said that I would always encounter an obstacle that it would be as though I came to a wall through which I could not pass. I said, 'In that case I will devote my life to beating my head against that wall.'" Quoted in Kostelanetz, *Documentary Monographs in Modern Art: John Cage* (New York: Praeger, 1970), 52-53.

⁴⁴ Many of the early percussion compositions were composed using the "Square Root" formal structure that Cage developed in the early 1930s, which consisted of a given number of measures played the same number of times (i.e. 16 measures played 16 times) and then broken down into a pattern of often odd measure groupings (such as 4, 3, 2, 3, 4). Christopher Shultis in his article "No Ear for Music: Timbre in the Early Percussion Music of John Cage," in *John Cage: Music, Philosophy, and Intention, 1933-1950*, ed. David W. Patterson (New York: Routledge, 2002) has addressed the issue of Cage's use of form versus the sounding timbres in the early percussion works, stating that a study of the formal design of the compositions without a consideration of timbre is incomplete.

sounds themselves. The intense vibrations of instruments such as the “thunder sheets” and scraping brake drums create a sonic field activated with white noise and punctuated with sharp blasts of sound. In this formulation there is nothing left except rhythm and noise.

Cage later developed a concept that allowed him to create a virtual percussion ensemble using only a piano.⁴⁵ Placing screws, bolts, washers, nuts, plastic, cloth, and wood on or between the piano strings greatly altered the timbre of the instrument. Depending on the object and the placement, Cage could create sounds that ranged from buzzing and rattling to jangles and thuds. By simply performing from a traditionally notated piano piece a performer could now create any number of timbrally distinct sounds. Cage’s most ambitious work for the prepared piano was the collection of twenty short pieces entitled *Sonatas and Interludes for Prepared Piano* composed between 1946 and 1948. Those pieces call for forty-five specific preparations within the piano. While the piano preparations could have resulted in a wide range of timbres, Cage’s choices favored the creation of noisy sounds. While many of the short pieces are quiet and reflective in nature, some of them like “Interlude IV” feature a repetitive, percussive rhythmic sound that is similar to timbres used by many Industrial musicians.

Cage’s prepared piano conceptually foreshadowed the coming of the digital sampling keyboard. During the 1980s, second generation Industrial musicians programmed digital sampling keyboards in much the same way that Cage suggested that one prepare the piano, with each key able to produce a particular sound as a part of an ensemble. While these early compositions of Cage influenced the sound and/or performance of Industrial music, his musical philosophy regarding the act of composition based on indeterminacy also had a deep effect.

⁴⁵ While working at the Cornish School in 1940 Cage was asked by Syvilla Fort to compose music for a new dance project she was choreographing. The Repertory Playhouse where the performances were to take place was too small to hold both the dancers and Cage’s percussion ensemble so he decided to compose a piece for piano.

Composers such as Charles Ives and Henry Cowell had experimented with the use of indeterminacy and chance operations in the early twentieth century, but these concepts only emerged as important and influential compositional techniques in the music of John Cage during the late 1950s. Cage's chance music contemplates many of the same issues as the Dadaists, and one might even see his compositions as an analogue to Marcel Duchamp's ready-made artwork, especially in *Imaginary Landscape No. 4* (1951). On the surface the concepts of indeterminacy and chance composition seem to be quite similar and are often invoked as being one in the same. Cage, however, conceived of the two as separate, resulting in different relationships between the composer, performer, and the audience. Both concepts are used within Industrial music to varying degrees so it is worth explaining the difference here. In a 1958 lecture given at Darmstadt in Germany entitled "Composition as Process," Cage explained this very confusion. The discussion includes many musical examples, but in one section he describes his own composition for solo piano, *Music of Changes* (1951), which used the Chinese book of Changes (the *I-Ching*) to create a set of charts that are used in conjunction with the tossing of coins in order to determine the musical details of the piece including tempos, dynamics, pitches, and durations.

In the *Music of Changes*, a structure, which is the division of the whole into parts; method, which is the note-to-note procedure; form, which is the expressive content, the morphology of the continuity; and materials, the sounds and silences of the composition, are all determined. Though no two performances of the *Music of Changes* will be identical (each act is virgin, even the repeated one . . .), two performances will resemble one another closely. Though chance operations brought about the determinations of the composition, these operations are not available in the performance. The function of the performer in the case of the *Music of Changes* is that of a contractor who, following an architect's blueprint, constructs a building. . . . The *Music of Changes* is an object more inhuman than human, since chance operations brought it into being.⁴⁶

⁴⁶ Cage, 36. From "Composition as Process: II. Indeterminacy."

The use of “chance operations” is a compositional device, wherein the specific events and their ordering are determined by a pre-determined system of chance. Once the work is completed the work is determined for the performer. The performer may still make performance specific decisions about tempo and phrasing (thus Cage’s assertion that each performance is different), but the compositional determinations, such as the choice of pitch and the ordering of events, are already contained in the score and may not be altered. This process of using chance operations in connection with a pre-compositional system to determine a composition’s details is considered *aleatoric composition*.⁴⁷

An *indeterminate composition* on the other hand is one in which a number of the compositional aspects of the music, be it rhythm, pitch, order of events, or instrumentation, are either left unspecified or purposely open to the choice of the performer. For example, a piece may contain eight sections of specifically notated music, yet the composer may ask the performer to choose the ordering of those eight sections. In this manner the form of that composition was indeterminate while the other aspects were all still pre-determined. An aleatoric composition may or may not be indeterminate in respect to performance, and a piece that is indeterminate in respect to performance may or may not be composed using chance procedures.

In his famous composition *4’33”* (1952) Cage used chance operations to devise the length of the various movements in the work which, once composed, become set aspects of the piece no longer open to change. All other aspects of the piece are indeterminate. While the performer in *4’33”* does nothing to produce sound, the piece becomes full of the sounds in the hall made by the audience, the lights, the HVAC system, or anything else. Each time the piece is

⁴⁷ That specific term was created by Pierre Boulez, derived from the French word for risk and from the Latin for dice, “alea.”

performed the results will vary based on the location, audience, etc. The piece asks the audience to fulfill Marinetti and Russolo's dream of the music of modern society created by the noises of that society itself, and it puts into play the Dada ideal of anti-art, the work of art that contains nothing in itself except for the moment.⁴⁸

These distinctions are also played out in several magnetic tape compositions Cage created during the 1950s and 1960s, first at his own studio named the Project for Music for Magnetic Tape in New York City and later at Luciano Berio's *Studio di Fonologia Musicale* in Milan.⁴⁹ The pieces were assembled with systems of chance, combining various scraps of prerecorded sound into larger sections. Most of the sounds were recorded to tape by his friends the Barron brothers. In his book *Electric Sound*, Joel Chadabe describes the organizational system used by Cage in the creation of *Williams Mix* (1952):

Cage first created a library of snippets of tape, catalogued as *A* (city sounds), *B* (country sounds), *C* (electronic sounds), *D* (manually produced sounds, including normal music), *E* (wind-produced sounds, including voice), and *F* (small sounds requiring amplification to be heard). These sounds were further classified: the letter *c* indicated control and predictability, the letter *v* designated lack of control or unpredictability; and both *c* and *v* were applied to pitch, timbre, and loudness in that order. The designation *Bvcv*, for example would indicate a country sound of uncontrolled pitch, known timbre, and uncontrolled loudness.⁵⁰

Cage was unable to hear the individual snippets of tape at the time of composition and would only listen to the completed sections later on the Barron brothers' tape machines. For Cage,

⁴⁸ Thinking of the Futurists, one could image a performance of *4'33''* today that might gloriously contain ringing and buzzing of cell phones and iPhones, the humming of electronic equipment and lighting fixtures. The piece will potentially contain all that is current or modern about a society as well as all that is essentially human such as breathing, coughing, wheezing, or part of the natural world. All of this should sound very familiar to my previous musings on noise in reference to Russolo since the musical and sonic concerns are the same—which Cage was very aware of.

⁴⁹ The Project for Music for Magnetic Tape actually consisted of only his own apartment and the tape machines owned by his friends Louis and Bebe Barron. Berio's RAI studio is also where Berio created his landmark electronic music tape piece *Thema-Ommaggio a Joyce* in 1958 using a similar "cut-up" technique on a recorded spoken text (performed by Cathy Berberian) of James Joyce's *Ulysses*.

⁵⁰ Chadabe, 55-56.

these designations were all that were needed in order to structure the piece, and the tape sections were physically spliced together using results from chance operations. This effectively removed Cage from the process placing chance, and not musical taste or structure, as the organizing principle. The only determined aspects of the piece came from the initial act of recording the sounds and from a pre-compositional graphic score which arranged time-length sections and the density of tape fragments. In the 1960s Cage's views on sound and chance operations were adopted by a number of musicians who worked in both popular music and avant-garde composition including John Cale and Yoko Ono, allowing his methods to move into popular music forms such as Krautrock and Industrial music.

La Monte Young and Terry Riley: Minimalism

“Motors in the machine shop at school—I used to sing and whistle along with them.”

La Monte Young (1987)

In the late 1950s composers La Monte Young (b. 1935) and Terry Riley (b. 1935) were at the forefront of the musical development that would eventually be termed *minimalism*. These composers explored the creation of music that used a limited number of sounds held out for a long time period or the repetition of short, repeated melodic and rhythmic patterns. The music focused the listener's attention on the sonic detail that resulted from the combination of sounds and the process of musical change over time. During the 1960s and 1970s groups such as the Velvet Underground, Can, Kraftwerk, and Tangerine Dream transformed the sound of these composers into a popular music aesthetic. Industrial musicians in the late 1970s adopted the minimalist use of drones, rhythmic/pitch patterns, and concept art in a way that incorporated both the original avant-garde intentions and the experimental popular music variations.

In 1958 La Monte Young composed a piece based on single tones and chordal structures that are held for long periods of time called *Trio for Strings*. Young limited changes of pitch,

rhythm, and dynamics in the work, and created a slow rate of change between successive musical events. This creates the sensation that nothing is changing, that the music is static. In reality many things are happening but they are occurring on a time-scale that is expanded beyond what a listener might expect in a Western art music composition. In *Trio for Strings* (1958) a simple three-chord progression may take as long as fifteen minutes to appear and dissolve. At this speed many of the traditional connections between these pitch structures become tenuous, strained by the listener's musical memory and the ability to hear the sounds as a progression, and the events begin to act as a series of drones in which the rhythmic beating of the tones against one another results in a moving cloud of textures and overtones. Young himself describes it as telescoping the music of composer Anton Webern so that each single event would last for minutes instead of seconds. Young attended Stockhausen's summer composition seminar at Darmstadt in 1959 and showed the older composer his *Trio*; it is reported that Stockhausen approved.⁵¹ It was also during this summer in Darmstadt that Young had his first encounter with John Cage and his ideas on musical indeterminacy.

In 1960 Young began to explore what philosopher Henry Flynt later called concept art, illustrated by Young's *Composition 1960*.⁵² It is a series of pieces, all of which consist of short instructions for the performer that are vague enough to allow for a large number of possible interpretations. Some of these pieces are more conceptual than musical, such as the *Composition 1960 No. 10*, which consists of the instructions "Draw a straight line and follow it." Others like *No. 7* return to Young's static/drone music and the score gives two notes, B and F#, with the instructions, "to be held for a long time." This Cage-ian minimalistic indeterminacy reduces the piece to an absolute *single* event, a simple instruction to create a concentrated music/event-

⁵¹ Edward Strickland, *Minimalism: Origins* (Bloomington: Indiana University Press, 1993), 134.

object. In the *Composition* pieces the instructions themselves, and the performance and interpretation of the instructions become the focus, rather than any specific musical action that may result. The performer is left to decide what the audience hears. Of course, depending on how the pieces were enacted, the relationship between the instructions (composition), the interpretation (performance), and the actions (sounds) could change dramatically. First generation Industrial musicians developed an affinity for musical structures and ideas that allowed for radically different results from one performance or recording to the next. In these cases the music was open-ended in terms of time, pitch, and timbre, allowing for almost any musical or dramatic interpretation of the plan. Sometimes a piece consisted of only a general idea or concept without any specific set of instructions or score at all, and in other instances the instructions were at the center as in a conceptual work of art designed as an action to be performed rather than experienced.

Young performed much of his music himself or with his ensemble The Dream Syndicate, creating a performance practice that was based on only a limited number of pitches, rhythms, timbres, etc. Young had, in essence, formed a band and many of their concerts took place in loft apartments in New York City and were complete with lighting effects and amplification.⁵³ The Dream Syndicate consisted of Young, who sang and played saxophone, Young's wife Marian Zazeela who sang and created the light show, Tony Conrad (violin), Angus MacLise (percussion), Billy Name (guitar), and John Cale (electric viola).⁵⁴ Many of these members later

⁵² See Henry Flynt, "Concept Art" in *An Anthology*, edited by La Monte Young (New York, 1963).

⁵³ Yoko Ono's 112 Chambers Street was one of the most famous places for these loft concerts, and she became friends with Young after seeing performances of his concept pieces.

⁵⁴ The recordings made by the Dream Syndicate became the pieces, more so than the instructions written down by Young. This eventually led several members of the group to question Young's practice of copyrighting the music in his name alone. Tony Conrad, a composer in his own right, even asked Young to start calling the pieces group collaborations, and when Young refused Conrad and friend John Cale left the group. To this day Young retains ownership of these tapes and has refused Conrad and Cale the right to copy them for their own use.

went on to become members of various rock bands in the late 1960s. MacLise and Cale worked with Lou Reed in the Velvet Underground, Billy Name became a member of Andy Warhol's crowd, and in 1972 Tony Conrad recorded an album with the Krautrock band Faust entitled *Outside the Dream Syndicate*.

A fellow student of La Monte Young at the University of California at Berkeley was Terry Riley, and in 1959 the two became good friends. Riley was extremely impressed with the music of Young: “. . . it was just like going somewhere in a spaceship! Time stopped, and I'd never had that experience. It's like an initiation.”⁵⁵ At the beginning of 1960 Riley composed his *String Quartet* using Young's long drones but with one important change: he added tonal or modal pitch content. This separated the drones from the twelve-tone system that had helped to form them in the first place. For Riley, the influence of modal jazz loomed large. Modal jazz began in the 1950s based on the use of modal scales and was practiced by musicians including Miles Davis, John Coltrane, and Herbie Hancock. The style quickly developed an affinity for drones and two-chord ostinato that gave the music a static character. This serene sound was instrumental in guiding the minimalist composers to the idea of constant repetition. Some musical moments on John Coltrane's *My Favorite Things* [Atlantic LP 1361, 1961] and *Africa/Brass* [Impulse AS 77, 1964] sound very similar to the later music of the minimalists, and the title track on *My Favorite Things* is a piece that many minimalist composers cite for its use of extreme repetition. Short patterns repeat on a structural level numerous times within the piece, in essence using small scale repetition to determine large scale structural form.

Terry Riley's piece *In C* [1964] was the first minimalist composition to receive widespread public attention and became a favorite of many Industrial musicians both for its

⁵⁵ Strickland, *American Composers* (Indianapolis: Indiana University Press, 1991), 111.

indeterminate structure and for its use of rhythmic/pitches patterns. The instrumentation is not specified, but Riley envisioned it as a group effort. The piece is made up of fifty-three small musical patterns, and each performer must repeat the patterns an unspecified number of times and then move to the next pattern. When all players reached the final pattern the piece is over. Riley's concept for the piece was to create a process whereby individual events came together over time to form a whole. He had originally composed *In C* without the "pulse," the two repeated metronomic upper C's on the piano. During rehearsals the piece kept falling apart as the players got further and further away from one another. Composer Steve Reich (b. 1936), the organ player in the ensemble during the 1964 world premiere, suggested that a drummer play a steady eighth note pulse so that the players could keep a common, steady time. At the next rehearsal, Riley added the pulsing piano part.⁵⁶ This simple addition was a major factor in the acceptance of Riley's work outside of art music circles. The idea of a constant pulse around which the rest of the piece is structured made an easy connection with the already pulse-driven world of popular music. As a result, the use of a unifying pulse around which rhythmic pitch patterns are repeated became a direct part of particular sub-styles of Industrial music.

There were also a number of other direct exchanges between the music of the minimalists and the popular music world, including the music of the Velvet Underground—a band that was revered within the Industrial music subculture. In the next chapter I will explore how the various musical conventions of the avant-garde concert tradition were used by musicians within the popular music world, and how this eventually led to the creation of Industrial music in the mid 1970s.

⁵⁶ Strickland, *Minimalism*, 180.

Musical Modernisms in Popular Music 1967-1974
Chapter Three

In the early 1970s there was a period when, for me, there wasn't really a division between "high" and "low" electronic music, there was a lot of crossover. I think there is more of a philosophical connection between Throbbing Gristle and this type of work [- the avant-garde classical tradition]. But what we were doing with Throbbing Gristle was never intended to be seen as classical, it was always intended to be populist.

Peter Christopherson (Throbbing Gristle)¹

The approaches to music and to the world of sounds are completely different now than in the past. The main difference is in the limitations. Rock and roll is really based on a formula. It has some rules; you need a bass guitar, a drummer, a guitarist, and a singer, and then you have the magic formula to begin rock and roll. Nowadays, we speak about our opportunities to access the world of sounds. We don't even speak about the abilities of musicians anymore.

Patrick Codenys (Front 242)²

In 1978 Throbbing Gristle released the first Industrial music 45rpm single [IR0003, 1978] on the fledgling Industrial Records label using the profits from their first LP *The Second Annual Report* [IR0002, 1977]. Industrial Records advertised the single as a "double A side"—a decisive commentary on the music industry's practice of placing a hit song on the A side of a 45 and a throwaway song on the B side. It was a move designed to send a message to the listening public stating that Industrial Records and Throbbing Gristle would produce no second rate music, only A sides.³ It also drew attention to what Throbbing Gristle considered to be the "blockhead" nature of the punk/electronic music scene that was willing to participate in the idea

¹ Peter Christopherson in an interview with Simon Ford. Quoted in Ford, *Wreckers of Civilisation: The Story of COUM Transmissions and Throbbing Gristle* (London: Black Dog Publishing, 1999), 8.8. The pages in Ford are listed as chapter and page with new page numbers for each chapter; i.e. 1.1, 1.2, 2.1, 2.2 etc. Christopherson uses the exact phrase "the avant-garde classical tradition" earlier in the interview.

² Patrick Codenys in an interview with Robert L. Doerschuk in "Front 242: The Aggressive Edge of Rhythm and the Power of Recycled Culture" in *Keyboard Magazine* 15, no. 9 (Issue 160), September 1989.

³ There is also a historical precedent for the double A side within the world of independent record labels. Sam Phillips, the owner and operator of Sun Records, released many 45s in the 1950s with unmarked sides, essentially claiming that he didn't care what side a disc jockey played as long as they played the record on the air. The economic impact was such that he could generate two hits off of one record.

of a hit song in the first place.⁴

Throbbing Gristle's first LP was filled with an uncompromising assault of avant-garde noise compositions, but for their first single they decided to replicate the sounds of experimental popular music styles that had been influenced by concepts and techniques of the modernist avant-garde. Sonically the two sides could not have been more different. "United," the bigger commercial success, recreated the precise electronic rhythms and synthesizer-based sounds of the Krautrock band Kraftwerk.⁵ "Zyklon B Zombie" smashed the heavy proto-punk rock assault of the Velvet Underground into small pieces and turned up the volume.⁶ The band created both songs with a single methodological principle: taking a selected musical model and boiling it down to its most basic elements in order to build something new. Just as Industrial musicians had positioned Luigi Russolo as the genesis of industrial sounds within the concert music tradition, they looked to the proto-punk music of the Velvet Underground, the space-rock of Pink Floyd, and the Krautrock sounds of Can, Tangerine Dream, and especially Kraftwerk as the first popular music moderns. A close examination of "Zyklon B Zombie" demonstrates how the first-generation Industrial musicians looked to the experimental music groups of the late 1960s and early 1970s as a model for the integration of avant-garde ideals into popular music.

Throbbing Gristle band member Genesis P-Orridge once commented that the sound they

⁴ Throbbing Gristle drove this point home even further by including a thirty second version of "United," on the album *D.o.A. The Third and Final Report of Throbbing Gristle* [IR0004, 1978]. The *D.o.A.* version is sped up and reversed on a tape deck. The unrecognizable short version parodies the music industry standard of including a previous single on a new album. This marketing technique is typically meant to lure fans into buying the new album, except in the case of "United" the very accessible single is rendered into unrecognizable noise by its distortion and compression.

⁵ "United" was named the *NME* single for the week for June 3, 1978 where Jon Savage called it, "Syd Barrett meets Kraftwerk in the lab and TG [Throbbing Gristle] walk away laughing" (Jon Savage, *Sounds*, May 6, 1978). The music certainly sounds like a mix between German Krautrock and British space rock with a bit of ABBA thrown in for good measure, but Savage also picked up on the parody aspect of the track as well. As a member of the Industrial music subculture Savage understood that the accessible nature of the song was really a lure, easy pop music as subversive interloper.

⁶ For some unknown reason newer reissues list the title as "Zyclon B Zombie," while the original 45s spell it as "Zyklon B Zombie," which is the spelling I use here.

wanted to create was the music of the Velvet Underground stripped of all its rhythm and blues components. This is literally true in the case of “Zyklon B Zombie” in which Throbbing Gristle reduced the abrasive rhythm and blues of the Velvet Underground’s “I Heard Her Call My Name” [V6-5046, 1968] down to the pulsing rhythm and noise, and then rebuilt it within a more conventional song structure that was common of mid-1970s punk rock songs like the Sex Pistols “Anarchy in the UK” [EMI 2566, 1976]. A comparison of “Zyklon B Zombie” and “I Heard Her Call My Name” shows how Throbbing Gristle maintained certain musical characteristics as a frame and discarded others in favor of creating a more avant-garde-sounding track. The related form and pitch structures of the two songs are shown in example 3.1.

Example 3.1
Form and Pitch comparison of “Zyklon B Zombie” and “I Heard Her Call My Name”

“Zyklon B Zombie”	“I Heard Her Call My Name”
Intro [F#, C#]	Intro [GM – CM]
Verse 1 [F#, C#] Chorus [F#, C#] Verse 2 Chorus Verse 3 Chorus	Verse [C (Bflat) – F (E flat)] Pre-Chorus Chorus [GM – FM – GM – CM]
Solo [Guitar Solo that sounds like electronic experimentation]	Solo [Wild guitar solo] Intro [riffs on F, G, C, D]
Chorus Verse 4 Chorus [extended with bass motion]	Verse 2 Chorus 2 Pre-Chorus 2
Solo [Electronics with Chorus vocal]	Solo 2

The original Velvet Underground song, “I Heard Her Call My Name,” begins with a messy tangle of drums, strummed slightly-dirty electric guitar, and bass guitar alternating

between G major and C major chords. Lou Reed's half-spoken introduction and a loud distorted guitar overshadow the introduction by striking a series of dissonant notes mixed with the squeals and squeaks of feedback. An extreme amount of noise appears on the entire track resulting from the individual volumes of each instrument being pushed well beyond the red during recording, giving it a particularly "hot" sound. Even when playing the song at a low volume it sounds like it is distorting the speakers, making it difficult to identify the specific details of what each instrument is playing. During the first verse the band settles into a more traditional rock groove playing an alternation between the pitches C and F, with B flat and E flat as corresponding lower neighboring tones.⁷ The chorus of the song features a V-IV-V-I blues progression in C major, and Reed and the band repeat the chorus vocal "I heard her call my name," in a call and response. When Reed states, "And then my mind split open," the band returns to the overdriven sounds of the intro and the distorted electric guitar plays a dissonant solo. Structurally this functions as a repetition of the introduction and thus begins a new iteration of the previous formal structure, as seen in example 3.1.

Throbbing Gristle chooses to maintain several key elements of the Velvet Underground song in the creation of "Zyklon B Zombie," but meshes them with contemporary punk sounds and avant-garde noise elements. The instrumentation is similar in the two songs except for the absence of percussion in Throbbing Gristle. "Zyklon B Zombie" begins with the sound of the mono tape deck used to record the track coming to life with a slight pop and a hiss, making the artifice of the recording process obvious. In the distance we hear Genesis say "OK" and then count off the band with a rapid Ramones style "1 . . . 2 . . . 1, 2, 3, 4!" Although the tempo fluctuates throughout the song it hovers somewhere around 170 BPM, a rather fast tempo more

⁷ The Throbbing Gristle song "United," on the flip side of "Zyklon," uses identical progression of pitches, so that even while "United" is based on the sounds of Kraftwerk the pitch structure is taken from the Velvet Underground.

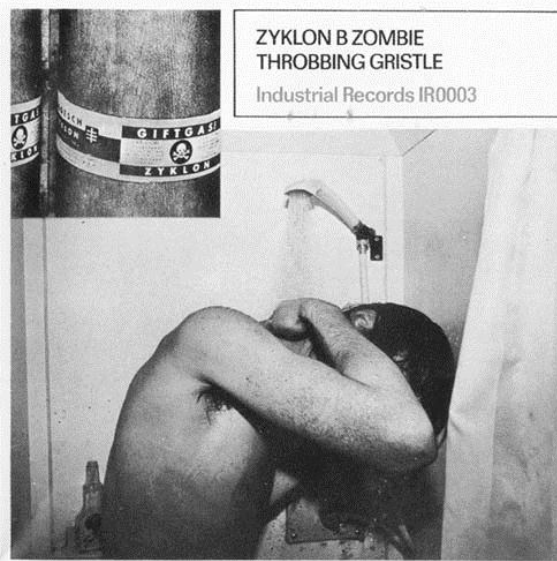
reminiscent of mid-seventies punk than the Velvet Underground. A heavily distorted bass guitar begins alternating between eighth notes on F# and C# every two measures. This pattern replaces the opening perfect fourth relationship of “I Heard Her Call My Name” with a perfect fifth that serves as the basis for the entirety of “Zyklon.” The perfect fifth interval is played using a pick and is fretted on the second fret of the low E string and the fourth fret of the A string, giving the notes a sharp attack and a deep resonance. Like the Velvet Underground recording, Throbbing Gristle recorded their song very “hot” so that the overall sound of the recording is distorted with hiss, hums, and noise.

While Throbbing Gristle maintains the overall structure of “I Heard Her Call My Name,” they alter the verse/pre-chorus/chorus sections into a more typical 1970s punk rock verse/chorus structure as seen in example 3.1. Despite this change “Zyklon” actually sounds more monotonous—and eventually, even slightly maddening—because the harmony never changes to the blues progression used by the Velvet Underground. The reduction of the song’s pitches to only two notes serves to move the focus away from pitch and place it firmly on the elements of rhythm and timbre. This is especially evident during the guitar solo of “Zyklon” when Throbbing Gristle guitarist Cosey Fanni Tutti electronically manipulates the sound beyond recognition. She uses ring modulation and amplitude gating on the guitar, resulting in a swooping electronic sound that pulses in an eighth-note rhythm, slightly out of time with the bass guitar.⁸ The entire solo sounds as if it was produced on a synthesizer rather than on a guitar and recalls the electronic sounds of Stockhausen but also connects to the sonic clouds produced by

⁸ A ring modulator is an electronic device that alters the frequency and amplitude of a sound by producing difference and sum frequencies between the source signal and a second tone, and adds the two together. This produces a number of partials and creates a very distinct metallic timbre. The effect was frequently used by Stockhausen during the 1950s. An electronic gate is a device that will either block or pass a sound through it based on the position of a switch. This switch can be voltage-controlled so that the gate opens and closes in rapid succession every x seconds, thus creating a chopped version of the sound with gaps every x seconds. This was also a common technique used in early electronic music.

bands like Pink Floyd and Tangerine Dream. After twelve seconds the gated guitar rhythm speeds up and the individual instruments playing the song's pulse coalesce into one pure modulated tone. Just as the song reaches an apex it slows down again and the sounds separate, moving back into the chorus. "Zyklon B Zombie" was not a critical or commercial success at the time of its release, partially because it contained elements of the noise used on Throbbing Gristle's first album, but primarily because of the outrageous and shocking nature of the lyrics.

Example 3.2
Sleeve cover to the 45rpm of "Zyklon B Zombie"



The Velvet Underground lyrics are discarded and replaced by ones that are much more sinister. The title of the song is a reference to the WWII chemical gas Zyklon B that was pumped through fake shower heads into the death chambers of Nazi concentration camps such as Auschwitz in order to kill Jewish prisoners. The cover of the "Zyklon B Zombie" side of the single sleeve (example 3.2), shows Throbbing Gristle member Chris Carter in the shower while a smaller insert photo shows containers of Zyklon B gas. References to Nazi extermination methods were not unheard of in the 1970s; one might recall Captain Beefheart's "Dachau Blues" or the Sex Pistols' "Belson was a Gas." The lyrics to the first verse and chorus of "Zyklon B

Zombie,” shown in example 3.3, are even more extreme, especially when the dark and violent words are combined with the relentless and pummeling musical assault. One of the most powerful and frightening aspects of the lyrics are the manner in which they quickly and often unpredictably shift point-of-view between the two main characters of the song: a little Jewish girl who is being marched to her death in the gas chamber and the Nazi guard who is escorting her. Lines flip-flop without warning and suddenly the “I” of one line and the next are confused or conflated. Lyrics such as, “and if I had a steel hammer, I’d smash your teeth in” appear to be spoken by both characters simultaneously—forcing the listener to sit uncomfortably in the shoes of both.

Example 3.3
Lyrics to the first verse of “Zyklon B Zombie”

I'm just a little Jewish girl
Ain't got no clothes on
And if I had a steel hammer
I'd smash your teeth in
And as I walk her to the gas chamber
I'm out there laughing
Zyklon, Zyklon, Zyklon B, Zombie, Zombie

There is a single lyrical reference to the Velvet Underground song at the highpoint of the Throbbing Gristle version. Just before the electronically manipulated guitar solo Genesis shouts, “And then my head split open!” In the Velvet Underground song Lou Reeds’ statement, “And then my mind split open,” operates as a psychedelic drug reference to the upcoming guitar solo. The Throbbing Gristle lyric trades the crucial word “mind” for “head,” shifting the imagery from the metaphysical to the physical. Like other lyrics in the Throbbing Gristle song the statement is divorced from a particular character. Is it the girl dying, her head literally split open? Is it the soldier going insane from the death he deals? Are the lyrics breaking down the fourth wall of the narrative and confronting the listener, who may be having difficulty facing the cruel reality of the

situation? Regardless of the chosen interpretation, violence prevails.

“Zyklon B Zombie” worked within the new Industrial music subculture as a commentary on modern society—maintaining that everyone was, in one way or another, dancing themselves to death in the haze of confusion and terror that is the modern crisis. People conform to expectations, what they are “supposed” to do: driving to work, buying things, listening to the government, and falling prey to the mainstream media. Throbbing Gristle believed that this was a process that turned us all into zombies marching forward into the figurative death chamber. If our eyes opened to the reality of our situation, we would smash the world’s teeth out. But we don’t, and neither did punk rock, which was the real point.

Throbbing Gristle believed that the punk rock movement had already thrown away its promise and been assimilated into the music business machine. Punk rock’s rebellious attitude and anger were becoming window dressing for the same old rock and roll formulas and music industry practices. The venom of the Sex Pistols’ “Anarchy in the UK” was becoming a sing-along chant at bars and clubs, and their scandalous dress code was becoming a working class uniform. As journalist John Savage has remarked, “If it had been the project of the Sex Pistols to destroy the music industry, then they had failed.”⁹ The spit-in-your-face and do-it-yourself attitude of punk suggested that you could play music with only three chords, but that still implied that you actually needed chords. Throbbing Gristle and the other first-generation Industrial musicians wanted to take away even that small concession. From the very start they held a strong belief that anything could, and should, be heard as music. They also realized that the music industry machine would soon come for them in the same way it had for punk, so they decided to work within the system right from the start as a guerrilla network, to hide in plain

⁹ John Savage, *England’s Dreaming* (New York, St. Martin’s Press, 1992) 541.

sight.

Throbbing Gristle enjoyed the shock element of presenting such an idea in a pop record single. While “Zyklon B Zombie” served as a musical homage to the proto-punk of the Velvet Underground, possibly suggesting that maybe they had been closer to true revolution, it also criticized the mindless nature of the contemporary punk culture. Genesis described “Zyklon” as “featuring the extensive mangling of instrument generated sounds in an attempt to project to the listener the actual feeling of hysteric coma whilst being gassed to death in Auschwitz.”¹⁰ The members of Throbbing Gristle relished the idea of punks pogo dancing to a song about gas chambers, and at one point Genesis even suggested that the popular punk pastime of sniffin’ glue would now be replaced with sniffin’ zyklon—dark humor indeed. The humorous aspect that Throbbing Gristle brought to the subculture should not be dismissed. This kind of dark humor became a tool used by Industrial musicians to look into the depths of human behavior during the modern post-WWII era, much as humor was used by the Dadaists at the start of the twentieth century.

In the remainder of this chapter I examine the style of vernacular modernism that developed within the world of popular music during the late 1960s, a time when the academic avant-garde began to effectively distance itself from popular culture. Within this time period the modernist ideals discussed in chapters one and two were adopted and altered for use by popular musicians. Dada, Nietzsche, Schaeffer, Cage and Stockhausen were all making their way into the popular music culture via the music of the Beatles, the Velvet Underground, Pink Floyd, Frank Zappa, Can, Tangerine Dream, and Kraftwerk. The Industrial music subculture and its associated strand of modernism were a product of the period from 1967 to 1974 when cutting

¹⁰ Genesis P-Orridge, “Hard Listening for the Ease in Hearing” (1988). Liner notes to *The Second Annual Report of Throbbing Gristle*, re-released on CD on Mute Records in 1991 [MUTE 9 61093-2].

edge modernist principles were shared among “serious” and “popular” musicians alike. While the term crossover is typically used to describe this kind of high/low cultural trading, it is less accurate in this case because so many of the core ideas were shared by both sides. I prefer to use the term *fusion*, which is intended to signify exactly how modernist ideals and conceptions of sound were simultaneously used by both art music and popular music. Of course the avant-garde and experimental popular music remained separate in many ways—economics, performance practice, and choice of venues—but popular musicians in the 1960s and 1970s made efforts to combine those aspects as well by applying for grants to support their activities, using art music performance practices, and even performing at art galleries and universities. More importantly, the word *fusion* speaks to the later methods of the Industrial musicians who took the sounds and techniques of the popular music modernists and infused them with additional avant-garde ideals—as Throbbing Gristle had done in the creation of “Zyklon B Zombie.”

The Industrial music subculture grew out of, and was a consumer of, the late sixties and early seventies. The quote from Patrick Codenys of the second-generation Industrial group Front 242 at the start of this chapter exemplifies similar discussions within the subculture where the formulaic elements of rock and roll music, and the overall constraints of the popular music industry, were looked down upon, while art music composers and popular musicians who created new sounds and engaged with the modernist aspects of originality and progress were revered.¹¹ The popular music moderns discussed in this chapter used many of the same compositional techniques and methods discussed in chapter two, such as indeterminacy, noise, timbral exploration, and electronic and tape-based music; however, these techniques were altered for a particular use, allowing one to detect a different ideological understanding. By looking at

¹¹ Because of this Industrial music rarely references popular music from before the mid-1960s.

several specific musical examples I examine how the modernist concepts previously discussed changed as they were brought into the popular music world. This examination demonstrates how the popular musicians of this time period embraced diverse musical styles, how their audiences responded to these new modernist ideals, and looks forward to the first generation of Industrial music by focusing on music examples that were specifically referenced by Industrial musicians.

New York City Proto-Punk – The Velvet Underground

The Velvet Underground (or VU) represents one of the first direct connections between the ideologies and compositional practices of twentieth-century avant-garde composers discussed in chapter two and that of popular music songwriters. Their music contains the stripped down raw power, energy, and sonic assault of England's mid-seventies punk explosion and the sound of Industrial music. In fact the original lineup of the Velvet Underground is one of the few musical influences mentioned by almost every first-generation Industrial band.¹² The core membership of the Velvet underground from 1965 to 1968 consisted of Lou Reed (vocals, guitar), John Cale (bass guitar, viola), Sterling Morrison (guitar, bass guitar), and Maureen Tucker (percussion). The band members had very different musical pedigrees, particularly Reed and Cale. Reed was trained as a rock musician and songwriter (he wrote the mid-sixties dance craze song "The Ostrich"), while Cale had performed with La Monte Young in the Dream Syndicate and studied composition with Iannis Xenakis and Humphrey Searle. The sound of the Velvet Underground was already a mixture of the band members' diverse backgrounds and this mixture fostered the creation of a unique musical sound that had a significant impact on Industrial musicians.

¹² Many popular musicians discuss the early Velvet Underground recordings as an influence, but the band's larger impact on rock music is more typically cited from the later Lou Reed-dominated era of the band and songs like "Sweet Jane."

The Velvet Underground combined a number of pop music and modernist techniques into one package and in the process suggested a new approach to composition. The fusion of Lou Reed's pop-song sensibilities and John Cale's classical avant-garde music training helped them to develop a style that is harmonically and structurally based around blues verse-chorus models, but is expanded, and occasionally undermined, by the use of drones, extreme dynamics, intensive volume, audio distortion, and musical repetition. Two of the most representative examples of the methods of stylistic fusion later adopted by Industrial musicians are "Heroin" from their debut album *The Velvet Underground and Nico* [Verve 5008, 1967], and "Sister Ray" from the 1968 follow-up *White Light/White Heat* [Verve 5046, 1968].

Their notorious first album was produced by the pop visual artist Andy Warhol who also designed the "peel slowly and see" cover artwork.¹³ Warhol's actual production work on the album was minimal, but the band members agreed that his support and encouragement during the sessions motivated the group and shaped the sound of the album. This relationship was an important forerunner to the way many experimental popular music bands wanted to view their work as being intricately connected to the work of a respected artist, author, composer, etc. The Velvet Underground's connection to Warhol is one of the key factors that allowed them to create a form of popular music that was rooted within the serious art community of New York City. Warhol himself rode between those two worlds, bringing the everyday and popular (soup cans and Marilyn Monroe) into the realm of serious artwork ("pop art" and silk screens). The Velvet Underground created a fused musical style that could exist as a part of Warhol's art shows or as a

¹³ *The Velvet Underground and Nico* contains eleven songs that are stylistically in three separate groups. The four songs sung by Nico have a light, lyrical sound and follow standard 1960s pop-song structures and harmonies, and as a result met with the most radio success. The second group, "I'm Waiting for the Man," "Run Run Run," and "There She Goes Again" fall into Reed's repetitious blues style that would later become the hallmark of his solo career. The third group of songs show the adoption of modernist aesthetics and noise sound, including "Venus in Furs," "European Son," "The Black Angel's Death Song," and "Heroin."

stand alone popular music performance. Perhaps Warhol's most important contribution to the Velvet underground was his initial decision to cast them as the house band in his *Exploding Plastic Inevitable* (EPI) shows in 1967, which started in New York's East Village but eventually went on tour across the US. The EPI was one of the earliest rock and roll multi-media shows and mixed together elements of modernist music and pop art. Warhol made use of film projections, slide projections, colored lights, strobe lights, dancers (including Gerard Malanga and his famous S&M whip dance during the song "Venus in Furs"), and live music.¹⁴

"Heroin" is a powerful song that is based almost entirely on a slow oscillation between two chords, (C#-E#-G#) and (F#-A#-C#), while a G# drone is played on the viola and guitar (and possibly an organ) throughout. This simple combination reveals the two musical styles that are fused in this song: the blues and minimalism. The two chords alone don't signify much, but in the context of the Velvet Underground's music they are a clear connection to the blues elements consistently referenced by Reed. The two strummed chords function as the opening I-IV chords of the blues traditional I-IV-V-I progression, but they stall out, unable to push forward to the end of the sequence. The song is anchored by the G# drone that enters quietly at the thirty-second mark and continues to crescendo until the end of the song's seven minutes. By 4:00 the drone is at a volume almost equal to the chords and vocals. The C# of both chords is not played as a drone but it continues to sound strongly throughout and adds to the strength of the G# resulting in an open perfect fifth. The drone elements display a connection to John Cale's work with La Monte Young in the Dream Syndicate. But both influences are eventually swallowed up by the onset of overwhelming noise elements at 5:00. The song explodes, unleashing a torrent of feedback from the guitar and viola. The viola begins to play harmonics and makes use of several

¹⁴ Along with the San Francisco concerts by the Jefferson Airplane and the Grateful Dead, the VU were one of the earliest rock bands to create a live show that was fully conceived as a spectacle, and became an important reference point for rock bands in the 1970s and 1980s.

other extended performance techniques. The guitar chords are strummed at a faster rhythm and the drums begin a constant sixteenth-note pulse on the toms. At 6:30 the music slowly returns to the song's opening texture but the drone remains at its high volume. In "Heroin," Reed's pop-song structure and chords serve as a frame on which to hang a loud, noise-driven drone-feedback attack.¹⁵ This same concept was practiced by many Industrial bands including Throbbing Gristle who created the punk/noise sounds of "Zyklon B Zombie" using the Velvet Underground as the frame.

The members of the Velvet Underground often said that their live performances showed them at their best and most aggressive, and that the studio albums were only one possible rendition of a song, and not always the best rendition by their own standards. Sterling Morrison relates a story about a close friend's reaction on hearing the album for the first time: "Helen Byrne ran up to me after the release of the album and exclaimed, '*The Black Angel's Death Song* . . . it's got chords!' Apparently, she hadn't noticed in the live performances. 'Of course it's got chords,'" I replied. 'It's a song, isn't it?'"¹⁶ Both Helen and Sterling's attitudes tell us something important about the Velvet Underground. Helen Byrne, like many other VU fans, was unable to hear the chords during the live performance, suggesting that the live songs were noise and that the recorded versions were heard as songs. Sterling Morrison's comments suggest that the VU heard their use of noise as *music*. Many rock bands were forced to deal with the fact that there was a technologically imposed division between the raw and extreme noise of their live performances, and the typically cleaner sound in the studio recordings. This was an issue that remained significant for the first generation of Industrial musicians.

¹⁵ This musical idea also did an excellent job of expressing the true meaning of the anti-drug lyrics—that heroin use (represented by the drone) would eventually overtake an addict's life.

¹⁶ Victor Bockris and Gerard Malanga, *Up-Tight: The Story of the Velvet Underground* (London: Omnibus, 1996), 106.

The closest one can come to hearing what an early live VU performance was like is the studio track “Sister Ray” from *White Light/White Heat*.¹⁷ Because of the limitations in recording technology of the time it was often difficult to combine separate performances and still maintain control over the individual elements of each take. This developed into a problem for the VU in the studio as the individual egos of the band members started to clash, and each member wanted to select a different take in which he or she sounded the best. The VU decided to solve this by recording several songs for *White Light/White Heat* in one take. Sterling Morrison describes the recording of the album and in particular the track “Sister Ray”:

On ‘Sister Ray’ which we knew was going to be a major effort we stared at each other and said. ‘This is going to be one take. So whatever you want to do, you better do it now.’ And that explains what is going on in the mix. There is a musical struggle—everyone’s trying to do what he wants to do every second, and nobody’s backing off. . . . There was fantastic leakage because everyone was playing so loud and we had so much electronic junk with us in the studio—all these fuzzers and compressors. Gary Kellgran, the engineer, who is ultra-competent, told us repeatedly, ‘You can’t do it—all the needles are on red.’ And we reacted as we always reacted: ‘look, we don’t know what goes on in there and we don’t want to hear about it. Just do the best you can.’ And so the album is all fuzzy; there’s all that white noise.”¹⁸

Despite the fact that Morrison and the other members of the VU believed the album still didn’t capture the intensity they wanted, it created a new kind of studio-based sonic overload in songs like “Sister Ray,” “I Heard Her Call My Name,” and “Here She Comes Now.” One could imagine that many of the VU live shows had a similar sound as the band members turned up their amps to the maximum and progress into a live jam which lasts for seventeen minutes.

¹⁷ Unfortunately the VU never recorded or filmed any of their early live shows so we are unable to examine the sonic landscape of these performances. The earliest VU live recording made available was a bootleg from 1969 that was released on Mercury Records. This live set was the last show Lou Reed played with the band and John Cale had already quit the previous year—hence this show does not represent the original lineup of the VU at the height of their live performance career.

¹⁸ Bockris and Malanga, 124-126.

“Sister Ray” raises the volume and intensity of the musical material itself until the harmony, melody and the vocals are pushed beyond recognition. This was the sound of a live performance that was unintentionally distorted by the studio equipment, but the outcome was something that became a model for many Krautrock and Industrial musicians who later tried to purposefully replicate that sound in the studio.

While their music was loud and abrasive, they did not jump around or dance on stage, something that blended simple pop sensibility with avant-garde modernist performance practice. The Velvet Underground’s lyrics were concerned with dark, and mostly urban, subject matter such as drug addiction, city life, death, and prostitution. Their physical appearance and dress was equally dark and somewhat reserved including black jeans, black shirts, black leather jackets, and dark sunglasses. By the time all these elements filtered through the German Krautrock music scene of the early 1970s, it was ready to function as a basic primer for early Industrial music style.

Space Rock–Pink Floyd

In the late 1960s a new musical sound emerged from the British music underground that was cultivated by British Art school students, and hence was often called *art rock*. The umbrella term *art rock* contained two different branches, progressive rock and space rock. Progressive rock was developed by musicians who were either classically trained or wanted to blend what they saw as the complexity and virtuosity of Classical music with the power and amplification of rock music (i.e. Emerson, Lake, and Palmer; Yes; and King Crimson). Space rock consisted of art school students who often had little or no musical training but instead learned to play their instruments by listening to the radio and performing in R&B cover bands. It was called space rock because of the science fiction aspects of the lyrics and their reliance on new recording

technologies and the synthesizer to make “outer-space” sounds. Many space rock musicians envisioned their music as a British version of San Francisco-based psychedelic rock, musicians who had combined rock with an avant-garde influence from twentieth-century art music composers. In this dissertation I focus on the music of the British space rock artists because they had the greatest influence on, or were directly referenced by, Industrial musicians. Because the space rock musicians were not classically trained, what they were able to pull from their exposure to avant-garde composers such as Stockhausen and Xenakis were the sonic effects of large swaths of sound created through the use of electronics. These sounds were something that could be recreated using the instrumentation of a rock band and synthesizers. The space rock group that had a greatest influence on Industrial Music was the band Pink Floyd, and Industrial musicians especially focused on the band’s use of improvised musical soundscapes and the use of extended performance and structural techniques.¹⁹

In 1966 London’s underground club scene was growing and the club’s promoters were looking for musical groups that could help create the type of “happenings” that were occurring in the East Village of New York and the Haight-Ashbury section of San Francisco. Promoters like Peter Jenner were only reading about these American events in newspapers and magazines: “We didn’t really know what was going on there, and so we created our version of the underground.”²⁰ Pink Floyd began playing in places like the UFO Club where they soon became the house band. The band consisted of four members: Roger Waters (bass), Rick Wright (keyboards), Nick Mason (percussion) and Syd Barrett (guitar and vocals). The UFO Club was run and owned by their management team of Peter Jenner and Andrew King. Just as Andy Warhol’s *Exploding Plastic Inevitable* shows helped the Velvet Underground rise above five-

¹⁹ Another excellent space rock band that influenced many Krautrock and Industrial musicians was the group Hawkwind; however, due to space constraints I will only focus on the music of Pink Floyd.

²⁰ Nicholas Schaffner, *Saucerful of Secrets: The Pink Floyd Odyssey* (New York: Delta, 1992), 32.

dollar-a-night gigs in Queens NY, so the UFO club helped to turn Pink Floyd from a London Underground curiosity into an avant-garde rock group.²¹ This allowed them to stop performing R&B covers and develop their improvisational instrumental interludes based on guitar feedback and distortion into the content of an entire show. In January 1967, Chet Helms, the promoter of the Avalon Ballroom in Haight-Ashbury, came to London in hopes of opening a club there. Once he arrived he changed his mind and decided instead to spend his trip observing the local musical talent. His recollections of a Pink Floyd show give us some idea of what the UFO Club gigs were like:

UFO was pretty parallel to what was happening in the Haight. . . . The Pink Floyd were pretty much the house band, the way Big Brother and the Holding Company were for me. I remember feeling that our music was much more musical, probably because it had its roots in American R and B. . . . [The Pink Floyd] were more influenced by the avant-garde classical composers like Stockhausen. My experience of the Floyd was that it was atonal and amelodic—in large part, walls of sound and feedback-based space music.”²²

Pink Floyd had started out only two years earlier as an R&B cover band but Helms no longer detects any trace of these roots less than a year after Floyd begin developing their space rock style. Helms correctly cites Stockhausen as a major influence on the band. Keyboardist Rick Wright had been listening to a lot of Stockhausen’s music at the time and was trying to include the same kind of atonal and textural organizations into his playing with the band. Peter Jenner hoped that the band would become the darlings of the underground scene (which they did) and further encouraged them to pursue their interest in improvisation and Stockhausen.

Pink Floyd’s first full-length album *The Piper at the Gates of Dawn* [EMI Columbia 6157, 1967] was recorded during several sessions between March and July of 1967 at the Abbey

²¹ After Peter Jenner started managing the Pink Floyd he wanted to expand his roster and become a full-time rock and roll manager. He even called up his fellow countryman John Cale and asked to manage his band the Velvet Underground. Jenner says that he was a big fan of the VU and that he listened to their records at many parties in England. Of course Warhol had already taken the job of manager for the VU.

²² Schaffner, 50. The text quoted is from an interview between Helms and Schaffner.

Road studios.²³ The track “Interstellar Overdrive” is a ten-minute instrumental that was frequently the highlight of the band’s live shows where it could often last as long as thirty minutes. This song is important for its conception of musical form, and the way it uses fragmentation and changes in timbre, register, and dynamics to achieve structure rather than focusing on the development of chord progressions or melody. The album’s producer, Norman Smith, who had previously been chief engineer for most of the Beatles albums up until *Rubber Soul* [EMI, 1965], decided to record the song in a single take as a way to introduce the band to recording in a new studio and capture the rawness and power of the band’s live performance.²⁴ Smith placed an expensive set of microphones in front of the band and recorded them onto stereo 2-track tape. He then decided to record a second performance of the song onto the remaining 2 tracks of the Studer 4-track tape machine, and in the end mixed the two performances together, panning the first mostly to the left channel and the second mostly to the right channel. Since the band did not play the music exactly the same on the second take the track has an added thickness to it that a four piece band would be unable to achieve alone. It has a rawness or sloppiness that normal multi-tracking, where each player adds a harmony or new musical line to his/her original part in a controlled punch-in situation, often tends to eliminate.

²³ During this time the Beatles were also at Abbey Road recording their own psychedelic extravaganzas *Revolver* and *St. Pepper’s Lonely Hearts Club Band*. Much excellent scholarly work has already been published on the Beatles, and for more information on the late-period Beatles see, Walter Everett, *The Beatles as Musicians: Revolver through the Anthology* (New York: Oxford University Press, 2001).

²⁴ This is similar to the Velvet Underground’s technique used to record “Sister Ray” from *White Light/White Heat*.

Example 3.4

Musical Form in Pink Floyd, “Interstellar Overdrive”

[G = Guitar, B = Bass Guitar, O = Organ, D = Drums]
 [All times are indicated as minutes: seconds, i.e. 0:00]

Section A (0:00 – 2:20)

0:00 G + B: Falling chromatic riff	O: Trills	D: 4/4 with backbeat
0:52 Riff fragmentation and decrescendo		
1:50 Crescendo and buildup of activity		

Section B (2:20 – 8:40)

Left Channel (Take 1) *Center Channel* *Right Channel (Take 2)*

POINTILLISTIC SUBSECTION

2:20 G: muted E B: muted E	2:20 O: trills and clusters start on E and then descend to lower pitches. 3:20 D: fade in on Tom Toms and cymbals	2:20 G: hard plucked Ab 2:45 G: Alternates between Ab and Eb
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“LET THERE BE MORE LIGHT” SUBSECTION

3:40 D: kick drum and cymbals	3:40 O: pulsing notes and clusters around Ab and E D: snare drum rolls	3:40 B: additive riff starts on E D: tom toms (8 th notes or faster) 4:24 B: LTBML bass riff
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5:00 (transition) G: distorted quarter note pulses	5:00 (transition) O + D: build up of activity	5:00 (transition) B: distorted falling riff
--	---	---

SPACE ECHOES SUBSECTION

5:30 G: trills on E with echo 5:48 D: cymbals with reverb	5:30 O: falling notes riff with clusters built-up along the way	5:30 G: sweeping glissandi (focus on E) B: moving around on the pitches B, D, E D: quarter note kick with reverb cymbals
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6:05 (transition)	6:08 (transition) O: Loud Ab and D (with grace notes)	6:05 (transition) B: E note with lower octave echo
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REVERSE SUBSECTION

There is some kind of tape editing going on in this subsection. Cuts can be heard in the Left channel at 6:44, and in the Right Channel at 6:30 and 6:52. It is possible that some of this subsection was actually reversed on the tape deck.

6:17 G: reverse gates on G and F D: cymbal rolls	6:17 B: E pulse O: clusters	6:17 Cello like effects (bass or guitar?)
---	--	---

7:00 (transition)	7:00 (transition)	7:00 (transition) B: moves to E and D.
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FALLING RIFF SUBSECTION (MOTIVES FROM SECTION A)

7:17 G: feedback	7:17 G: picking O: falling riff D: cymbals 8:00 G: falling riff	7:17 B: falling riff
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8:22 (transition) G, B, and O alternates 1 measure pulsing on an E and then 1 measure on a D. Drums crescendo with rolls.
--

Section A' (8:40 – 9:05)

Same as the opening Section A but with some wild panning effects. This time the music moves to a stronger conclusion with a ritardando and the whole band playing repeated hits on D. This does not, however, resolve back to E (the central pitch of the piece) and leads into the coda.

Coda (9:05 – 9:42)

G: random wild playing. B: sustains the note D then slides down towards the lower octave E at very end.	O: wild playing D: a change to a new drum sound at the very end before the track just cuts out.
--	--

Musically the track is divided into three discrete sections creating an extended ABA form with a coda as shown in example 3.4. The song opens with a falling chromatic riff played in the guitar and bass guitar that descends from B to E—using B, A, G, and E as the primary tones, Bb, Ab, and F# as passing tones, as shown in example 3.5.²⁵ The entire opening section of the track (roughly the first 2:20) is based around the repetition and fragmentation of this melodic riff. The band proceeds to play fragments of the descending line that gradually disintegrate into smaller fragments and eventually nothing, closing out the section.

Example 3.5
Guitar and Bass riff from Pink Floyd, “Interstellar Overdrive”



The second section, B (2:20-8:40), is divided into five smaller subsections that flow continuously into one another. Each subsection is made up of a set of specific and static musical articulations, such as: pizzicato, glissandi, cluster chords, echoes, or descending riffs.²⁶ The formal plan of having specific blocks of music based on a single idea that wrap from one into the next may have developed out of the band’s interest in Karlheinz Stockhausen and his concept of moment form. In a 1971 lecture in London Stockhausen described the concept of moment form used in pieces such as *Momente* (1962-1964) [Wergo/Nonesuch, 1965]:

When certain characteristics remain constant for a while—in musical terms, when sounds occupy a particular region, a certain register, or stay within a particular dynamic . . . then a moment is going on: these constant characteristics determine the moment. . . . And when these characteristics all of a sudden change, a new moment begins. If they change very slowly, the new moment comes into

²⁵ Considering that the members of Pink Floyd were not great musicians, technically speaking, this is a fairly easy progression to play on guitar and bass since one can simply descend from the seventh fret to the open E string.

²⁶ Much of this material had been part of the band’s performances for some time and would show up again on their later albums. For example, in the second subsection Roger Waters begins to play a bass line that will be used on the band’s second album as the verse melody and bass line to the song “Let There Be More Light.”

existence while the present moment is still continuing. ...The degree of change is a quality that can be composed as well as the characteristic of the music that is actually changing.²⁷

These “moments” or subsections are used compositionally to create a larger musical form by stringing them one after the other. Listening to the Pink Floyd track (or Stockhausen for that matter) does not offer such an orderly experience. Because “Interstellar Overdrive” consists of two separate performances, both of which were improvised, the subsections in the first recording often overlap with those from the second and each moment is created differently in the two recordings. For example, the first pointillistic subsection is created by the guitar using muted notes and trills in the first recording and plucked strings and tone clusters in the second. While the structure of the B section was conceived in a way similar to Stockhausen’s *Momente*, the timing and performance of each subsection were based around improvisation and do not follow a strict pre-compositional plan. The final result yields a sound that is interestingly similar to listening to a Stockhausen piece, and this space rock interpretation of his moment form was frequently used by many Industrial musicians in the first and second generation.

When Pink Floyd went back to Abbey Road studios in January of 1968 to record their second album it was clear that Syd Barrett, who had been behaving very strangely on tour for the first album, was becoming mentally ill.²⁸ The band decided to replace him with Barrett’s old friend David Gilmour, an accomplished guitarist and singer. Gilmour’s technical ability as a guitarist pushed the band to a new musical level and tightened up the often-sporadic sound of Barrett’s guitar playing. Without Syd to write the songs, the rest of the band was forced to fill in the gap and to work on original music for *A Saucerful of Secrets* [EMI Columbia 6258, 1968].

²⁷ Stockhausen, 63-64.

²⁸ He had been doing massive amounts of LSD and his already fragile mental state began to crumble around him—to the point that he was able to compose and perform only one song for the new album.

Nick Mason commented on the band's sudden change in compositional method, saying "all the things that interested us in a studio were not involved with improvisation. Very quickly we found that we were aiming to try and perfect things and build them up . . . it made life a lot easier and a lot better if we stopped being too free."²⁹ This altered the band's performance technique and much of the new music was written out in diagrams (as least structurally if not in traditional notation) before the song was recorded. As Dave Gilmour recalls the composition of "Saucerful of Secrets" consisted of "drawing these peaks and troughs and things on a chart, [and] working out where the piece was going to go."³⁰ The band began to think of their music as soundscapes and began to move away from the musical improvisation that had been so important to Barrett.

The band's connection to avant-garde composition and more specifically Stockhausen, Cardew, and Cage was capitalized on by the record company EMI. The press release for *A Saucerful of Secrets* read, "Unlike Cornelius Cardew or even Stockhausen, whose futuristic dabblings seem erratic and uncoordinated, the Pink Floyd have managed to blend sounds—all sounds—so that they convey deeply felt convictions with a clarity and directness whose authority is unmistakable."³¹ This statement not only claimed that Pink Floyd was building upon Stockhausen, but that the Floyd had done it better, and with a more serious conviction. It also shows a historical and conscious connection to the ideas of the Italian futurists and John Cage in the claim that Pink Floyd uses "all sounds" in their work. This made for a good press release, but of course it was not really true. While Pink Floyd was surely open to the idea of using all sounds, they did not.

²⁹ Cliff Jones, *Another Brick in the Wall: The Stories Behind Every Pink Floyd Song* (London: Carlton, 2000), 34.

³⁰ Schaffner, 133. The text taken from a personal interview with Schaffner; however, he does not list the date or circumstance of the interview.

³¹ Schaffner, 34.

Pink Floyd performed on the instruments of a typical rock band (guitar, bass guitar, piano/organ, and percussion), but they used these instruments in an extended manner. They opened up new timbral possibilities and broadened the sonic landscape within the popular music context by altering the way these instruments were performed and recorded. One new feature of Pink Floyd's music can be seen in the record label's assertion that these musical techniques were incorporated into a new and complete whole that has a powerful emotional impact. Much of the modernist concert music tradition was based on ideals of objectivity, but Pink Floyd attempted to achieve a form of popular music modernism that connected with the growing youth-based countercultural movement of the mid 1960s and presented a powerful emotional element in the musical sound. In this venture both Pink Floyd and EMI attempted to walk a tightrope between avant-garde "credibility" and the popular music success of reaching a larger audience.

Pink Floyd is one of the first significant examples of an entire rock band using its instruments in a manner that suggested a new kind of performance practice. While other artists in the mid-1960s focused on the use of the recording studio to alter their sound, Pink Floyd explored the new possibilities of their instruments through extended performance technique and the use of electronic alteration.³² This insistence on developing both new instrumental performance techniques and studio production techniques became an important piece of the Industrial music aesthetic. As mentioned in the opening of this chapter, Genesis P-Orridge described the creation of the Throbbing Gristle song "Zyklon B Zombie" as "the extensive mangling of instrument generated sounds," and the same can be said for the methods of almost

³² Pink Floyd continued to move in the direction of expanded timbral experiments and the technical-electronic modification of sonic material throughout their work in the 1970s. As Waters' compositional and lyrical content moved to explicit storytelling in the 1980s the music became much more song-oriented and moved away from the long soundscape compositions (e.g., *The Wall* and *The Final Cut*).

every first-generation Industrial music band.³³ The first generation of Industrial musicians drew inspiration from the noise and attitude of the Velvet Underground and the extended performance and structural techniques of Pink Floyd, but they also became deeply immersed in the sounds and recording methods of several German bands that also fused the popular and the avant-garde into a musical style called Krautrock.

Krautrock – Kosmische Musik in West Germany

When was the last time you heard a German band go galloping off at 965 MPH hot on the heels of oblivion? No, they realize that the ultimate power is exercised calmly, whether it's Can with their endless rotary connections, Tangerine Dream plumbing the sargassan depths, or Kraftwerk sailing airlocked down the Autobahn.³⁴

Lester Bangs, *Kraftwerkfeature* (1975)

In post-World War II Germany the popular music avant-garde developed in a different fashion from England and the United States, and was more directly connected to the composers and sounds of twentieth-century art music. In the early 1960s when England and the United States were both undergoing various forms of cultural revolution and popular music experimentation, most of continental Europe merely watched from the sidelines.³⁵ Germany was a particularly torn landscape that was literally divided after WWII and found itself at the center of the Cold War between the USSR and the USA. In West Germany, the many American and British army bases precipitated a large influx of culture after the war, especially American goods and entertainment, mostly in the form of American radio broadcasts such as the “Voice of

³³ Genesis P-Orridge, “Hard Listening.”

³⁴ Lester Bangs, *Kraftwerkfeature*, Creem Magazine, Sept. 1975.

³⁵ That is until the Paris student riots in 1968 when much of Europe decided to “wake up” to the counterculture.

America,” and BBC radio broadcasts.³⁶ As author and musician Julian Cope relates, “the post-war West German kids learned their English from the radio and the TV; they all had American accents. . . . They learned to love chewing-gum, Coca-Cola, jeans and everything else they saw from the USA.”³⁷ West German club owners would arrange for British and American bands to play in Germany, including the Beatles and the Velvet Underground, Frank Zappa and the Mothers of Invention, and later The Stooges (featuring Iggy Pop).

At the same time original West German music was thriving in the area of experimental art music, and more specifically electronic music. The West Deutsche Radiofunk (WDR) had just opened its Electronic music studios in Cologne and was witnessing the production of musical works by Karlheinz Stockhausen and Herbert Eimert. Due to the amount of radio play this music received at the time, these new pieces were heard by a large percentage of the German public. Holgar Czukay of the Krautrock band Can talks about his early exposure to the music of Stockhausen and others while listening to the radio:

The main direction was defined by heavy weight composers like Stockhausen, Pierre Boulez or John Cage. When I was a pupil at school I switched on the radio every Tuesday and Thursday night at 11 p.m. to hear what was behind this far out and often intellectually overloaded music. Somehow Stockhausen had managed to stick out among all others. There was obviously more to find out than just some or other bizarre sounding effects. . . . For me, it sounded strange and exciting at the same time. But how could I ‘manufacture’ these strange sounds myself? That was for me the most important question which I had to solve sooner or later.³⁸

This experience was not unique. Many young musicians in Germany heard avant-garde music on a regular basis and attempted on some level to recreate the sound of the music—albeit without

³⁶ The *Voice of America* was an American WWII effort started in February 1942 as a branch of the Office of War Information. Its purpose was to broadcast information about the United States and its policies, and it was considered an important element in the wartime propaganda effort. After the war it fell under the control of the U.S. Information Agency and continues to broadcast music, news, and English-language talk programs around the world (except for North America) until this day. Many still consider it to be an American propaganda machine.

³⁷ Julian Cope, *Krautrock sampler* (London: Head Heritage, 1995), 4.

³⁸ Holgar Czukay, “Karlheinz Stockhausen’s Influence on Today’s Electronic Music” (1997). Published in the online e-zine *Furious Green Thoughts*—<http://www.furious.com/perfect/stockhausen.html>.

the millions of dollars of equipment. Many of these musicians began studying music at Universities which eventually led to an entire generation of musicians learning composition and musicianship as students of Stockhausen and/or his contemporaries.

With such diverse and experimental influences the popular music scene in West Germany became a hotbed of new ideas and innovative musical groups. The late 1960s saw the emergence of a new wave of bands in Germany, all influenced by the intersection of American proto-punk rock, British experimental space rock, the European avant-grade concert music tradition, and the works of John Cage. Krautrock developed into more than just the sum of its parts as these bands attempted to develop a new *German* sound. Within West Germany this music was called *Kosimsche Musik* (cosmic music), partially because it related to the sounds of British space rock, but the term also sounded cool and “heady.” It suggested the same connotations as the term psychedelic rock had in the United States. This was to be the German version of the Haight-Ashbury, CBGB’s, and UFO club infused with the electronic music sounds of WDR and the philosophical groundings of Marx, Nietzsche, and Herman Hesse (all Germans after all).³⁹

The British press began to notice that the West German bands were gaining popularity in England and claimed that it was all simply a new fad, calling it “Krautrock.” The term was first used by journalist Ian McDonald in a British review of the Amon Düül song “Mama Düül and her Sauerkraut Band Start Up!” making an obvious play on the word *sauerkraut* and the similar derogatory term for Germans used during WWII, *kraut*. The German groups soon appropriated that name as a badge of honor and claimed it as their own. The band Faust even used it as the

³⁹ While many of the Industrial bands mentioned in the next chapter will have some debt to *Kosimsche Musick* there were also other high profile popular musicians who displayed an equal amount of interest in the scene including David Bowie, Iggy Pop, Sonic Youth, Public Image Ltd., The Eurythmics, Devo, The Talking Heads, and Julian Cope.

title of a song on their *Faust IV* album [Virgin, 1973]. In many ways Krautrock is the direct musical predecessor to Industrial music. Its three major ideals became the standard for the Industrial music subculture: strict metronomic rhythm and layered interplay of elements, the use of synthesizers, and a focus on modernist thought and images of the future.⁴⁰ The Krautrock bands also set an important precedent for Industrial music by refining the interaction between live performance and studio work. While there were many Krautrock bands during the 1970s, I will consider three that had the most direct influence on Industrial music: Can, Tangerine Dream, and Kraftwerk.

Can – “It’s the Rhythm”

Can was the result of several established and classically trained musicians discovering rock and roll in the late 1960s and deciding that they could find a way to fuse it with the music they already knew. The result was a sound that featured a strict sense of rhythm and a compositional method based on editing long jam sessions into tightly focused pieces of music. In 1965 two college classmates, Holger Czukay and Irmin Schmidt, talked about starting a new performing group to create modern music through the use of electronics and various ethnic instruments. Both were studying music and composition with Karlheinz Stockhausen and had previously studied with Luciano Berio, John Cage, and Pierre Boulez at Darmstadt. Schmidt had also performed with La Monte Young in New York. In 1967 Czukay was teaching music at the school at St. Gallen when one of his students, Michael Karoli, offered to play him a number of American and British rock records. The first record they listened to was “I Am the Walrus” by the Beatles, and Czukay was astounded. The Beatles had mixed together sophisticated recording

⁴⁰ Of course one should realize that these features are also major aspects of many of the musicians mentioned in this chapter, and that after all is the point. All of these musical/social attributes have been flirting with each other for almost a century and have finally collided in the form of Krautrock, which will then pass it on to Industrial music as a solid entity. It should also be mentioned that aside from Julian Cope’s connoisseur book on the subject, *Krautrock sampler*, there are no in-depth English language studies of this musical movement.

techniques with driving rock-and-roll rhythms in a song with a strong emotional content. After Czukay listened to albums by Jimi Hendrix, The Mothers of Invention, Cream, and the Velvet Underground, he called Schmidt and asked to assemble an experimental rock band along with Karoli, a flute player named David Johnson, and a well-known free-jazz drummer named Jaki Liebezeit. They began as an instrumental group using the name Inner Space and practicing in Johnson's Cologne apartment.⁴¹

During their most notable years, from 1968 to 1974, Can consisted of four core members including Irmin Schmidt (organ and piano), Holger Czukay (bass and tape manipulations), Michael Karoli (guitar), and Jaki Liebezeit (drums). Liebezeit suggested that they call themselves *Can*—a sound that had a number of meanings in different languages. In Turkish it means soul or life. In Japanese it means feeling or emotion, and in English it sounds like the word for the object can (a metal container used to hold things) but also means *can* (as in, I can do this). There is no doubt that the band tried to embody the positive spirit of the new name and create music that was a statement of their beliefs in the counter-culture and the possibilities of a new world.

A friend, Manni Löhe, owned the Castle Schloss Norvenich outside of Cologne and suggested that Can use it as their base of operations and build a recording studio there. Löhe became a patron of the band, allowing them to live and work at the castle at their leisure. This fostered a different creative environment from most other bands that were only given a small block of time by their record labels to work in a recording studio and produce a finished album.⁴²

⁴¹ Johnson eventually left the group and worked in the WDR electronic music studio with Karlheinz Stockhausen during the composition of *Hymnen*. He is featured in that recording during the studio conversation over the use of the *Horst Wessel Song*.

⁴² One of the most famous examples of this is the San Francisco-based band the Grateful Dead who were unhappy with the sound of their first album *Grateful Dead* (1967), which had been produced and mixed by record company associates and had what the band referred to as a “corporate” sound. They decided for their second album

The Velvet Underground and Pink Floyd had developed their signature sound through live performances in clubs first, and only later learned how to record through trial and error. The shift from live performance to recording studio created tension, such as The Velvet Underground's attempts to record "Sister Ray," or Pink Floyd's move from live improvisation to pre-conceived musical forms on their second album.

Can believed that long-term work in the studio eventually led to the creation of an album, via experimentation, editing, and refinement. The band members imported this idea from modernist composition, especially Stockhausen and Schaeffer who developed methods for pre-compositional work in a recording studio. This set a precedent that was later adopted by Industrial musicians who believed that it was a necessity to work in the recording studio day and night, experimenting with new ideas and mastering the craft of recording and making music. It also gave rise to the aesthetic within rock culture at large during the late 1970s that a band's specific musical sound eventually "surfaced" through the manipulation and editing of material after many hours of music had already been recorded—something very different from the early recording practice within popular music of trying to get the one perfect take in a limited period of time (maybe only hours).

Holger Czukay served as resident sound technician for Can, helping to record, mix, and edit all the recording sessions. This modus operandi became a significant feature of Krautrock in general—the belief that a band should do everything on their own, making them a self-contained artistic entity without need for interference from outside sources, especially that of a record

Anthem of the Sun (1968) that they would learn how to record and mix by themselves. This project resulted in an interesting but bizarre album, in which hundreds of hours of live recordings (from seventeen different concerts) and studio tapes (recorded at four different studios) were edited together often in a very hodge-podge manner where the "cuts" become obvious seams in the music. The album put the band \$100,000 in debt with the record label Warner Brothers—a cost that took them several more albums to pay back. The Dead went through a period of growing pains in order to figure out how to record, and eventually decided that their live sound was more important anyway and the records would only be "calling cards" for the live shows.

company or even a producer. Irmin Schmidt commented that “Record companies tend to think that good music can only be done with a certain technique and a big amount of money. It’s absurd, and this kind of reasoning alienates the creativity of many musicians.”⁴³ In the studio they recorded long jam sessions and let the music develop slowly on its own. Czukay would then edit these performances down to a reasonable size for inclusion on an album. Czukay described the process of working in the studio:

Live you don’t have that control that you have in the studio. Everything in the studio can be manipulated; live it’s such a different thing. When it’s played spontaneously, having some good parts and of course some bad parts in it, then you are able afterwards by editing and recording to bring a powerful form out of it, which makes a lot of sense. That’s what I have tended to do.⁴⁴

Czukay’s discussion of his process points to the difference between composition, as defined within the classical music tradition, and the act of performance in the popular music tradition, and highlights the ways that he attempted a fusion of the two. The energy of the live performance allows for the emergence of improvisational moments and real interaction between the musicians. New ideas can be tried, second takes recorded, and musical features refined. Those recordings are then treated in a way that is similar to Schaeffer’s sound objects, each moment of the live performance able to be put into place and manipulated to create new sounds. The creation of a powerful musical form is brought about through the editing process. This method was an act of musical composition in which the material was the performance element of the popular music world.

Czukay’s ability to take hours of recorded material and edit/mix it down to a twenty-minute or even a six-minute song that sounds as if it were originally recorded at that length was

⁴³ Pascal Bussy and Andy Hall, *The Can Book* (Harrow: SAF, 1989), 158.

⁴⁴ Bussy and Hall, 24. This and all following quotes from Czukay are taken from private interviews with the book’s two authors, Bussy and Hall, unless otherwise noted.

remarkable. This often involved dozens of editing cuts in the master tape, yet one is almost never audible in the final mixes. The final result was a musical sound that was both fluid and controlled and made up of multiple layers that were added in and taken out of the overall mix by Czukay.⁴⁵

The track “Hallelujah” from the album *Tago Mago* [United Artists, 1971] represents the height of their creativity, with many different recordings edited together.⁴⁶ The music was first performed using Can’s basic instrumentation of bass (sometimes with effects), drums, organ, synthesizer (making use of noise sounds, arpeggios, and rapidly repeated notes), guitar (with effects and whammy bar bends), and the subtle use of live tape effects. Right from the start a tight rhythmic groove is established by the drums and bass guitar and serves as the centerpiece of the song providing the rhythmic foundation. Different tape, organ, and guitar effects find their way around the musical space moving closer and further away from the listener, panning left and right, but never detracting from the basic bass and drum groove at the center of the track. Most of the tune is based around a repeated G with a neighboring lower F tone. Each instrument noodles around this pitch space, never going too far astray or stepping on the other melodic lines. It is a massive jam where all the players begin to thicken out the texture with wild passages and some really exceptional playing. One can easily envision the entire song as a set of concentric circles as shown in example 3.6.

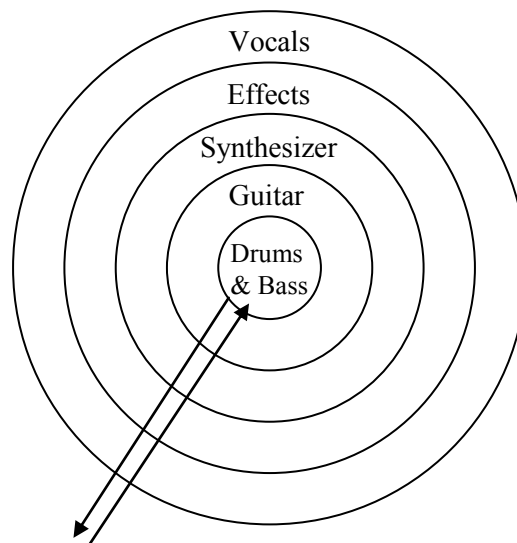
At the center is the rhythmic core of the piece created by the drums and bass. Each additional circle builds on the one before it, adding to the structure, but never disrupting the

⁴⁵ This approach to performance and editing was not entirely unique to Can, and I have already referenced several other artists who worked in this way from the Beatles and the Pink Floyd to Frank Zappa and the Grateful Dead. But in this context the work of Holger Czukay was the most direct influence on the Industrial musicians, and his approach was also one of the most grounded, and purposefully so, in the compositional techniques of the avant-garde composers.

⁴⁶ The track is 18:32, but it also appeared as radio single and was cut down from eighteen minutes to just over five. This can be heard on the 1998 greatest hits package *Cannibalism 1* on Spoon Records/Mute.

center. The overall form of the work is created as structure expands and contracts through the addition or subtraction of circles that represent the elements of the mix. When one element is taken away to contract the form, a different instrument playing an entirely new musical idea may enter to expand it back out. The vocals function in the same manner and sit on the outer perimeter of the overall mix. In fact, the other instruments only respond to lead singer Damo Suzuki during the few moments of the eighteen-minute song where he shouts at the top of his lungs, “Searching for my brother, ah-di-ah-di-ah-di-ah-di-wow.” But always at the center are the groove and the rhythm, almost unchanged. Jaki Liebezeit’s drumming is like a clock, strict and steady on the beat. Even when he plays fills or moves a particular rhythmic pattern to a different percussion instrument in the drum set, the tempo does not dip momentarily as it does in so many rock bands.

Example 3.6
Musical Structure in Can, “Hallelujah”



Can's philosophy was to make their music as repetitive as it could be and still have a developed sound that was viscerally powerful. Czukay describes this method and its connections to their musical influences:

We wanted to make something very simple with a lot of repetition. Of course we were aware of the ideas of Terry Riley and others, but we did not look to that. Rather we looked towards the Velvet Underground. They were the first group we had ever heard who were playing something with a completely new relation to their instruments, very unconventional in their way of playing, a magic way. Repetition is like a machine, and of course we like machines. If you can become aware of the life of a machine, then you are definitely a master. . . . There is so much tension created by restriction.⁴⁷

While Czukay mentions Riley, it is the Velvet Underground that sets the benchmark for the new sound they are creating, particularly the way the Velvet Underground played their standard rock instruments as if they were classical performers. Czukay refers to machines as "living beings" that have a heart and soul, and that if one treats them as humans one will get a much better response from the machine's performance. The machines are members of the band, something that will become more pronounced in Industrial music. For Czukay and Can it is the idea of repetition and restriction that tie the world of musical human creativity and the world of the machine together. Simple ideas, layered in complex ways, resulting in music that had a new kind of modern power, a tension—something that could only be achieved through technology. As I will show in part two of this dissertation, the same tension between the avant-garde and the popular plays out across all three generations of Industrial music.

Can's music always focused on repetitive machine-like rhythms and precision. Industrial musicians would eventually borrow those elements wholesale. In fact it was the combination of Can's mechanical rhythms, and the way in which their long experimental jams were edited down into sharp, focused tracks that made them an important part of the history of the Industrial music

⁴⁷ Bussy and Hall, 70-71.

subculture. As the experimental electronica duo *U.N.K.L.E.* points out, “Can was and still is a blueprint for what is great in . . . eclectic, experimental and progressive modern music science.”⁴⁸ The majority of Can’s output was created with standard rock instruments and it was Czucay’s masterful tape-editing that allowed them to sound even more futuristic than they might ever have been. While Krautrock bands like Tangerine Dream started in the same way, they eventually changed their approach to employ a battery of synthesizers that enabled them to create otherworldly sounds with only three band members.

Tangerine Dream—“It’s the Synthesizers”

The leader of Tangerine Dream, Edgar Froese, was captivated with the Beatles “Lucy in the Sky with Diamonds” when it was released in 1967. Froese decided to name his own band after a line from the song, but his choice of lyrics is one of the great misquotes in rock history. He believed that lyric “Tangerine trees and marmalade skies” was actually “Tangerine dreams.” This is an understandable mistake when one considers the strange flanging multi-tracked effect used on Lennon’s voice and the fact that Froese’s first language was German.⁴⁹ The music created by Tangerine Dream used synthesizers to create moving, bubbling layers of music and large ocean-like soundscapes and the group was extremely forthcoming about their desires to mix the popular and the avant-garde into a form of popular modernism. The futuristic sounding clouds of timbre, sequenced rhythmic/pitch patterns, and melodic arpeggios used by the group all make their way directly into the sound of the first generation of Industrial music.

Edgar Forese’s interest in music and the arts did not begin with the Beatles. He had always admired the paintings of Salvador Dali and was able to meet the artist in Cadaques during

⁴⁸ From the liner notes of Can *Sacrilige* (1997) Mute Records.

⁴⁹ Tangerine Dream is a better name for a band anyway. There is a popular fan based web-site about the band with the name Tangerine Trees.

1965.⁵⁰ Froese had several long conversations with Dali that opened his mind to new experimental possibilities: “This was the biggest change I ever had in music. By seeing the way he was talking and thinking, I found that everything was possible. I thought that I would do the same thing as he did in painting, in music.”⁵¹ By applying Dali’s artistic surrealism to his music Froese endeavored to create a similar disruption in the perception of space, color, texture, and time. He wanted the experience of music to be a multi-sensory phenomenon where music, painting, performance, and writing could all find their place within a single moment.

Froese returned to Berlin and immersed himself in the thriving avant-grade music scene that included composers such as Thomas Kessler, as well as public visits from Karlheinz Stockhausen, Luciano Berio, John Cage, Milton Babbitt, and Iannis Xenakis. Over the next three years Froese worked with a rotating cast of musicians performing everything from experimental instrumental versions of the Doors’ music to six-hour-long musical “freak outs” inspired by Frank Zappa at the Zodiac club. Musicians came and went as he tried to organize his *dream*, but the lack of money and steady gigs made it difficult to hold a band together. From time to time he met with some level of success, including a gig opening for Zappa at a private party attended by John Cage. In 1968 Froese met two students who were able to help him realize the first version of Tangerine Dream to record an album. The first student, Klaus Schultze, was a drummer who had played with the West Berlin band Psy-Free and was an undergraduate at the Technical University of Berlin majoring in psychology and experimental composition. Schultze was studying with Thomas Kessler and learning how to make tape music compositions in the University electronic music studio. The second student, Conrad Schnitzler was a composer who

⁵⁰ Froese’s first band *The Ones* was asked to play a gig at Dali’s villa in Cadaques.

⁵¹ Cope, 30. Dali was apparently interested in the young musician’s work as well and asked him to compose music for the inauguration of his Christ Statue, a sculpture made of rain barrels, bicycles, and metal. The resulting music was featured in a film about the sculpture by filmmaker J.C. Avery.

played cello, violin, and guitar, and who had been called an “untamable experimentalist” by musicologist A. Freeman.⁵²

The Tangerine Dream record they produced, *Electronic Meditation* [Ohr, 1970] was a flash of experimental noise sounds and floating organ textures, as if bits and pieces of rock and roll had been stuffed into a Stockhausen-brand blender and then poured out onto vinyl. Rolf Ulrich-Kaiser, the head of Ohr Records, commented that the record had “no commercial chance,” but he released it nonetheless, hoping that it might find a cult following in the thriving Berlin music scene. The album cover shows the back of a headless toy doll with approximately twenty wires coming out of a hole in its back. The other ends of the wires are plugged into what looks like a music studio patch bay running across the horizontal plane of the cover.⁵³

The first track, “Genesis,” sets the mood for the entire album and its sounds seem to invoke the cover image. Flanged string instruments enter slowly, one at a time, sounding as if they sprout from each other. Oscillating organ chords and cello tremolos produce a hazy dreamworld of floating clouds that are occasionally punctuated by percussion. After two minutes electric guitar and flute enter to expand the timbral palette into the upper registers. It is not until the four-minute mark that a drum set begins to play something resembling a rock-and-roll rhythm. While Can’s “Hallelujah” placed the rock music rhythmic groove at the center of the music from the very start, Tangerine Dream’s “Genesis” builds its structure over time from timbrally diverse sustained sounds.⁵⁴ While the music of *Electronic Meditation* reproduces the sounds and character of many experimental electronic music works (e.g., Xenakis and

⁵² Cope, 33. Eventually Schnitzler left to form the band *Cluster* and Schulze left to join *Ash Ra Temple*.

⁵³ This image was designed by Monica Froese (Edgar’s wife) who created the first four album covers. The first pressing of the album came with an inflatable balloon exiting from the hole in the doll’s back. This seems more in line with Edgar Froese’s occasional Dada leanings rather than the message of the album. He often used similar Dada-style performance art during early live performances including amplified pinball machines that the band would play, or instruments made from household items.

⁵⁴ The same is true of other tracks on the album such as the eleven-minute “Kalter Rauch” (Cold Smoke).

Stockhausen), it was created with traditional acoustic or electric instruments including guitars, piano, organ, violin, cello, and drums. Like the music of Can, the electronic sounds are created through the use of processing—the organic made electronic. Schulze tells how the band was “experimenting with a lot of random stuff, putting things through loads of effects and making up our own sounds.”⁵⁵ Many of the original sounds featured on the album make it stand out as an early classic of Krautrock and as a sonic template for early Industrial music experimentation such as Cabaret Voltaire’s “Dada Man.”

When the title of the album, the cover art, and the musical sound are considered together, a theme begins to emerge: a new age of electronic rebirth for humanity. But this electronic rebirth is not a celebration; it is connected to a level of religious questioning present in the album that can be seen when one considers both the opening track “Genesis” and the closing track “Resurrection.” Tangerine Dream poses a reevaluation of the relationship between man, machine, and God in the modern era. It makes us speculate if Nietzsche’s polemic “God is dead” might soon be considered anew as the age of the intelligent machines arrives.

While *Electronic Meditation* was a remarkable achievement, Tangerine Dream quickly moved away from this method of creation and began to work on the musical sound they would become famous for, consisting of entire productions using only synthesizer. Froese settled into a steady partnership with two new musicians, Christopher Franke and Peter Bauman. Franke introduced Froese to the music of György Ligeti and the expanded timbre and texture explorations used by that composer. The first album recorded by this lineup was the synthesizer-based *Phaedra* [Virgin V2-86064, 1974]. The liner notes list the specific keyboard instruments used by the band in a kind of technological fetishism, “Froese: Mellotron, Bass, VCS3, organ; Franke: Moog, Keyboards, VCS3 SA; Bauman: organ, Electric piano, VCS3, flute.” On rock

⁵⁵ Paul Stump, *Digital Gothic: A Critical discography of Tangerine Dream* (London: SAF, 1997), 43.

albums this kind of detailed information was something that was not typically listed for other instruments such as guitar (i.e. one will rarely find a listing that says something like 1959 Les Paul Standard). The album contains no percussion instruments, yet the tracks are very rhythmic as the synthesizer takes over the role of rhythmic pulse in the form of constantly rolling arpeggios at different subdivisions of the beat. This was made possible through the use of voltage-control sequencers that were available for many synthesizers starting in the early 1970s.

Donald Buchla was one of the first engineers to develop a sequencer as a part of his voltage-control Buchla synthesizers in 1965. The hardware electronic sequencer could be pre-programmed to play a repeating pattern of up to sixteen notes without the interaction of the performer. A musician would set 16 knobs on the synthesizer to control voltage positions that corresponded to particular frequencies. While the resulting pitch cycle remained constant the performer could alter the sound of the synthesizer while it was playing back the sequence. On the title track “Phaedra,” Tangerine Dream began to manipulate the filtering parameters of the VCS3 and Moog synthesizers to create a static set of repeated pitches that sounded as if they moved around in the soundscape. By sweeping the resonance and cutoff frequencies of the filters, the various synthesizer sounds gained or lost respective partials across the frequency spectrum. When used in combination with the sequencer a simple sixteen-note pattern would sound like it was moving across a much larger range of pitches than it actually was. Reverb and delay were added to create a sense of distance from the listener and expand the sonic space of the music. The simple act of mixing the volume levels of several different running sequencers with different rhythmic/pitch patterns would allow Tangerine Dream to create a churning sea of sound

that closely resembled the world of Terry Riley's minimalism but with arguably even more timbral depth.⁵⁶

The new synthesizers were able to produce fuller sounds, allowing Tangerine Dream to explore a new range of textures. They created massive developing clouds and clusters of sound with synthesized strings and mellotron timbres. The guitar and drum solos of the early records are replaced by synthesizer arpeggios and tone clusters. The sound of the music on *Phaedra* is like layers of flowing sheets coated one over the other, until patterns and designs appear not only in individual patterns but also in the folds and bumps between them. Despite its electronic generation, *Phaedra* has an organic feel to its development. One can not help but think of the music of György Ligeti, and the kinds of crystalline structures his music employs.⁵⁷ The final piece of what Industrial music took from Krautrock—the futuristic image—was developed by the last band discussed in this chapter, Kraftwerk.

Kraftwerk—"It's the Future"

Next to the Velvet Underground, Kraftwerk is the most important and direct link between avant-garde compositional aesthetics and Industrial music. As seen throughout this chapter, the late 1960s and early 1970s saw increasing mixture between music and art that had typically been considered separated by the high versus low cultural boundaries. It was the weakening of the retaining wall between them that allowed for such diverse musical and cultural elements to

⁵⁶ These new found techniques were not without their problems. Syncing the various rhythmic patterns and the tuning of the various synthesizers was not as easy as it is today. Some instruments would drift out of tune, while others might speed up or slow down. Froese, Franke, and Bauman needed to keep a close eye on the tape machines to make sure that all the parts were recorded, and then edited as necessary. Famously, around the nine-minute mark of "Phaedra" the synthesizer playing the main pattern begins to slowly drift up almost a whole step. They left it in the recoding as a "happy accident" but it also caused them to make a musical/formal shift in the piece during minute ten, when presumably things drifted too far to maintain the coherence of the music.

⁵⁷ While the music of Tangerine Dream progressed into a futuristic soundscape their image still remained that of the hippie student crowd and they would eventually find themselves linked to the musical style New Age, a form of modern relaxation music. This was rather unfortunate, especially since it was more of a marketing strategy, albeit a successful one. Eventually they had a successful series of film scores including *Risky Business*, *Legend*, and *Miracle Mile*.

undergo a fusion in the work of groups like Kraftwerk, and resulted in the growth of a cultural climate that fostered the birth of the Industrial music subculture. Kraftwerk's music went on to serve as a foundation for numerous late twentieth-century musical styles such as Industrial, euro-disco, synth-pop, hip-hop, new wave, house, electro, techno, and even straight-ahead pop music.

Kraftwerk has typically appeared on albums and on stage as a quartet, but the core members of the group have always been Ralf Hütter and Florian Schneider who act as composers, lyricists, producers, and stylists. Both Hütter and Schneider came from a comfortable upper-middle-class German background and studied music at an early age. They both attended the Düsseldorf Conservatory, Hütter for organ and Schneider for flute. Both were interested in classical music, jazz, and the music of post-war avant-garde composers.⁵⁸ The two quickly became close friends and decided to pursue their interest in avant-garde improvisation in the form of contemporary electronic music. Hütter saw electronic music as a new frontier: “. . . we rushed into making industrial music, abandoning all our other activities from before—our education, our classical background. It was a total rupture for us.”⁵⁹ The idea of Kraftwerk was positioned as a modernist endeavor that allowed Hütter and Schneider to leave behind years of classical music training and rupture with the past. This was not entirely true, however, since much of what they went on to create was based on their training as classical musicians. In fact what they had done was to position themselves as composers but within a new electronic medium, a move similar to the practice followed by Czuckay of Can.

⁵⁸ It has even been mentioned during interviews that Schneider's father had a rather large record collection that included albums by Pierre Henry.

⁵⁹ Pascal Bussy, *Kraftwerk: Man, Machine, and Music* (London: SAF, 1993), 17. It should be noted here, since I will be using several citations from this text, that Kraftwerk have publicly stated that they do not endorse this book. None of the quotes taken from this book contradict things that Hütter and Schneider have said elsewhere (and I will be using several other sources for this reason). Kraftwerk are extremely secretive and attempt to control all aspects of their image including a refusal to tell reporters anything about their early life on the grounds that it has no connection to their current musical work.

The only influences Kraftwerk were willing to claim in the early days were those of contemporary avant-garde composers and a general sense of post-war modernism. This strategy allowed Kraftwerk to place themselves in the present looking forward to the future, not tied to any moment in the past—a strategy similar to the one used by Industrial musicians like Cabaret Voltaire discussed in the opening to chapter two. Hütter suggested that their true education came from hearing electronic music pioneers such as Stockhausen and Boulez played on the radio, or even in going to see the music in concert.⁶⁰

Kraftwerk frequently used the word “industrial” as a description of their musical sound. It was a multi-layered statement that functioned as an indication of their compositional method, musical style, and sound, as well as a reflection of the world in which they lived. The city of Düsseldorf was being extensively rebuilt to erase the last scars of WWII. It seemed as if the world of the futurist manifestos was being realized in the construction sites filled with heavy machinery and scaffolding that were producing the new modern buildings. At the same time the old factories and machines of industry continued to clank, belch, and smoke throughout the night. The window of the apartment Hütter and Schneider lived in looked directly out on one of the main power plants of the city, “. . . both the heartbeat of the city and the engine of its reconstruction—driving the city into the future.”⁶¹ As in the work of the futurists before them, the industry of the modern world represented progress and the possibility of the new. They saw the power plant as the heartbeat of the city that propelled it into a new age, and the music of Kraftwerk was the sonic representation of that progress and the journey forward. Their use of the term *industrial* during the early 1970s represents the historical moment when the musical

⁶⁰ For example see Mark Dery, “Kraftwerk” *Keyboard Magazine* October 1991. A portion of this interview is used at the head of chapter two of this dissertation.

⁶¹ Tim Barr, *Kraftwerk: From Düsseldorf to the Future (with Love)* (London: Ebury Press, 1998), 52.

history told in part one of this dissertation reaches its point of intersection with the birth of the Industrial music subculture.

In 1970 Hütter and Schneider officially entered the world of popular music. They became members of the band *Organisation* (Hütter on organ and Schneider on flute and violin) and recorded the album *Tone Float* for Conrad Plank's production company Rainbow. Plank, better known as Conny, was an amateur jazz musician turned recording engineer/producer/promoter who was convinced that the only way German bands were going to have a chance of succeeding in the world market was to create a uniquely German sound. Over the years Plank would record and produce numerous Krautrock bands, several Industrial bands, and other famous groups including the Eurythmics, Killing Joke, and Ultravox. The band *Organisation* recorded the album *Tone Float* [RCA, 1970] in Plank's portable studio that was located in an abandoned oil refinery.⁶² The record failed to sell in England and the band broke up leaving Hütter and Schneider looking for a new venue for their musical aspirations.

They decided to push forward in a new direction, and spent the next several months creating a small recording studio in Düsseldorf.⁶³ While they had enjoyed working with Plank they wanted to master the art of recording on their own. During interviews they frequently described the recording studio as a musical instrument, and indicated that the studio was both a recording tool and a creative source—a philosophy that, like Can's ideas on musical editing, was very much in line with Pierre Schaeffer's *musique concrète*. Hütter frequently made connections to Schaeffer's work and compositional process: "Not only were we interested in *musique concrète* but also in playing organ tone clusters and flute feedback sounds that added variety to

⁶² The fact that Plank's portable studio happened to be parked in an abandoned oil refinery may be totally random, but the coincidence is too perfect to not point out here how the industrial concept is in this case linked overtly to place.

⁶³ Their current mega-recording studio *Kling-Klang* is located in the same building where they rented space in 1970.

the repeated note sequences that we recorded and mixed on tape.”⁶⁴ Studio experimentation helped them develop the innovative sound they were searching for and by the end of 1970 they had finished a new album and reenlisted Conny Plank to help with the production.

Hütter and Schneider called their new project *Kraftwerk*—a word that represented their ideals on several different levels. Firstly, the German word *werk* means work, and represented modernist aesthetics about the ideals of work, particularly the futurists’ conceptions of artistic creation as a type of work. The word *kraft* generally means strength or power, but could also be linked to Hermann Helmholtz’s concept of *Kraft*, the natural source of all labor power in the universe. The entire word *kraftwerk* in German means power station, a symbol for the industrial era and the cityscape of the modern world.

The cover of the early Organisation album had featured a psychedelic painting, but the new self-titled *Kraftwerk* shifted the imagery to the industrial world of machines and work. The front cover is a rather minimalist endeavor that shows the name *Kraftwerk* written in construction site style stenciled letters over a red and white traffic cone.⁶⁵ The traffic cone served as a symbol of everyday modernization—something that appears in our lives when a new structure is being built, something old is being torn down, or in its most frequent appearances on the highway. On the inside of the album’s gatefold sleeve was a giant black and white picture of a power generator and transformer outside Düsseldorf. This is quite different from the gatefold sleeves being released by progressive rock bands like Yes, whose Roger Dean paintings invited the listener into a fantasy world of lakes, trees, floating islands, and mythical creatures.

Kraftwerk was highlighting the everyday modern as a celebration of technological advancement

⁶⁴ Ralf Hütter, in *Electronics and Music Maker Magazine*, 1981, reprinted online. It should also be noted that the use of “repeated note sequences” is a fairly clear reference to the Minimalists, something that is also represented sonically on their early albums.

⁶⁵ By *construction site* I am referring to the types of stencil writing one might find saying “danger” or “high voltage” and is typically spray painted on wood panels at work sites.

and power and inviting the listener into an industrial world of the near-future. It is also important to note that the music is referred to in the liner notes as “compositions.”

Musically the album *Kraftwerk* [Philips, 1970] and its follow-up *Kraftwerk 2* [Philips, 1971], are a large step forward from their early musical experiments both in terms of sound and technique.⁶⁶ The two albums use the same set of instruments: flute, organ, bass, violin, and drums (including some self-made electric percussion instruments). As with Can and Tangerine Dream, these instruments almost never sound “natural” and are edited and/or altered by reverb, chorus, flanger, and delay. These effects can be clearly heard on the second track of *Kraftwerk*. “Stratovarius” is a *musique concrète* tour-de-force that features altered recordings of Schneider’s violin.⁶⁷ The music begins slowly with clusters of violin notes created by tape editing, some slowed down and others sped up. These are reinforced with extremely high or low notes from Hütter’s organ creating blocks of sound that fade in and then slowly fade out. Just after three minutes the violin sounds are replaced with various looping sounds of machinery. As a group these sounds do not form a regular pattern and instead weave in and out of one another. A short noise interlude is followed by several drum and violin sections that imitate the previous machine sounds. At five minutes the bass, drums, and violin *pizzicatos* create a groove over which a distorted and reverberated violin howls away in a manner very similar to John Cale or Tony Conrad. This particularly Krautrock moment quickly dissipates and at seven minutes the instruments return to the machine-sound emulations.

“Statovaris” uses moments of Krautrock style but within a larger framework that focuses on the industrial nature of the sounds themselves. The mechanical rhythms, noise sounds, and

⁶⁶ The album *Kraftwerk 2* featured the same cover as the first album only with a green and white traffic cone. The replication and standardization of the image played on Andy Warhol’s pop artworks and commented on consumer culture while simultaneously reveling in its sweet simplicity.

⁶⁷ The title is a play on words including the famous violin maker A. Stradivarius, the word Stratosphere, and the idea of violin variations.

repetitious patterns are specially designed to make the listener feel as if they are in a factory. The cosmic/psychedelic elements of the Krautrock style such as long solos and jam sessions, chanting group vocals, and floating clouds of synthesizer sound became stylistic signifiers that quickly faded into the background and were replaced with the mechanical. In a 1992 interview Hütter described their early interest in creating music with noise:

We've always used noise—music is organized noise . . . [Our early music was] physically concrete. . . . People always responded well to the “noises” we used from the beginning, we always created an interest, whether locally or in the next city. So that was never a problem. In those days, I think the time was ready, people wanted to hear new sounds. Everybody was interested; we couldn't even do all of the things people wanted to hear, it was such an open-minded time.⁶⁸

The various references the band often made to figures such as Varèse and Cage (organized noise) and Schaeffer (concrete sounds) would have been clear to their audience at the time and the words were carefully chosen by Hütter and Schneider. By the third Kraftwerk album, *Ralf und Florian* [Philips, 1973], they began to distance their music from the rest of Krautrock (or cosmic music), and presented themselves as pure electro-mechanical musicians. Journalists began to describe Hütter and Schneider as intellectuals who were working in the field of rock music. During interviews their references to avant-grade composers were abundant, as was the use of the term *industrial* to describe their sound.

The artwork used for *Ralf und Florian* also illustrates the new philosophy described by Schneider. The back cover shows one of the most famous pictures of their recording studio during the early 1970s. The two sit facing each other behind their various musical instruments, which now feature more electronics and synthesizers than acoustic instruments. They are connected by an electrical power-strip and fluorescent signs of their names. The clothing, funky

⁶⁸ Mark Sinker, “Ralf Hutter Interview,” *Music Technology Magazine* 1992. Although this quote is from the early 1990s, they made very similar comments throughout the 1970s, although not in such a compact manner—hence my choice here.

colored lights, and the odd array of early electronic equipment appear dated now, but we actually see an image of two men working in a laboratory-like environment where the machinery takes up more of the picture than they do—the famous picture of Luigi Russolo and his *intonarumori* is laid out the same way.

Kraftwerk's fourth album *Autobahn* [Vertigo, 1974] was a monumental change for them. At the heart of *Autobahn* was the synthesizer, as can be seen in the album credits: "Ralf Hütter: Vocals, Electronics; Florian Schneider: Vocals, Electronics; Klaus Roeder: Violin, Guitar; Wolfgang Flür: Percussion." Hütter and Schneider are not even listed as playing any particular instruments anymore but only as using electronics—a major step in the direction of presenting themselves as audio scientists. The prominence of electronics is also sonically apparent on the album which is a mixture of *musique concrète* and the Beach Boys.

Hütter and Schneider had always heard the Beach Boys as a point of excellence in American popular music, and they even attended several Beach Boys concerts. Kraftwerk wanted to incorporate three basic elements of the Beach Boys music: the fun lifestyle presented in the lyrics, the musical perfectionism of Brian Wilson's arrangements, and the embodiment of a particular culture. Kraftwerk decided that there was no better way to create an image of modernism, German culture, and fun than to create a song about Germany's major highway, the Autobahn. The result was a 23-minute piece of music that covered side one of the resulting album and used electronics to generate the sensation of driving in a car on the Autobahn. "Autobahn" was the first Kraftwerk song to feature vocal melodies created through the use of a vocoder. Lyrically the song relates images of driving through Germany, but the melodic refrain (a first for Kraftwerk) repeated the lyric, "Wir Fahr'n auf der Autobahn" (we are driving on the autobahn). It is no mistake that when an English-speaking listener hears these lyrics it sounds as

if they are saying “the fun of the Autobahn.” The lyric is often stuttered, “Wir fahr’n fahr’n fahr’n auf der Autobahn” which is clearly meant to sound like the Beach Boys “Fun, Fun, Fun” except that Kraftwerk present the line in a deadpan voice—it is fun, but only serious fun.

Despite all of the melodies and references to the Beach Boys, the band still managed to connect to their previous experiments in *musique concrète* and electronic music and it is engineered by Conny Plank (the last Kraftwerk album he would work on). In order to present an accurate soundscape for a drive on the superhighway the band went out in their own Volkswagen Beetle for a drive and recorded the sounds of their car and others onto a portable tape deck. While the original idea may have been to use these sounds in the composition, only one “sample” remains. *Autobahn* opens with the sounds of a Volkswagen Beetle engine starting up.⁶⁹ From that point on the band recreates the sounds of the highway with synthesizers, specifically the new Moog that they had reportedly purchased for the same price as a VW Beetle. Synthesizer sounds pan across the stereo field and change slowly in pitch to simulate the Doppler Effect. Tritones blare in emulation of car horns, and a constant chugging electronic percussion beat and delayed bass-line gives one the sense that the road is passing beneath your feet (think of the sound of tires bumping over the seams on old concrete highways). Hütter describes the desire to use and compose with “real” sounds in a 1992 interview:

We want to hear the real sounds—I want to hear the sound of the escalator, I want to hear the sound of the plane, the sound of the train. Good-sounding trains, for themselves, they are musical instruments. . . . We want to make people aware of

⁶⁹ The German car is pictured, along with a Mercedes-Benz, on the album cover designed by the band’s friend and creative partner Emil Schult (who also helped write the lyrics of “Autobahn”). These were symbols of Germany and German engineering might—although once again they tread dangerously close in their references to Nazi Germany since both the Volkswagen and the Autobahn were designed by the Nazi government and endorsed by Hitler. Of course the Beetle also became a favorite car of the American Counter-culture so that these images, and the song itself, have several layers of meaning.

reality, by bringing out in our compositions the sounds of cars and trains, and ideas of the beauty of the sounds themselves.⁷⁰

This musical philosophy helps to form the basis of Industrial music. The modern world around us excites the ears and technology excites the mind. It is the future, the future that starts here and now.

Kraftwerk attempted to capture this feeling, just like Bussoni, Russolo, Varèse, Schaeffer, Stockhausen, Cage, Young, Riley, the Velvet Underground, Pink Floyd, Can, and Tangerine Dream. These ideas appear in the birth of Industrial music, and help to fuel artists like Genesis P-Orridge of Throbbing Gristle and Richard Kirk of Cabaret Voltaire. Patrick Codenys of the second-generation Industrial band *Front 242* commented on the sound and influence of Kraftwerk's *Autobahn* on his own musical ideals.

In the early '70s the majority of the, let's say creative groups, were virtuosos like King Crimson and Yes whose music was based around sophisticated jam sessions. When I bought *Autobahn* I had the feeling that it was changing. For the first time it was music that was impossible to touch—not being made up with [sic] the usual components of rock. . . . This helped me to think, “Why can't I make music on my own?” At that time, Kraftwerk represented the natural following step after Can, Tangerine Dream and Neu! by bringing something more precise. They were the first group to express a discipline, a process.⁷¹

Codenys describes the music of Kraftwerk as being different from what he heard before.

Kraftwerk not only presented a musical sound, they also represented a discipline and process that Codneys and others like him adopted. Kraftwerk represented the modernist work aesthetic that tied back to the futurist beliefs that the act of artistic creation was a form of work. Industrial music was a product of the musical and cultural issues discussed in the first part of this dissertation, but the first generation of Industrial musicians actively made connections between these elements in order to generate a history for the subculture during the late 1970s.

⁷⁰ Sinker.

⁷¹ Bussy, *Kraftwerk*, 59.

Introduction: Part Two

On May 7th, 2008, after attending a Ministry concert at the Cleveland Agora that was part of the *C U La Tour*, I found myself walking onto Al Jourgensen's tour bus. As I ascended the stairs Jourgensen and his wife Angie were sitting on a couch with their two dogs, Lemmy and Ozzy. He invited me to sit down and talk, and asked me if I enjoyed the show. The other members of the band, whom I had met earlier that day, told him that I was a big fan, and that I was writing a dissertation on Industrial music. I could tell early in our conversation that Jourgensen wasn't so sure how he felt about that. He seemed to be testing me as we talked, leaving out key bits of information and waiting for me to fill it in. "Yeah, I always loved that first Front 242 album. . ." he said looking up as if trying to remember the name.¹ "*Geography*," I said. "Yeah that's it" he said back with a tone of approval in his voice, and then proceeded to talk about the sound of the album and the contributions of member Daniel B. Now maybe it was just me being nervous, but his tone seemed to change as we talked. It was as if he was trying to discover whether I was just writing about this topic, or if I actually knew something about it, if I was part of the subculture.

Finally the topic of Industrial music itself came up. I knew that Jourgensen had never been completely comfortable with the name, and several times through out his career he had tried to distance himself from it. Then he said, "The problem I have with calling it Industrial is that it's too narrowing. People want to say I'm one thing because I use sequencers in my music, but ZZ Top use more sequencers than I do, does that mean that they're Industrial?" I thought it was

¹ The conversations were not recorded so all of the dialogue is paraphrased from notes I took that night and what I documented the next morning. Jourgensen was aware that I was the Director of Education at the Rock and Roll Hall of Fame and Museum, and had toured the other band members through the Museum earlier that day.

a rhetorical question and was curious about what he would say next so I didn't answer.

Jourgensen stared at me and said, "Well, are they?" Finally I said "No, of course they're not."

Jourgensen responded by saying that people wanted to label him Industrial because of the tools he used to make music. He felt that it was unfair, and was too limiting when you considered the sound and ideas of his music.

This was my chance. I was either going to agree with him and say that the word had no meaning at all, that it was merely a marketing term as he had suggested, or I was going to tell him what I thought Industrial music was. At the risk of being asked to leave the bus, I told Jourgensen that the tools and the sound were important, but that at its heart Industrial music was all about William Burroughs' idea of the information war. It was about information and music as noise in the system. And that's what made his music different from ZZ Top, and what held all of Industrial music together. He looked at me. I'm sure it was only a second or two but it seemed like a very long time. He slowly said, "Yeah man...you're right, that's it. You get it." Then he looked at the other people who had made their way onto the bus—band members, roadies, and friends—and he said "This guy knows what the fuck he's talking about." He laughed. I breathed in a deep sigh of relief. It was as if I had passed the test. Suddenly the conversation opened up. We spent the next two hours talking about music, the music industry, his career, the fans, other bands, Timothy Leary, and William Burroughs. We listened to the new album by his side project RevCo. Jourgensen told me how the ideas and messages had always been an important part of Ministry.

In many ways my visit to Al Jourgensen on his tour bus that night embodied much of what this dissertation is about. Industrial music has always been about more than just the music. From the early days of Throbbing Gristle and Cabaret Voltaire to Ministry, Skinny Puppy, and

Nine Inch Nails, it has always been a modernist endeavor that gathered ideas and material from the world around it in order to generate noise in the system. As a subculture, entry into the club included the knowledge of those elements beyond the music—Dada, Futurism, Nazi propaganda, Fritz Lang, Aldous Huxley, John Cage, Stockhausen, the Velvet Underground, and Krautrock. But it also meant gaining an understanding of how those elements fit together and that all of it was part of what William Burroughs called the information war.

Language is a Virus from Outer space: William Burroughs

William S. Burroughs is the one figure that deeply influenced all three generations of Industrial musicians. His way of looking at and thinking about the world, along with his methods of manipulating the systems of mass media in our society, shaped the overall mission of Industrial music. From a purely chronological standpoint William Burroughs belongs at the end of the first chapter in this dissertation. The bulk of his influential work dates from the late 1950s to the early 1970s: *Naked Lunch* (1959), *The Soft Machine* (1961), *Nova Express* (1964), *The Job* (1970), *Wild Boys* (1971), and *Electronic Revolution* (1971), just to name a few. In these seminal works of literature Burroughs synthesized much of what came before for him and pointed down a path that led readers back to Dada and Marxism. But from an intellectual standpoint Burroughs belongs right here, just before the start of the Industrial music revolution. After all, they considered Burroughs to be one of their own, not as an historical figure. As vivid as the connections to Huxley, Cage, and the Velvet Underground were for many Industrial musicians, they were still things from the past.

Many Industrial musicians made trips to meet Burroughs. Genesis P-Orridge of Throbbing Gristle struck up a friendship with him when they both lived in London during the mid-1970s and Burroughs helped him write a grant proposal for a series of performance art

shows. In 1982 *RE/Search* magazine published a special two-issue book (issues four and five) about William Burroughs, Throbbing Gristle, and Brion Gysin.² The issue includes interviews with members of Throbbing Gristle, and several interviews with Burroughs and Gysin conducted by Genesis P-Orridge. During my conversations with Alan Jourgensen he told me how he went to stay with Burroughs for several days while shooting footage for the Ministry music video of the Burroughs-inspired song “Just One Fix.” Burroughs remained an active presence as he continued to publish into the 1980s including *The Thrid Mind* (1978), *Blade Runner (A Movie)* (1979), and *Queer* (1985).

In his writings Burroughs questioned the basic institutions and structures of the modern world, adopting a view that was built on aspects of both Marx and Nietzsche but twisting their ideas in peculiar ways. Burroughs concluded that most people were not only slaves to the ruling class but that the entire structure of society was based upon invisible control devices. In his novel *The Job*, Burroughs rails against the capitalist system in a manner that is reminiscent of Marx:

And what does the money machine eat to shit out? It eats youth, spontaneity, life, beauty and above all it eats creativity. It eats quality and shits out quantity. There was a time when the machine ate in moderation from a plentiful larder and what it ate was replaced. Now the machine is eating faster much faster than what it eats can be replaced. . . . People want money to buy what the machine eats to shit money out. The more the machine eats the less remains. So your money buys always less. . . . The machine is eating it all.³

² *RE/Search* magazine was started by V. Vale as a follow-up magazine to the earlier punk rock magazine *Search and Destroy*. This magazine is particularly important for the study of Industrial music, particularly because issues six and seven have been reprinted as *The Industrial Culture Handbook*, an early attempt at summarizing the subculture. It features a short introduction by Jon Savage that will serve as the basis for much of chapter five of this dissertation.

³ William S. Burroughs (with Daniel Odier), *The Job: Interviews with William S. Burroughs* (Middlesex, England, Penguin Books, 1974 [original French printing Paris: Editions Pierre Belford, 1969]), 73-74.

Burroughs takes a philosophical concept and presents it as a science fiction scenario, much as Herman Hesse and Aldous Huxley had done before him. In Burroughs' vision the global power system is personified as a giant machine created and fed by humanity, all the while destroying us beyond our own control. It is an image that evokes the underground demon/machine of Fritz Lang's *Metropolis* (previously shown in example 1.2). For Burroughs the machine is always gaining more control over society and humanity must struggle to simply become cognizant of the situation. The idea of machines as both the invention of and the devourer of humanity becomes an iconic image in the Industrial lexicon. Humanity builds the systems and machines of power, but we can also become slaves to those very machines and systems. Burroughs suggests that even the basic social structures of nation, family, birth, and reproduction are things that need to be broken down.

One of the reasons that Burroughs continued to be such a vibrant figure to each new generation of Industrial musicians was his frequent call to the youth of the world to be its warriors and saviors. He implores the young to take up the battle suggesting that the older generation is already too deeply entrenched in the machine to see a way out. In this simple assertion Burroughs tied himself to the growing youth countercultures of the 1960s and 1970s. Soon there was an entire generation that looked up to old "Uncle Bill" as they began to call him.

In *The Job*, Burroughs suggests what should be done:

There should be more riots and more violence. Young people in the West have been lied to, sold out, and betrayed. Best thing they can do is take the place apart before they are destroyed. . . . We intend to destroy the police machine and all its records. . . . We intend to destroy all dogmatic verbal systems. The family unit and its cancerous expansion into tribes, countries, nations, we will eradicate at the vegetable root. We don't want to hear any more family talk, mother talk, father talk, cop talk, priest talk, country talk or party talk. To put it country simple, we have heard enough bullshit!⁴

⁴ Burroughs, *The Job*, 81, 83.

Burroughs' language contains a strong element of Nietzschean nihilism taken to its most violent conclusion, and he calls for the active destruction of the world's systems of power. For Industrial musicians in England during the 1970s the time seemed ripe indeed, particularly due to the ever-increasing decline of the economy and the failure of politicians and the older generation to do anything to stop it. It also appeared that the 1960s counterculture movements' vision of peace and love had failed to materialize, and became what the Industrial subculture called "post-psychedelic trash."⁵ Things had not changed, and Burroughs suggested a solution to the modern crisis phrased in the current vernacular by asking them to "take the place apart."

By endorsing violent action Burroughs frames Nietzsche's ideas in a manner that is not inherent in the original. Burroughs sees it as a necessary action in order to break down the current systems of control. Words, music, and images are all parts of the system of control and they must be cut, smashed, and broken for us to be able to see them for what they really are. It is through this particular lens that many Industrial musicians look back to the words of Marx and Nietzsche. As a result they often imbue the works of these late nineteenth-century philosophers with much more violence and action than was there in the first place.

Burroughs' work also suggests that literature, the visual arts, and music could serve as primary locations for violent social action; he urges people to "cut word lines, cut music lines, smash the control images."⁶ He talked about literature as if it were music and music as if it were literature—words as sound, and sounds as pure ideas. He suggested that the tape recorder could be one of the most important inventions in recent history, and had the potential to be used as a weapon in the information war. Writers, artists, and musicians must be a part of the revolution to

⁵ Genesis P-Orridge, "Music From the Death Factory Poster," quoted in Ford, 6.16-17.

⁶ William S. Burroughs, "Quick Fix" (1941). Reprinted online at *The Beat Page*, <http://www.rooknet.net/beatpage/writers.burroughs.html> (accessed December 31, 2006).

manufacture change by creating noise in the system. Burroughs' conception of how art creates "noise" in the system shares some features with Attali's notion that the true madness of the modern world can best be heard in its noise:

Today, our sight has dimmed; it no longer sees our future, having constructed a present made of abstraction, nonsense, and silence. Now we must learn to judge a society more by its sounds, by its art, and by its festivals, than by its statistics. By listening to noise, we can better understand where the folly of men and their calculations is leading us, and what hopes it is still possible to have.⁷

Burroughs believed our society was so corrupted that even the basic system of written and spoken language became part of the problem. He suggested that the spoken word as we know it did not predate the written word, but was instead a product of it. Throughout a number of his science fiction writings Burroughs relates a story, in which early humans communicated with an animal-like system of sounds, and the word was flesh and the word was God. Once the written word was introduced our thoughts no longer focused on the objects but on the words, the signifier and not the signified.

The creation of a written language, Burroughs suggests, allowed for the possibility of deception. Words, by their very nature, were removed from their signified and could be twisted to have a new meaning. All of this has been passed down to us from one generation to the next. Burroughs called it a living word-virus from outer space:

My basic theory is that the written word was actually a virus that made the spoken word possible. The word has not been recognized as a virus because it has achieved a state of stable symbiosis with the host, though this symbiotic relationship is now breaking down Is the virus then simply a time bomb left on this planet to be activated by remote control? An extermination program in fact? . . . will any human creature survive?⁸

⁷ Jacques Attali, *Noise: The Political Economy of Music* (Minneapolis: University of Minnesota Press, [1977] 1985), 3.

⁸ Burroughs, *The Job*, 12. This portion of text was originally from "Playback from Eden to Watergate" which first appeared in *Harper's* (1973).

The virus will eventually destroy humanity as it continues to gnaw its way into our brains and fester in the words and images of the media era. It allows those in power (and in the tradition of the best conspiracy theories we never know who they really are) to manipulate us, to use words as instruments of control. Burroughs (much like Attali and Cage) used the idea of silence to describe an element of the modern condition in which all language and all sound are cut from their signified, allowing language to aspire to a new silence that is free of the word-virus—which always attempts to fill our minds with “words” and not thoughts.

The Industrial music subculture adopted this basic belief and decided to use Burroughs’ artistic technique called “cut-up” as one of its primary artistic tactics. This method was also attractive to them since it had roots in the work of the Dadaist and early twentieth-century modernism. In *The Third Mind* from 1978, Burroughs described the cut-up, something he had been using in his writings since the late 1950s:

Take a page. Like this page. Now cut down the middle and across the middle. You have four sections: 1, 2, 3, 4. Now rearrange the sections placing section four with section one and section two with section three. And you have a new page. Sometimes it says much the same thing. Sometimes something quite different—cutting up political speeches is an interesting exercise—in any case you will find that it says something and something quite definite. . . . Now take [a] poem and type out selected passages. Fill a page with excerpts. Now cut the page. You have a new poem. . . . Cut-ups are for everyone. Anyone can make cut-ups. . . . Right here write now.⁹

⁹ William S. Burroughs and Brion Gysin, *The Third Mind* (New York: Viking, Seaver, 1978), 31. Cited from a First Edition print in the Special Collections Department, Frank Melville, Jr. Memorial Library, Stony Brook University. Burroughs acknowledges that he had learned the cut-up methods of artistic production from Brion Gysin. Gysin himself was trying to develop techniques he had taken from Tristan Tzara, which later led Burroughs to directly research the work of the Dadaists. Burroughs’ description of how to perform a cut-up mirrors much of the style, cadence, and concept of Tzara’s “Dada Manifesto on Feeble Love and Bitter Love,” part VIII (quoted in chapter one).

There is a level of immediacy and simplicity to the technique. Burroughs even references Tristan Tzara's Dadaist statement "poetry is for everyone" by saying "Cut-ups are for everyone."¹⁰ The cut-up allows the author to work with words in a physical manner, much in the same way that Pierre Schaeffer's *musique concrète* technique was conceived as a physical manipulation of sound. Industrial musicians realized the possible connections between the two ideas, and saw that the simple act of cutting up source material allowed them a basic method for the creation of new works. If Burroughs was to be believed, it also functioned as an act of resistance.

Burroughs was also aware of the cut-up technique and its application to sound and music, and specifically of the work done by John Cage: "Music is extremely important. . . . Certain music is played at certain times, and the association of music is one of the most powerful. John Cage and Earl Brown have carried the cut-up method much further in music than I have in writing."¹¹ Burroughs became more and more interested himself in the use of technology to accomplish his cut-up technique. He began to work with tape recorders to produce his cut-ups in the same manner John Cage had done in compositions such as *Williams Mix*. While Burroughs and Cage never connected, they were placed side by side in the Industrial music subculture. Both talked about silence and noise, the use of chance elements, and both suggested the use of modern technology (specifically the tape recorder) as a tool in the act of creation and a way to move beyond ourselves. Burroughs' tape experiments intrigued Genesis P-Orridge and many first-generation Industrial Musicians. Genesis described his interest in William Burroughs thus:

The things I picked up on the quickest were the ideas of control and the ideas of cut-up, the theories behind them I would always read his essays, short theories and lectures. Or listen to him talking about ideas of what is possible.

¹⁰ Burroughs, *The Third Mind*, 31.

¹¹ Burroughs, *The Job*, 33.

Because that is where I think he is absolutely brilliant, and that is where I think, in a sense, he's a modern alchemist. He puts together elements that shouldn't go together and turns up something uncannily accurate. . . . We think that integrating random chance and intuition is actually the most precise way of working at anything. It was through Burroughs that we started using tape, and we still do.¹²

Burroughs proposed using art as a weapon in what became one of the most important guiding principles of Industrial music: the belief that the late twentieth century was the time of an information war that was being fought through the use of the cut-up method and tape machines. It was through his tape experiments that Burroughs eventually became an actual part of the Industrial music subculture in the form of the final Industrial Records LP, *From the Archives of William S. Burroughs: Nothing Here Now But the Recordings (1959-1980)* [Industrial Records, IR0016, 1981].

Jackhammer: The Sounds of Industrial Music

In the second part of this dissertation I examine the creation, development, and evolution of the Industrial music subculture, beginning with the formation of the band Throbbing Gristle in 1975 and ending with the album *Antichrist Superstar* [Interscope/Nothing, 1996] released by the band Marilyn Manson in 1996.¹³ During that twenty-one year period the music and the subculture changed in a number of significant ways and therefore I have divided the study into three musical generations. This historical demarcation is informed by my own experiences as an Industrial musician, as well as writings by musicians, journalists, and fans. Throughout the next four chapters I look at Industrial music and culture from several interconnected viewpoints: specific musical techniques and performance practices, the use of technology to generate

¹² Charles Neil, ed., *Tape Delay* (Wembley, London: SAF, 1987), 27.

¹³ After 1996 both the musical style and the subculture began to splinter apart and Industrial music was subsequently sucked into the giant marketing device known as "electronica," a musical marketing category that attempted to combine the various electronic music styles into one group allowing for easier fan-base recognition.

particular sound qualities and timbres, and the utilization of political strategies and methods to present a worldview that was based on modernist ideologies.

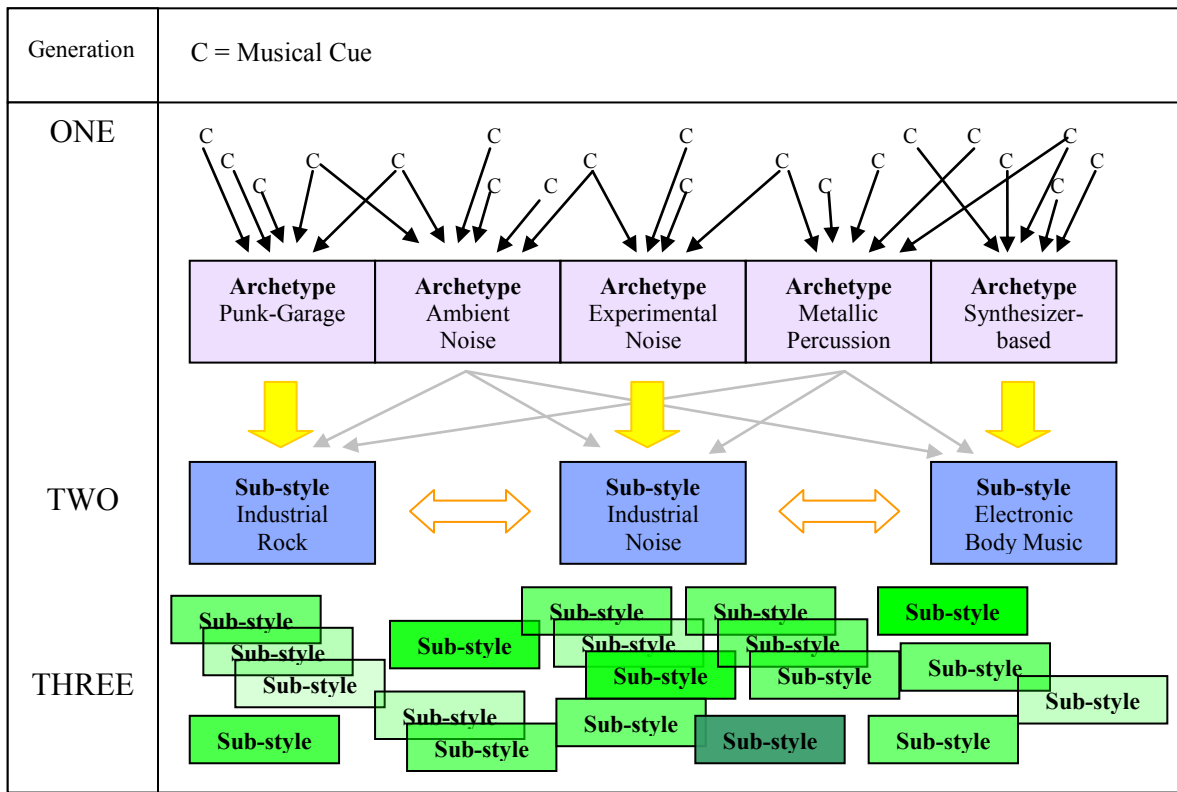
Within each generation Industrial musicians adopted different musical strategies and sonic cues that were strongly connected to the philosophical ideals of the subculture. In order to analyze the musical sounds of Industrial music I developed a phenomenological approach that isolates, describes, and discerns the most salient cues of the music as can be heard in the flow of experience. After years of performing and listening to the music, along with conversations and interviews I conducted with Industrial musicians, I began to catalog musical features.¹⁴ Sounds and patterns began to emerge, and I narrowed the list down to a particular set of musical cues that have an experiential presence such as the use of distorted timbres, metallic percussion, and white noise, or the use of repetitive rhythm patterns. These musical cues are to be understood as a set of sonic markers, a stimulus that guides listeners to make a particular distinction between one piece of music and another—and in this case a marker that identifies a piece of music as Industrial. Individual cues are meaningless in isolation; for example, many types of music use two-note dyad patterns. But when a series of cues are used together, such as short repeating patterns, rigid tempos, factory rhythms, and the use of vocal samples, they begin to function as identifiers of Industrial music.

While a small number of these cues remain constant throughout the twenty-one year history of Industrial music, there is a substantial amount of change over time as certain cues drop out of usage and are replaced by new ones. When I began to theorize how these cues worked together it became clear that the changes were directly connected to the historical demarcations of the three generations of Industrial music. In the second half of this dissertation I argue that

¹⁴ During this process I operated along the principles of a “first” phenomenology *à la* Don Ihde in his *Listening and Voice: A Phenomenology of Sound* (Athens, Ohio: Ohio University Press, 1976).

the manner in which the cues were conceived and implemented was deeply connected to the way that musicians engaged the modernist philosophical foundation of the subculture. I have represented these changes and groupings as shown in example IT.1. I will use this framework in the coming chapters to analyze the sound of each generation, but some general thoughts on the model are required here.

Example IT.1
Cues, Archetypes, and Sub-styles



During the first generation, as the style began to form, the musical cues were used freely—particularly in the earliest music of Throbbing Gristle. Many of the cues are musical techniques, sounds, or structures that were adopted from avant-garde composition and experimental popular music styles (i.e., tape editing, drones, or the creation of sound-masses), and due to the first generation’s adherence to the philosophy of originality, the cues were tenaciously used without a structural framework or formula. Throughout the first generation, however, five musical

archetypes developed that combined a specific set of cues from the larger pool. I have defined each of the archetypes by the cues it used and have labeled them as Punk-Garage, Ambient Noise, Experimental Noise, Metallic Percussion, and Synthesizer-based. Some of the general first-generation cues were used in more than one archetype. In turn, some of the archetypes defined the general cues in a more specific way that shifted the focus, or added new cues that were not a part of the more general Industrial sound. During the first generation the archetypes were not viewed as exclusive to any one band or situation. For example, Throbbing Gristle could use the cues of the Punk-Garage archetype during a live show, use the cues of the Ambient Noise archetype to make a studio recording, and might not use the Metallic Percussion archetype at all in a particular recording or performance. I have also defined a sixth possibility called mixture (not represented in IT.1) that represents times when musicians simultaneously used aspects from more than one of the five archetypes in a single piece of music.

During the second generation of Industrial music the archetypes served as models for the creation of three major sub-styles, represented by the yellow block arrows in example IT.1. The Punk-Garage archetype became the Industrial rock sub-style; Experimental Noise became Industrial Noise; and the Synthesizer-based archetype was the basis for the new Electronic Body Music (EBM) sub-style. The sounds of the Ambient Noise and Metallic Percussion archetypes became so prevalent during the second generation that they were absorbed into Industrial music as a whole and are present in the sound of all three sub-styles; thus they are represented by the light grey arrows moving into each sub-style. I submit that the formation of the three specific sub-styles during the second generation was the result of an advancement and codification of Industrial music's compositional technique, signified by the fact that a band like Front 242 might only create music within the EBM sub-style with little cross-over to the other areas. But the sub-

styles did eventually blend, an inheritance of the mixture of archetypes within the first generation. This blending is represented by the orange arrows in example IT.1. Like the first-generation archetypes, the second-generation sub-styles shared a number of musical cues and had a number of style-specific ones that were the result of the new philosophy of musical assimilation discussed further in chapter six.

The third generation is the least defined. A large number of diverse musical cues from outside the Industrial subculture, such as hip-hop and jazz, flooded into the Industrial musician's vocabulary and created an explosion of new musical sub-styles. The cues became so numerous that they began to lose their meaning and coherence, resulting in a fragmentation of the core sounds of the first generation. This fragmentation is represented in example IT.1 by the many green boxes that overlap and obscure a clear picture.

Part two of the dissertation analyzes these musical cues, archetypes, and sub-styles within the story of Industrial music's historical development and connecting these musical concerns to subcultural ideals. From 1975 to 1983 the first generation of Industrial musicians assembled elements of the modernist past discussed in the first half of this dissertation into a unified movement. Many of the essential components of the Industrial music subculture were established, or at least germinated, by the four members of the band Throbbing Gristle: Genesis P-Orridge (Bass guitar, Violin, Vocals), Cosey Fanni Tutti (Guitar, Effects, Tapes), Peter Christopherson (Tapes, Machines), and Chris Carter (Synthesizers, Drum Machine, Tapes). Chapter four relates the story of how the four met as a part of the performance art group COUM Transmissions, how they transformed their musical work into the formation of the band Throbbing Gristle, and how they founded the independent record label Industrial Records in 1977. In chapter five I focus on bands in England and Germany that began to make Industrial

music during the time period from 1975 to 1983, with the goal of understanding how the Industrial music subculture coalesced. First-generation bands such as Cabaret Voltaire, SPK, Clock DVA, *Deutsch Amerikanische Freundschaft* (DAF), and *Einstürzende Neubauten*, along with their audiences and journalists, all played a role in shaping the aesthetic of Industrial music.

The second generation of Industrial music, from 1983 to 1989, was fashioned by a new group of bands including Front 242, Skinny Puppy, and Ministry. Chapter six begins in 1983 and tracks these new bands in Belgium, Canada, and the United States, showing how they adopted the first generation's experimentation and combined it with a popular music styles such as synth-pop and the new wave of British heavy metal. The new availability of synthesizer timbres, drum machines, and samplers evolved the musical sound beyond earlier tape music experiments. Independent record labels such as Wax Trax, Netwerk, and Play It Again Sam worked together to distribute each other's music and broaden the reach of the style around the globe. By 1989 Industrial music began to reach larger audiences and many bands migrated to major record labels, a move that had a number of major repercussions on the sound, message, and audiences of Industrial music in the 1990s.

Chapter seven looks at the third generation of Industrial music, from 1989 to 1996, just as the style begins to fragment. This chapter also serves as a conclusion to the dissertation by connecting the musical and subcultural aspects of Industrial music in the 1990s back to its origin in 1975 in order to show how the style maintained certain musical aspects, but began to lose its political force. This was due in part to the mainstream chart success of the band Nine Inch Nails and the rise of many new groups, like Stabbing Westward, who worked with talented producers to copy the basic sonic blueprint of Industrial music. Many of these new groups used the musical cues of Industrial music, but severed it from the subcultural philosophy and politics.

Chapter seven ends with a consideration of *Antichrist Superstar* by Marilyn Manson, an album that features a blur of Nazi references, dance beats, rock guitar, and distorted vocals created by bandleader Marilyn Manson, Trent Reznor of Nine Inch Nails, and Dave “the Rave” Ogilvie who was the primary producer for the second-generation band Skinny Puppy. The album caused a great deal of controversy that responded to the abrasive sound of the music, along with offensive song titles, artwork, and photographs. Make no mistake, the album was designed to offend, but what was it really saying, and how was the album understood as Industrial music’s last gasp before it was subsumed into the mainstream of popular music?

Building the Machine: The Story of Throbbing Gristle and Industrial Records
Chapter Four

For the machine is an end in itself only under given social conditions – where men are appendages of the machines on which they work. The adaptation to machine music necessarily implies a renunciation of one’s own human feelings and at the same time a fetishism of the machine such that its instrumental character becomes obscured thereby.¹

Theodor W. Adorno (with the assistance of George Simpson)
From “On Popular Music” (1941)

I was listening to the washing machine the other day and there was this real nice rhythm with this tone that kept coming in and I thought “God, that would make a really good song.”²

Chris Carter (Throbbing Gristle)

Throbbing Gristle (aka TG) performed its first live concert on July 6, 1976 at the London AIR gallery as part of a series of events organized by Genesis P-Orridge under the general title “Crime Affirms Existence–High Crime is like High Art.” The performance was later released as an Industrial Records cassette tape [IRC3, 1979]. During the show the band pushed the volume of the PA system to its limits, as Peter Christopherson recalls: “[We wanted] to see if it was actually possible to get people to react physically.”³ The volume was so loud that the audience could feel the air pushing against their bodies to the point of causing physical pain, an effect that was augmented by the use of extreme registers and long blasts of mechanical sounds. Even at this very early point in their career the concert embodied Throbbing Gristle’s mission to create a form of popular music that was based on noise and political action and rooted in a specific, collected history of modernist thought.

¹ Adorno, 313.

² Neil, 221-222.

³ Neil, 120.

The music was a fusion of avant-garde and popular music, making use of Stockhausen's moment form to structure large sections but interpreting that idea through the music of Pink Floyd. Some sections of the music contained clouds of synthesized sound that used tone clusters and sonic layers like the music of Tangerine Dream. The nature and atmosphere of the evening was closer to a contemporary art music concert than a popular music concert. It included a printed program that informed the audience of the band's message, including connections to modernist concepts, authors, and philosophy. The concert provides insight into how the members of Throbbing Gristle began to actively assemble the modernist elements of the Industrial music style.

The show was only thirty-eight minutes long and was made up of several sections of instrumental music that flowed continuously from one to the next. I have chosen to call the entirety of the performance that night a *set*, a word that connects to the popular music tradition of creating a "set list" of songs to be played during a concert, and to the more general concept of a fixed or prescribed group of relationships. I have defined the form of the set as consisting of five sections, labeled in the section column of table 4.1, each with its own musical qualities and static character. While Throbbing Gristle did not achieve this structure through an elaborate pre-compositional system, they did intentionally fix certain musical parameters before the performance and a number of these can be heard in the music. The musical ideas tend to shift in thirty-second blocks throughout the set, and the important changes are listed in the time column of table 4.1. The separation between the blocks is not fixed and sometimes elements and motives drift between one and the next, or the timing is slightly more or less than a full thirty seconds.

Table 4.1
Throbbing Gristle live at the AIR Gallery (7.6.1976)
 Transcribed by the author from the Throbbing Gristle live performance released as IRC3

Time	Section	Description
0:00	Moment Form I: Bass	Pulsing bass guitar (on G) and machine sounds Squelching overtones
0:30		Bass begins to alternate pitch between G and G# High register white noise increases
1:00		Echo effects are added
2:00		Slow attack metallic sounds enter (may be connected to the bass) Bass, white noise, and metallic sounds all alter pitch together
3:30		<i>1st approach to silence</i> Bass moves to F. Background sounds drop out leaving filtered sweeps and feedback.
4:00	Moment Form II: Guitar and Noise	Noise loops generate the texture Bass and metallic sounds are sporadic
4:30		Bass pulses on various pitches with some references to Moment Form I / Guitar noises
5:30		Guitar plays clipped plucked notes
6:00		New guitar noises with constant bass pulse
6:30		Electric violin or synthesizer (with a horn-like timbre) plays a modal melody
7:00		<i>Peak 1</i> Tempo speeds up and sounds begin to blur in a jumble of noise
8:00		Sounds begin to fade out revealing a new plucked guitar melody
8:30		<i>Peak 2</i> Texture begins to thicken again creating a wide swath of noise
9:00		Sounds drop out leaving only the bass and a sustained high pitch tone
10:00	Moment Form III: Synthesized Tone Clusters	Sustained synthesizer and bass tones Use of melody and counterpoint
11:00		Moog melody with portamento creates Theremin-like sound
11:30		Moog melody dominates (not in any key)
12:00		<i>Peak 3</i> Tone clusters build around the Moog melody
12:30		Pitches glissandi into the lower register with increasing distortion
13:00	Break	<i>2nd approach to silence</i> Some tuning sounds and cable "pops" with fuzz
14:00	TD "Phaedra" Style	Bass guitar and synthesizer resume a steady pulse and develop into sonic clusters While the timing of this section continues to work in thirty-second intervals the process is much slower, and this entire section is much more self contained
	TD 16:00	Melodies develop
	TD 17:00	Noise elements increase, bell tones
	TD 18:30	Guitar with echo, Bass pattern (Bb – Ab – F – Ab – F)
	TD 19:00	Volume of noise and hum increases
	TD 21:30	<i>Peak 4</i> Audience chatter with random soft sounds
22:00	Rhythmic Drones and Massive Textures	Bass/guitar drones alternates between F/Gb and Bb (fuzzy tone)
25:00		Rhythm builds
27:00		Volume of noise elements increases, rhythm intensifies
28:30		New melody enters
29:00		<i>Peak 5</i> Volume and noise level increases and individual sounds blur into one mass
29:30		High register noise frequencies rise out of texture
31:00		A short break to hum is followed by a massive swell of sound
32:00		Sounds retreat into the lower register
33:00		Noise level drops as a new rhythmic pulse develops
34:00		Filters sculpt white noise clouds resulting in what sounds like car engines shifting gears
35:00		Volume drops and sounds rumble in the lower frequencies
35:30		<i>3rd approach to silence</i> White noise and bass buzz move into silence
36:00		Sparse sounds pop and click with background chatter from the gallery
36:30		Noise sounds begin to build
38:00		<i>4th approach to silence</i> Sound ends and background chatter is heard
38:30		End

The five sections of the set are shaped by a series of large scale markers that I call *approach to silence* and *peak* (marked in bold and italics in the description column of table 4.1), and these musical events are formed through articulations of pitch, rhythm, timbre, texture, and volume. The “approach to silence” markers function as sonic cadences in which a change in a number of musical actions creates a feeling that the section is coming to an end. For example, the tempo may slow down, or the texture will thicken for a short period of time and then thin out dramatically. The “peak” markers are created when the tempo and/or volume increases, the texture thickens for a sustained period of time, or the instrumental timbres become more intense. The timbral changes in the music are a result of alterations to instrumental effects (such as added distortion or ring modulation that give the sound a fuller timbre, or changes in equalization), or changes to a synthesizer tone (such as adding a second oscillator that is slightly out of tune with the first, thus “thickening” the sound). The peak markers often initiate the entrance of new musical ideas or timbres. Some of the peak markers are followed by sudden sonic valleys, but since these valleys are unprepared the experience is quite different from the similar drop off in volume and activity that happens during the approach to silence markers. The two kinds of markers help to determine the major formal divisions of the set and create a sense of movement and change within the largely static textures filled with unremitting musical repetition.

The first thirteen minutes of the set produce a listening experience similar to Stockhausen’s moment form where a small set of musical ideas are repeated and work in imitation, sequence, or counterpoint to create a moment of sound. *Throbbing Gristle* created three distinct moments based around bass guitar, guitar and noise, and synthesized tone clusters, and each features explorations into the primary sound of that moment. The particular changes

and definitions of each section are listed in the description column of table 4.1. The way that Throbbing Gristle interprets the use of moment form is much like Pink Floyd's use of moment form in "Interstellar Overdrive," where fragmentation and changes in timbre, register, and dynamics were used to realize the structure rather than the development of chord progressions or melody (compare to example 3.5).

The first moment in the Throbbing Gristle set, *Moment Form I: Bass* lasts four minutes and is created from the repetition of the bass guitar played by Genesis in combination with various machine-like sounds. The bass alternates between a continual plodding G on the low E string (giving it a deep resonate sound) and a half step up to a G#, typically in patterns that are multiples of three or four notes. Because the rhythm and pitch remain static in this moment the majority of the sonic activity comes from the alteration of the sound of the bass via a number of effects including echo and ring modulation. While it is impossible to tell for sure, it sounds like many of the machine sounds of this section were created by placing numerous effects on the bass guitar, especially because these sounds are frequently delayed imitations of the pitch and rhythm played by the bass. At the 3:30 mark Moment I begins to transform through an approach to silence marker; the machine sounds fade, and the bass guitar drops down to a repetition on a new pitch F and then stops. The machine and bass sounds are replaced by a filtered rush of white noise that quickly rises in volume to fill the void and become the foundation for the next moment.

The second moment, *Moment Form II: Guitar and Noise*, lasts for five minutes. It still features the bass playing pulses but these are no longer constant or predictable, and the focus is on the guitar played by Cosey Fanni Tutti and a collection of noise tape-loops. There are few changes between the timbral types used in this section, and the majority of those changes result

from alterations in the rhythm and tempo of the tape-loop sounds, and the addition of a brief modal melody in the guitar part. The section features the first peak marker of the set at 7:00 when the guitar, bass, and tape-loops all increase in tempo and volume and mesh into a single wall of sound that lasts for almost an entire minute. The final minute-long transition/overlap at the end of Moment II introduces the synthesizer that is the primary sound used in Moment III.

The third moment section, *Moment Form III: Synthesized Tone Clusters*, lasts for exactly four minutes and is based on the timbral shifts and tone clusters created on the synthesizer. The peak marker at 12:00 is unique within the set because it builds the volume of the synthesizer and then drops it out entirely, only to be replaced with a series of glissandi in the lower register of the guitar and bass. This complete switch of timbres leads to the end of the third moment and the first definitive silence in the music at the 13:00 mark. The last two sections of the set are closer to the sounds of Tangerine Dream's "Phaedra" and the drone sounds of the Velvet Underground respectively. The entire set ends with sixteen minutes of pulsing drones and noise textures that eventually devolve into a buzzing hum and then nothing.

The set was given the title "Music from the Death Factory," and was designed to be the soundtrack of a dystopian post-apocalyptic world. Throbbing Gristle's goal was to musically represent modern society as an urban wasteland that was the battleground of Burroughs' information war, and to embody the fear and pain of the modern crisis. TG informed the audience of the ideological framework for the evening by producing a handout that included a list of equipment used as well as a description of the sound and suggestions towards how it might be interpreted:

Produced on Analogue Synthesizer; Mini-Korg synthesizer; Electric Violin; Bass Guitar; Lead Guitar; Percussion; Prepared Tapes. Projected through 800 Watt Quadraphonic P.A. system. Imagine walking down blurred streets of havoc, post-civilisation, stray dogs eating refuse, wind creeping across tendrils. It's 1984.

The only reality is waiting. Mortal. It's the death factory society, hypnotic mechanical grinding, music of hopelessness. Film music to cover the holocaust. . . The music of 1984 has arrived. Made up of various people from all creative areas, post-psychedelic trash, vanguard for thee [sic] Wild Boys, death seekers.⁴

The language of the handout made several direct connections to modernism. It used the Futurist trope of walking through the modern city as its structuring device, and much like Marinetti's 1909 manifesto, we are told of the city and its inhabitants. But unlike Marinetti's manifesto, there is no joy to be found. In Throbbing Gristle's account the reader is presented with a city in the midst of an abrasive and disturbing decline. The streets are an urban wasteland filled with packs of wild dogs and the music of hopelessness. There are direct references to George Orwell's *1984* and William Burroughs' *Wild Boys*, both novels that take place in a future dystopian society.⁵ Throbbing Gristle has used these literary references to invoke an image that feels very much like the underworld of Fritz Lang's *Metropolis*.

But Throbbing Gristle makes a crucial change to the dystopian stories of Orwell, Burroughs, and Lang. The TG audience is told that they are not waiting for the dystopian 1984 to come; it is already 1984 (conceptually, not literally of course). The idea of the future dystopia is wrenched into current times. The "death factory" society is already here, and it has been for some time. This is a Nietzschean move: the suggestion that the tragic event had already happened and that humanity was currently living in a period of decline, having just become aware of that fact. Throbbing Gristle tells their audience that they must wake up to the

⁴ Genesis P-Orridge, "Music From the Death Factory Poster," quoted in Ford, 6.16-17. The Quadraphonic sound system was also used by Pink Floyd during their live shows.

⁵ Orwell's *1984* predicts a future of governmental control and an oppression of individuality that is even more relentless and obvious than the one presented in Huxley's *Brave New World*. Burroughs' novel *The Wild Boys* (1971) and its follow-up *Port of Saints* (1973) take place in the future after a major disaster or plague has wiped out much of the earth's population. Supplies are limited and the technology and might of the modern world have become useless, broken junk. Violent street gangs rule the world and what remains of the American government is in a bloody battle to suppress them, and as one might imagine Burroughs' narrative sides with the wild boys.

fact that they are living in the dystopia, and while it may be too late to avoid its coming, one can still rally against the forces of control and attempt to break the cycle of servitude. This message was transmitted almost entirely via the handout, and what the audience heard that night was a sonic representation of the dystopian world Throbbing Gristle described. The music and extra-musical elements worked together as one to transmit the full concept, the impact of each one intensified by the other.

The dystopia that TG portrayed through the music and text during the “Music from the Death Factory” set was a heightened one that purposefully made the problems of 1976 England resonate with the bleak future of dystopian literature. Genesis expanded on this idea in a November 20, 1976 interview with *Melody Maker* magazine: “We’re writing about the future by looking at today. We look at this scabby, filthy, dirty, horrible society and transform it into an inhuman, emotionless parallel. That’s the way it’s going to be in 1984 for sure. It’s future rock if you like, but not that tacky sort of Hawkwind stuff, it’s real.”⁶ Genesis places TG directly within the dystopian literary model. By 1976 the concept of a post-apocalyptic future dystopia had become one of the most common trends in science fiction writing and film. It was used in the writings of William Burroughs, Philip K. Dick, and J. G. Ballard and soon became the center of the Sci-Fi film lexicon in movies such as *The Planet of the Apes* (1968), *A Clockwork Orange* (1971), and *Eraserhead* (1976). Genesis had flirted with ideas of a dystopian future earlier in his own artwork, but within the framework of Throbbing Gristle these ideas became fully formed.

The concept of a dystopian future was a major technique used by Industrial musicians that allowed them to present social commentary and suggest political action in a manner that

⁶ Brian H. Arrigan, “From Genesis–Revelations” in *Melody Maker* [November 20, 1976], quoted in Ford, 7.15. The reference to Hawkwind is the 1970s space-rock band similar to Pink Floyd.

was more powerful than simply discussing current events. In his book *The Science Fiction Novel: Imagination and Social Criticism*, Basil Davenport points out that the creation of a future dystopia allowed an author to speculate on how and why the earth might plunge itself into the apocalyptic depths rather than proposing a possible utopian solution to the world's problems (it's always easier to tear things down than to build them up).⁷ The underlying argument was that modern civilization was on a course for destruction because of specific economic, political, and cultural policies.

The dystopian literary technique used in Industrial music was similar to the work of the Futurists in many ways, but Throbbing Gristle altered the implications by representing hyper-industrialized society as a negative while simultaneously fetishizing its modern nature. Much of this is due to the influence of William Burroughs and Fritz Lang and their images of giant machines that devoured society as a personification of the modern crisis. But Industrial musicians wanted to have it both ways. While they used Futurist-style robots to represent evil and decline, the robots are also ever-present in the Industrial narrative. The sound of the "Music from the Death Factory" set may be the sound of decay and destruction, machines and fire, but as a form of popular music it was also something audiences sought out as entertainment.

Along with visions of the future, Throbbing Gristle also resurrected the past in order to show how the philosophy of modernism and the idea of progress had already gone famously astray in the form of Nazi Germany. The title of the set was a reference to the Nazi gas chambers of WWII. Throbbing Gristle purposefully used the same name to describe the social

⁷ Basil Davenport, "Introduction," in *The Science Fiction Novel: Imagination and Social Criticism* (Chicago: Advent, 1959), 12.

situation in England during the late 1970s.⁸ In the comparison made by Throbbing Gristle they positioned British society as being marched slowly and hypnotically to its own death. The information war was already being fought, and the working class was losing. TG's vision mirrored the current state of British society in the 1970s and suggested that if things were to continue on their current course there would be nothing left but an inhuman hole of despair and anguish.

The remainder of this chapter is a historical account of the formation of Throbbing Gristle in 1975 and the creation of Industrial Records in 1977. This history traces the assembly and development of the musical and philosophical characteristics that form the Industrial music subculture. From the early homespun experiments of Genesis P-Orridge, to the conception of the performance art group COUM Transmissions, and finally the establishment of the musical techniques of Throbbing Gristle and the modernist intentions of Industrial Records, there was a continual aesthetic development and historical progress that laid the foundation for the creation of the first generation of Industrial music. Throughout this history I examine the establishment of the performative nature of Industrial music and the tension that arose between musical techniques used during live performance and those used in recorded studio output—a tension that was frequently displayed through the creation of multiple renditions of a single musical work.

Beginnings: The Status Quo

The beginning of Industrial music was inescapably tied to the socio-economic status of the United Kingdom in the 1970s. As the first generation of Industrial musicians formed their artistic ideals they were influenced by the economics, politics, and culture that surrounded them every day. Many economists have described the twentieth century as the era of decline for the

⁸ This was a theme they returned to again and again, and it will be discussed in more detail later in this chapter and within the broader context of the entire subculture in chapter five.

United Kingdom, giving rise to the economic term *declinism*.⁹ Throughout the century the UK saw a drastic reduction in both its political power and economic performance, reaching its low point in the 1970s. This resulted in what can only be called a crisis of extreme proportions that affected the government, economy, industry, and culture of the country. Much of Britain's problem was rooted in its own uneasy belief in the industrialization and modernization of the previous century and the failure of those ideals in the face of a declining economy.

These circumstances saw the philosophical concept of a modern crisis turned into a daily reality for many who lived there. It was a similar slope of decline that had previously provoked Marx and Engels to cry out for the plight of the working class. In Britain during the 1970s the cultural divide between the upper and lower classes continued to grow and become more rigid, forcing more and more of the working class into ghastly conditions in factories and into the ghettos of cities such as Manchester, Sheffield, and Liverpool. The spirit of industrialization, as far as the British were concerned, had been relocated to the United States. Yet the politics, culture, and economy of the country had become so closely tied to its industry that it was impossible to wipe clean the effects of industrialization. The country faced the problem of replacing the industry-based economy once it was gone, and the production of service-sector jobs was unable to keep pace with the decline in industrial jobs in order to support the weight of the economy.

In 1974 the Labour Party was able to unseat the Conservative Party by a small number of votes with a political platform that opposed Britain's dependence on material, technological, and industrial advancements. Prime Minister Harold Wilson attempted to embrace the changing

⁹ See Martin J. Wiener, *English Culture and the Decline of the Industrial Spirit, 1850-1980* (Cambridge: Cambridge University Press, 1981), and Nick Gardner, *Decade of Discontent: The Changing British Economy since 1973* (Oxford: Basil Blackwell, 1987).

mood of the country by promising to bring social harmony and stability to the lives of the common British citizen. He quickly purchased a farm and took every opportunity to be photographed in its green surroundings in an attempt to remind people of the natural and simple beauty of the countryside in clear opposition to the industrialization of the cities. But the new policies of the Labor party did little to help, and by 1975 it became clear that England was still in a major crisis, as economist Nick Gardner describes in his book *Decade of Discontent*:

By April 1975, unemployment was again approaching the 900,000 level . . . and was rising at a rate of about 30,000 a month. Employment had not fallen from its 1973 levels; it had merely ceased to rise fast enough to keep pace with the numbers wanting work; which were increasing because of population growth. . . . With firms keeping their work forces on, despite falling output, productivity was falling, and unit costs were rising faster than ever. Retail prices were by now rising by more than 20 per cent a year—a faster peace-time increase than at any time in the previous 300 years.¹⁰

For many in Britain, especially the young who were unable to find work once they graduated from school, this was seen as a failure of the British government to assist its people. Both the left (Labour) and the right (Conservative) had developed new policies and attempted to subsidize the industrial sector, and neither had been able to solve the problem.

Matters of British political and economic policy had a major influence on the popular culture of the 1970s, especially music. Much of the musical culture from the previous decade was disappearing, partially due to the spectacular and rapid decline of the youth counterculture of the swinging sixties. The Beatles were gone, violence had spread through the once-peaceful festival concerts like the Isle of Wight, and counterculture was not yielding the enlightened visions of peace and love it had once promised. In *England's Dreaming*, Jon Savage conveyed the mood shared by many young musicians, including himself, in England at the time:

¹⁰ Gardner, 55.

England wasn't free and easy: it was repressed and horrible. . . . the claims of hippie culture to have changed the world were false: it was just window dressing, like the facades so quickly erected and demolished in consumer enclaves like Oxford Street. Consider the music of the time—then called 'Rock' in a bid for respectability. What a pompous, middle-class facsimile of the anarchy that was fifties Rock'n'Roll! The music industry was now in control and conning everyone: how could that industry's 'Rock' retain any trace of Rock'n'Roll's original teenage revolt?¹¹

The stage was set. The poor economic and political situation coupled with the burnout of 1960s counterculture allowed for an aesthetic shift in Britain in the 1970s. Industrial music was not a celebration of the industrial revolution, or of modern industrial might. It was the realization that people were going to have to live in what was left over: the broken factories, the scarred landscape, the poverty and social despair.

The palpable feeling of a modern crisis in Britain during the 1970s made the modernist writings previously discussed seem immediately relevant to the first generation of Industrial musicians. The historical works became important documents pertinent to the present as Industrial musicians posited the decline of modern Western Civilization and explored the effects of the modern crisis. The Marxist philosophy adopted by Industrial musicians was used to criticize the global system of nation-states, the capitalist system, and the music industry. They put forth a vision of a world that enslaved its own people in invisible shackles and plunged everything down towards the abyss. All of this was wrapped up in a general nihilistic attitude that the musicians fashioned from Nietzsche's philosophy. They used the sounds and techniques of the musical avant-garde of the past century to make "industrial music for industrial people" straight from what they envisioned as the "death factory" of the late twentieth century. But they were not always successful in their attempts. The messages were often lost

¹¹ Jon Savage, *England's Dreaming: Anarchy, Sex Pistols, Punk Rock, and Beyond* (New York: St. Martin's Press, 1992), 9.

amid the din of the crashing metal and constant barrage of cultural and philosophical references—often conflicting ones. Their belief in the concept of Dada anti-art often kept them from making clear statements about how humanity might divert its march into the abyss. They did not position themselves as the solution, only as a reflection of the decline reflected back into the eyes of the population in order to wake them from the sleepy chains of oppression. It was this set of shared interests that formed the basis of Industrial music for the next twenty years. Genesis P-Orridge was one of the young British artists who slowly connected these ideas as he progressed from his own youthful experiments to the creation of Industrial music.

Beginnings: Genesis P-Orridge (TG 1 of 4)

Genesis P-Orridge was born Neil Andrew Megson on February 22, 1950 in Manchester to working-class parents. His childhood was somewhat typical for a post-WWII child in England. His father was a veteran who worked as a salesman and his mother had been an aviation factory worker and a chorus line dancer. As a teenager Genesis disliked the strict nature of the British public school system and found refuge within an artistic community of teachers and students. In 1965 Genesis' English teacher introduced him to Jack Kerouac's novel *On the Road*. This inspired Genesis to delve into the writings of the many characters mentioned by Kerouac including William S. Burroughs (Old Bull Lee), Allen Ginsberg (Carlo Marx) and the Dadaists.¹² During lunch the small group of students and teachers would discuss Kerouac, Ginsberg, and Burroughs along with the music of Frank Zappa and the Velvet Underground. Because the official school paper would have nothing to do with the writings and poetry of this small group, they began an alternative school paper called *Conscience Magazine*.

¹² The first Burroughs book Genesis read was *Dead Fingers Talk* (1963), a cut-up book that is a composite of texts from the trilogy of *Naked Lunch*, *The Soft Machine*, and *The Ticket That Exploded*.

Through their work on the paper the students learned the tactics of underground media as a means to challenge what they viewed as the unjust authority of the British social system.

Genesis had played drums and taken some piano lessons as a child but it was his exposure to John Cage's book *Silence* that focused his growing musical interests. Genesis explains how the book helped to shape his understanding of sound: "My attitude towards sound was already forming. . . . I believed music was organized and assembled sound and that was as far as you could go with a definition. . . . I think reading *Silence* confirmed a lot of the things I was already feeling. That book was a vindication that anything and everything was possible and that everything could be included."¹³ Genesis began to connect his growing understanding of experimental sound with his study of Beat Generation writing techniques and avant-garde art. He found a substantiation of these ideas in the writings of John Cage. But his personal understanding of these modernist ideals allowed him the freedom to move back and forth between art forms and between his interest in rock-and-roll and the avant-garde.

Genesis formed a small band called Worm that recorded and pressed only one album. *Early Worm* [unreleased, 1968] was deeply rooted in the music and philosophy of Cage and included selected quotations from *Silence* on the cover. This early record shows that Genesis and his friends were attempting to mix together a wide range of musical and philosophical ideas (sometimes successfully, although most of the time not; the music simply is not very good). But within these youthful experiments Genesis began to investigate several modernist ideas that stayed with him for years to come, including the concepts that any sound could be music, that noises could be layered to create musical texture, and that found sounds could be recorded and manipulated through tape-editing.

¹³ Genesis P-Orridge quoted in Ford, 1.8.

The band Worm used anything available to them as a possible sound source, and in the liner notes Genesis is listed as performing “amplified drums, prepared tapes, feedback, kazoo, Indian gongs, temple chimes, amplified five string variable action guitar, unsung pony, bongos, waste paper bin, chromonica, vocals, guitar, ocarina, and recorder.”¹⁴ Most of the instruments are performed in a non-traditional manner, and depending on the selection the music either slides into a jumble of mixed sounds and voice as in the song “Balloon,” or quietly develops delicate environmental sound textures as in “Mourning to the Dusk.” The seventeen-minute final song, “The Early Worm” is a vocal and percussive improvisatory jam session that feels very close in spirit to Frank Zappa’s “The Return of the Song of Monster Magnet” from *Freak Out* [MCA, 1966]. The use of tape-machine manipulation reveals Genesis’s early interest in recording technology. On “Lament” several small snippets of sound are looped and altered by varying the speed, pitch, length, and direction of the tape loop, resulting in a quiet series of rhythmic percussive sounds mixed with longer floating sounds. The source material is hard to identify, although at different times it does sound like piano, guitar, harmonica, or violin.

In September of 1968 Genesis entered Hull University to study Social Administration and Philosophy, mistakenly believing that the Social Administration department taught classes in anthropology and not on the British Welfare system. He became very active in radical politics and in 1969 left the University to join a Marxist performance-art group in London called Transmedia Explorations. The group was run by David Medalla and consisted of people he met at London’s UFO Club where Pink Floyd played as the house band. The artistic mission

¹⁴ Ford, 1.8. Genesis pressed only one vinyl copy from the original master tape, so very few people at the time heard this music. The recording had become something of a lost icon within the Industrial music subculture as people searched for the recording or claimed to have heard it. It has since been released on limited edition vinyl.

of Transmedia Explorations involved the search for new forms of communication. Medalla believed that society's ruling class secretly enforced its oppressive social system and ensured the reproduction of its power through hidden codes contained in language. Genesis became very active in these social experiments, and one can imagine that he quickly connected Transmedia's ideals to William Burroughs' writings on systems of societal control.

Beginnings: COUM Transmissions

During his time with Transmedia Explorations, Genesis claims to have had a mystical vision in which he saw a visual symbol and heard the words "COUM Transmissions."¹⁵ From this he envisioned a communal performance-art group that also included the performance of experimental music. The formation of his own group allowed Genesis to experiment with the creation of an artistic ideal based on the modernist works he was reading (Marx, Cage, Burroughs, Dada) and the performance art he had done with Transmedia Explorations, but it also gave him the opportunity to connect these concepts to the musical composition he had done with Worm. COUM Transmissions was the place where Genesis tested his ideas, and the work done there became a primer for the concepts used to establish Industrial music. It was also through COUM that Genesis met the other members of Throbbing Gristle.

Genesis began to recruit members and designed a logo—a penis with a drop of semen at the tip. The name COUM (pronounced *koom*) was intended to suggest many possible meanings. For example, the sexual slang "cum" is used to describe male ejaculation, "coun" is an old French word for female genitalia, "come" can mean come and see us perform, while

¹⁵ This sort of mystical quasi-religious vision is something that Genesis has often used as a rationale for his artistic endeavors and discussed in a number of published interviews. He organized his post-TG band Psychic TV as an official religion that was recognized by the US government. The religion was called Thee Temple ov Psychick Youth and is still in existence today. The religion supports an idea called transmeticon which suggests that the human will can be realized through a connection between humans and machines creating a magik [sic] network for change and the creation of a global tribe.

“cum” is Latin for “with,” and the English language prefix “cum” means to combine with—a possible hint at artistic tactics. It also suggests vague connections to the Dada movement as a more-or-less nonsense four-letter word, and to the band Can who also picked their name so that it would have multiple meanings across several languages. The early COUM shows were wild free-for-all improvisations with names such as the “Clockwork Hot Spoiled Acid Test,” derived from combining Anthony Burgess’ *A Clockwork Orange* (1962) with Tom Wolfe’s *The Electric Kool-aid Acid Test* (1968). It was at an actual acid test party in late 1969 that Genesis met Christine Newby (aka Cosey Fanni Tutti).

Christine Carol Newby’s self-adopted stage name “Cosey Fanni Tutti” was a sexualized alteration of the title of the Mozart opera buffa, *Così fan tutte* (1790). The opera’s title translated into English is, “As do they all”—with the reference implied towards women. The altered use of the original Mozart title as her stage name was conceived by Cosey as a commentary on gender roles in 1970s England and as a way to criticize power struggles and sexual relations during the twentieth century. It is no mistake that her alteration of the title sounds like “cozy fanny,” with *fanny* being British slang for vagina. The word *tutte* is also changed to the rock-and-roll-esque “Tutti,” as in Little Richard’s “Tutti Frutti”—resulting in a fusion of high and low art.

Genesis and Cosey became immersed in the concept of Dada. They began to make use of chance elements and improvisation in the creation of their works of anti-art, stating that “the future of music lies in non-musicians. COUM is a vital musical concept. . . Inspired Chaos.”¹⁶ Genesis and Cosey begin to form the basis of what would become the Throbbing Gristle

¹⁶ Genesis P-Orridge from a letter in *Friendz* magazine no. 28, 1971. Reprinted in Ford, 2.10.

philosophy of sound–music exists in the act of creation itself and should be an experience open to anyone. Their statement that music should be “inspired chaos” rings of Dada’s anti-art but it also echoes the art of noises of Futurist Luigi Russolo and his own untrained musical background. COUM believed that the boundaries between music and noise had already been broken down within the avant-garde and the larger public needed to experience this revelation. What the members of COUM understood at that time from reading John Cage and William Burroughs was that they should be focused on breaking down conventions, not on building new ones, although this would eventually change in the late 1970s.

A number of COUM performances exemplified their deconstructive aesthetic while also lampooning the growing virtuosic British progressive rock performances of the early 1970s. In October of 1971 COUM performed as the opening act for the space-rock band Hawkwind at St. George’s Hall in Bradford. During the show the various members of COUM continued to bring percussion instruments onto the stage in a mockery of the large drum kits used by rock bands at the time. As the stage filled up a single drummer attempted to play the ever-growing amount of instruments on stage until the allotted performance time ended. Then they walked off the stage.¹⁷

By 1973 the group had moved to London in order to avoid problems with local law enforcement in Hull stemming from the obscene nature of several live performances that included simulated sexual acts, profanity, and self-mutilation. Once in London Genesis contacted William Burroughs who was living there at the time. After their first meeting Genesis composed a short poem entitled “Uncle Bill” in which he concluded “we agreed to eradicate a

¹⁷ Dave Thompson, *Space Daze: The History and Mystery of Electronic Ambient Space Rock* (Los Angeles: Cleopatra, 1994), 12. The story is told by Genesis P-Orridge.

few phenomena and parted.”¹⁸ Genesis had always felt an artistic connection to the author and greatly appreciated the encouragement Burroughs gave him. Genesis and Cosey began to gain a greater understanding of Burroughs’ concepts of society, control, cut-up technique, and the use of the tape recorder as a subversive device. The influence of Burroughs’ science-fiction elements were soon felt within COUM performances including a number of pieces based around a character Genesis created called the Alien Brain. The performances made use of several tape machines running at the same time and producing various sounds in conjunction with a light show designed to transport the audience into another dimension.

In January of 1974 COUM presented another performance that foregrounded their interest in Dada and music entitled *Marcel Duchamp’s Next Work*. Audience members were asked to come on stage and perform on what the group called Duchamp Harps while Genesis conducted. The instruments were copies of Duchamp’s *Bicycle Wheel* (1913) sculpture mounted on stools. I have been unable to find recordings of these performances (although it is rumored that one exists), but one can easily imagine several bicycle wheels with their spokes being plucked or even their spinning wheels producing rhythmic noises as different objects are brushed against them, like baseball cards in the wheels of a child’s bicycle. While the reference to Duchamp’s artwork may have linked them to Dada, the language used to describe the composition in a 1974 essay published by the group resonates with John Cage’s musical philosophy: “The score is decided beforehand, it remains constant [*sic*]. The instruments, their performers are strictly arranged and instructed. But beyond this scheme all is discovery,

¹⁸ Genesis P-Orridge, “Uncle Bill,” 1973, quoted in V. Vale and Andrea Juno, ed., *RE/Search: The Industrial Culture Handbook* (San Francisco: V/Search, 1983), 18.

self-coumtrol [*sic*] and intuition.”¹⁹ Genesis and Cosey were using *aleatoric* methods to determine the score, but then created a work that was indeterminate, so that each performance would feature audience members interpreting the instructions in a number of different ways. This concept was very important and would stay with them in the creation of music when they formed Throbbing Gristle. Following these shows COUM began performing more experimental musical works and less theater. Genesis even listed his contact information on posters stating that he was available for lectures at music departments regarding the Duchamp Harps.

In March of 1974 COUM Transmissions performed a new work, *Couming of Age* [*sic*] that included numerous references to Burroughs, and also used tape machines to play the music of the Velvet Underground and John Cale. After one performance an audience member named Peter Christopherson approached Genesis and Cosey and expressed his shared interest in Burroughs. Christopherson soon joined the group, first as a graphic designer, and later in March of 1975 as a performer. Christopherson’s upbringing and education were quite different from that of Genesis and Cosey. His father was the Vice Chancellor of Durham University and Christopherson attended several prestigious boarding schools. After high school he traveled to the United States to attend college at the State University of New York at Buffalo where he took courses in writing, computer programming, theater, and video design. He was not particularly interested in his studies and spent much of his time working as a DJ and exploring

¹⁹ Reprinted in Ford, 4.5. Genesis often altered traditional English words as a way to break the codes of language. In this passage all words that begin with “con” are altered to begin with “coum.” Of course the work of Cage and Duchamp were already linked in many ways and Genesis and Cosey were building on that relationship in their own artwork.

his perverse interests in sexual and medical fetishes.²⁰ Christopherson returned to London in 1974 to work as a design assistant for Hipgnosis, the design firm that had created many famous rock album covers including almost every Pink Floyd cover from *A Saucerful of Secrets* to *Animals*, as well as Yes' *Going for the One* and Led Zeppelin's *Houses of the Holy*. Peter brought a high degree of design skill to COUM and helped to incorporate new technologies into the musical and theatrical performances.

As the word of COUM's shows spread, the group intensified their performances, falling into the same problem that plagued the Zurich Dadaists: an ever-escalating need to shock their audiences. COUM attempted to explore a range of society's issues from the most taboo subjects to issues of language and control. They claimed that their consideration of a particular subject did not mean that they endorsed it. They considered their performances a search for truth in a "decaying Western, capitalist driven, anti-spiritual society," and claimed that one must know one's enemy in order to identify it and describe it.²¹ Yet they were also adamant that any real sense of meaning must lie with their audience. This could be viewed as an avoidance tactic, but it does reinforce how committed they were to carrying out the anti-art aesthetics of the Dadaists. As problematic as this approach was—for COUM, Throbbing Gristle, or particular strands of modernism—it would soon become one of the defining artistic tactics of the entire Industrial music subculture.

By the time Chris Carter met Genesis and Cosey their musical interests were already overtaking the performance-art elements, but Chris' interest in electronics and lighting became

²⁰ When Peter and Genesis first met in 1974, Peter shared his collection of sexual fetish photographs including many homosexual poses and medical operation procedures (hence the nickname "Sleazy"). Genesis arranged for Peter to meet with William Burroughs who also shared an interest in homosexual fetish photographs. Burroughs liked Peter's photos and wanted to use them in his new book, but Burroughs' publisher quickly declined the prints due to their lurid nature.

²¹ Genesis P-Orridge, "Thinking of COUM" (January 2000), http://www.genesisp-orridge.com/index.php?section=article&album_id=34&id=27 (accessed April 6, 2004).

an essential part of Throbbing Gristle's sound and live shows. As Cosey told me in an email correspondence, "Chris' expertise and obsession with technology was the catalyst for everything Throbbing Gristle came to stand for."²² One of the most important musical events of Carter's teenage years had come on November 8, 1968 when he attended a Pink Floyd concert during the *Saucerful of Secrets* tour. Carter recalls:

A whole bunch of us went to see Pink Floyd play at the Fishmonger's Arms pub in Wood Green, North London I took either some speed or acid. It was one of the first gigs I'd been to that had a really good light show, and the combination of the trippy [sic] music and powerful visuals totally blew me away. It was then that I realized how much impressive visuals could complement and influence music.²³

Pink Floyd's space-rock sounds and their massive lighting show would have a lasting effect on him. When he graduated from high school he decided to start his own light show company with a friend and worked a day job as an assistant sound engineer. By the end of 1974 he began using the lighting equipment along with his homemade synthesizers to perform under the name Waveforms. He was often assisted on stage by his art school friend John Lacey who introduced Chris to the members of COUM in the summer of 1975.

Chris Carter's arrival served as the stimulus needed to finally transform the group from COUM, the performance-art group that played music, to Throbbing Gristle, the musical group that featured performance art. Each member's individual skills also allowed for a basic division of labor within Throbbing Gristle. Chris and Peter would handle most of the technical aspects such as building electronic instruments and effects, working tape loops, and playing synthesizers, while Genesis and Cosey would handle the majority of the performance-art elements and perform on instruments at the front of the stage. Genesis played bass and electric

²² E-mail to the author, August 2011.

²³ Ford, 5.14. Genesis also attended a concert on that same Pink Floyd tour.

violin, and acted as the lead vocalist. Cosey played guitar, cornet, and effects, and functioned as an over-sexualized pinup for the band. That last function was more subversive than it sounds as witnessed in the *Prostitution* exhibit, which featured pornographic photos she had posed and been paid for in magazines. She then framed the images as “art” in the ICA gallery.²⁴ Like her adopted stage name, the photos took on a new life in the exhibit where they were meant to question the sexualized nature of women in society and point out that pornography was a legal form of prostitution and one of the only ways women could make a profitable living in British society. Throbbing Gristle was slowly developing out of the performance-art-based COUM in the same manner that the Velvet Underground’s music had developed as a part of the *Exploding Plastic Inevitable* shows produced by Andy Warhol.

Beginnings: Throbbing Gristle

On September 3, 1975, the thirty-sixth anniversary of Britain’s entry into WWII, COUM Transmissions officially began to pursue its musical endeavors under the name *Throbbing Gristle*. The group was first originally formed by Genesis, Cosey, and Chris, but Peter soon joined as a member to create the final musical quartet. Much like COUM, the name *Throbbing Gristle* had been selected by Genesis in order to evoke multiple meanings. In Yorkshire slang it referred to a male sexual erection, as in a throbbing, pulsing piece of meat/flesh, but Cosey and Genesis suggested other possible interpretations in a 1978 interview:

- Cosey: It did describe the way we played, it was throbbing.
Genesis: And gristle is tough but human, like flesh on glass. So it’s tough, and throbbing is also often used to refer to machines and engines. So it is

²⁴ The *Prostitution* exhibit (Oct. 19-26, 1976) was the last official work by COUM Transmissions. It was a main gallery show at the ICA and featured framed photos of COUM performances, photocopies of press clippings, used props from previous performances, and framed photos of Cosey from pornographic magazines. The photos were real. Cosey had posed for 40 magazines and been paid for all of them. COUM made an attempt to link the show to Marx’s statements about the prostitution of the worker in capitalist society. The opening night of the show included a performance by the band LSD who were a combination of successful punk musicians including vocalist Gene October (from the band *Chelsea*) and John Towe (drums), Tony James (bass), and Billy Idol (Guitar) who would soon form *Generation X*.

actually appropriate, but it is also instinctual.²⁵

While the most obvious association for British teens would have been the connection to male genitals and sexual stimulation, Genesis and Cosey make a clever turn in their discussion of the name by suggesting the toughness of it. Gristle is the tough cartilage found in meat that most people cut away as unfit for eating—the hard waste. They connected this particular idea to musical sound. Machines and engines produce tough, hard sounds—both in the sense that they are loud and severe and in that they admittedly may be difficult to listen to. This statement represents the sonic results of TG as a throbbing, pulsing mass of sound created from the timbres and rhythms of machines and factories. But Genesis is careful to remind us that it is also human. The “throbbing gristle” as male sexual erection is a basic part of the male anatomy and is part of what is needed for humans to reproduce, but it is also marked by society as something that should be hidden behind closed doors. In that way it revealed a desire to deal with the taboo aspects of modern society and put them on display.

Throbbing Gristle established connections to several forms of modernism from the very start. Genesis was clear at the time that this did not mean taking modernist thoughts and practices and watering them down into a form that could be digested by the masses. Industrial music was to be the modernist avant-garde functioning within the realm of popular music, and this required that there was an educational aspect to the subculture. The members of TG looked for new ways to communicate these concepts to their audience, as Genesis explained to the *Hayward Annual* in 1979: “We wanted to apply the analysis of the art world to a popular culture archetype and not frighten off the kids, so without them realizing, we were in a way educating them or presenting to them concepts which they would normally just poo-poo [sic] and ignore

²⁵ Ford, 5.16.

because of the way they are usually packaged.”²⁶ The idea was to attract audiences based on the popular-music elements of the group and then feed them a strict diet of challenging musical and political/philosophical material. Genesis often referred to Industrial music as a mini-Dada movement, claiming that his goals had not changed from the COUM Transmissions days, only the vehicle and manner in which the ideas were carried forth. TG quickly began to refine their methods in order to strike a better balance between the popular and modernist elements. For example, while the dystopian narrative was printed as a hand-out for the first AIR gallery show in July of 1976, by October of that same year Genesis was simply reading the text as an opening comment to the audience. It still transmitted the message but the spoken version functioned more organically within the rock music paradigm.

When discussing how their modernist convictions functioned within the world of popular music, Throbbing Gristle surprisingly reproduced Marxist language similar to that of Theodor Adorno. They suggested that one of the most detrimental impacts of industrial society on art and music was the creation of sameness brought on by systems of production and reproduction, recalling Adorno’s concept of pseudo-individualization. TG believed that the development of musical/social formulas in rock-and-roll meant that musicians were only creating slight variations of the same mold, resulting in a suppression of individuality and a move toward uniformity, or what Genesis called a “clone society” (a term he takes from Huxley’s *Brave New World*).

At the center of this position are the core modernist concepts of progress and originality, as espoused by so many composers in the modernist concert music tradition. Genesis explicitly discussed the issue of originality in an interview with *RE/Search* magazine in September of 1982:

²⁶ Ford, 5.17.

There's no way anyone can have the same sound as us and be describing themselves in a truthful way. It's just not possible. . . . It's like going into the Louvre and doing a drawing of the Mona Lisa and thinking you're a fucking artist. That's what they're doing. They'd laugh at somebody who came to them and said, "Hey, I'm really original—look at this pencil drawing of the Mona Lisa." Or, "I've done an exact copy of a Picasso – that means I'm a creative, unique artist." They'd laugh, and then they go and do the same thing with sound.²⁷

Genesis' statements position the creation of new music as an original engagement with sound that must project the artist's individual connection to that particular moment in time. As a result of adopting this philosophy Throbbing Gristle made sweeping changes in their musical sound from one album to the next. The first album, *The Second Annual Report* [Industrial, 1977], is all noise and fury while the third, *20 Jazz Funk Greats* [Industrial, 1979], contains the song "Persuasion," which Genesis referred to as his Frank Sinatra cabaret song. By constantly developing and changing their musical sound and style, they kept listeners, reviewers, and detractors off guard. Just when the sound of a particular album or performance gained a level of acceptance by their audiences (either in the form of record sales or concert attendance), TG would alter it. These constant musical changes also seemed to cause changes in who was actually in the audience. Based on numerous reviews and fanzine articles it is clear that the audience was predominantly middle-class, educated, and male, but details on exactly who they were is disputed. In an August 1979 article in *New Musical Express* journalist Peter Archer claimed that the shows attracted only an "art school" audience who was willing to "plug in and feed," to interpret the messages.²⁸ But Throbbing Gristle biographer Simon Ford claims that correspondences received by the band prove that at least their listening audience was much larger and "consisted of people from a variety of social classes and professions."²⁹

²⁷ Vale and Juno, ed., *RE/Search*, 11-12.

²⁸ Peter Archer, "Throbbing Gristle," *New Musical Express*, August 11, 1979.

²⁹ Ford, 9.9.

While Genesis typically portrayed Throbbing Gristle with the loftiest of motives, Cosey was more willing to admit that much of their work, at least in the beginning, was also meant to be ironic. She suggested that TG were looking to break down the preconceived notions of sound and what a band could or should be, but they accomplished this with less than virtuosic musical performances. “TG started off as a joke in the beginning. We were quite serious about breaking down the ‘rock and roll’ thing, but it was tongue-in-cheek at the same time because we knew we were giving them a load of rubbish soundwise [sic] just to get them out of their expectation of music.”³⁰ The popular music press also questioned the true musical value of TG’s early music.

A *New Musical Express* review of an October 1976 show at the Institute of Contemporary Arts (ICA) stated that “the band went into their, uh, music, which consisted of lots of weird psychedelic taped sounds rolling around random keyboards played plink-plonk style, lead guitar that Patti Smith would have been ashamed of and moronic bass.”³¹ In 1981 after the breakup of the band Jon Savage wrote, “TG are now part of the rock canon, they have left a ‘significant body of work’ behind. Their only problem, and the last laugh, is that it’s all junk really—as serious or as meaningful as you want to make it.”³²

Throbbing Gristle’s music maintained a high level of humor and irony, but by 1977 they started to present it in a much more serious and calculated way. A common language began to develop between them and their audiences, and the wild frantic live shows began to make sense to those who attended regularly. Throbbing Gristle claimed that they were presenting a kind of

³⁰ Neil, 216.

³¹ Tony Parsons, “But Mutilation is so Passé...,” *New Musical Express*, October 30, 1976. A recording of the show can be heard on IRC 2, *TG live at ICA, London*.

³² Jon Savage. Written in 1981 and reprinted in the liner notes to the *20 Jazz Funk Greats* CD [Mute records, 1991]. I will return to the issue of irony and interpretation with the first generation as a whole in chapter 5.

secret code that could be deciphered if one read the proper books, listened to the proper music, and went to the right places. The members of TG spent a lot of time talking to the popular music press and publishing their own material about the modes of perception needed to understand their music. They had a sense of the proper way to hear their music, but audiences needed to have newly trained ears to do so.

This conception of music is similar to philosophies presented by composers like John Cage and Milton Babbitt, but adapted to a popular music aesthetic. Like Cage, Throbbing Gristle was attempting to free listeners from expectations about what constituted a good sound, to allow sound to be free from previous aesthetic constraints. But over time Throbbing Gristle developed a musical language that used particular codes and challenged audience members to hear the music within a specified frame. This is similar to the aesthetic position of Milton Babbitt who advocated the composition of complex and detailed musical works that required an educated listener. One of the central properties Babbitt assigns to new music could also work as a guide for understanding the music of the first generation of Industrial:

Musical compositions of the kind under discussion possess a high degree of contextuality and autonomy. That is, the structural characteristics of a given work are less representative of a general class of characteristics than they are unique to the individual work itself. . . . Here again greater and new demands are made upon the perceptual and conceptual abilities of the listener.³³

Babbitt proposed that composers should not limit their creativity to an easily understandable musical language. In order to create a modernist philosophy of listening that would work within a form of popular music, Throbbing Gristle combined the two musical concepts and twisted them ever so slightly. Within their work sounds exist as sounds so that anyone can access the

³³ Milton Babbitt, "Who Cares if You Listen?" reprinted in *Contemporary Composers on Contemporary Music* (expanded edition), ed. Elliott Schwartz and Barney Childs (New York: Da Capo, 1998), 246.

music and become a part of the audience. But TG also wanted to create musical works that were unique and interesting, so they adopted something similar to Babbitt's concept that was applied across a series of musical works.

In order to make a connection from one work to the next they used a loose code of ideas and suggested to their audience particular ways to listen to the music. Within this system of creation and reception, audience members needed to be willing to work for an understanding of the music. This functioned quite well within a popular music framework since audiences could come deeper into the subculture if they wanted, but they could also stay on the outside and just listen. It is important to realize how this is different from the popular modernist works discussed in chapter three. The music of the Velvet Underground, Pink Floyd, and Can did not go as far as to suggest that listeners needed to develop new modes of listening, or that separate musical works might somehow be decoded via a set of musical and cultural codes.

Sounds/Tapes: Early Sonic Experimentation

Throbbing Gristle's earliest recorded experiments were made in a small homemade studio they created thanks to the electronics expertise of Chris Carter and Peter Christopherson. The first recordings produced in 1975 were raucous studio jams that were copied onto cassette tapes and mailed to twelve of their friends with the title *The Best of Throbbing Gristle Volume 1* [Private cassette, 1975]. The tracks on the tape were purely instrumental and the packaging did not list any titles or information. TG then produced fifty copies of a cassette that featured both studio recordings and live performances called *The Best of Throbbing Gristle Volume 2* [Private cassette, 1976].³⁴ The music on these tapes was not widely available at the time, but serves as

³⁴ While these tapes were produced in a very limited quantity the music contained on them was later released on a number of unofficial albums and cassettes. It was finally released in its original form on CD in 2001 by the label Thirsty Ear and called *The First Annual Report of Throbbing Gristle* [Thirsty Ear Records, 2001].

an excellent document that shows Throbbing Gristle learning their craft. The tracks contain a number of fundamental elements from punk rock and garage bands, found-sound tape compositions, and machine music and factory rhythms, and these sounds that will later function within the musical archetypes of the first generation of Industrial music.

The music on these early tapes mixes together multiple sonic ideas and blurs the lines between different performance modes. Both live performances and studio-based tape manipulations can be heard within the eighteen-minute track, “Very Friendly.” This track showcases the manner in which the band could approach the same musical material from two very different perspectives. The first section of “Very Friendly” is a live recording made at an ICA concert and the second section was created by using a tape machine to manipulate the same performance. While the live section features a number of musical cues that will later become important within what I will define as the punk-garage archetype of the first generation (live instruments, use of distortion, repetition), the second section looks forward to cues of what I designate as the Ambient-Noise archetype (recorded found sounds, use of tape-loops, long-held synthesizer tones).

The live section begins with a distorted bass line repeating a limited number of notes at a quick tempo, primarily on the pitch Bb with an occasional auxiliary tone on F (although the instrument is slightly out of concert tuning). Like many of Genesis’ other bass lines this is a very simple pattern that is easy to play on the first fret of the E and A strings. Various other sounds that are highly distorted such as synthesizer, filtered white noise sweeps, guitar fuzz tones, and spoken word vocals by Genesis blast out at seemingly random intervals. This sound was typical of TG live shows from this time and captures the sonic barrage and repetition of these performances. The live section comes eventually comes to an end and leads into a section

created through studio tape manipulations.

Throbbing Gristle placed the most dramatic moment of change in the entire piece on an important astrological number, thirteen—an idea that Genesis borrowed from both Cage and Burroughs. TG often used the thirteen-minute mark in their music as a focal point for large changes, including the musical set discussed at the start of this chapter as shown in table 4.1. Genesis believed that some of the oldest totems of the world held a power, and that those particular points of mysticism could create a catalyst that would jolt audience members.

The ending section of “Very Friendly” is made up of the more elaborate and structured sounds that were maturing in the experimentations of Christopherson and Carter. They subjected the raw live performance of the first thirteen minutes to studio manipulation and editing in the same way that Holger Czukay had done with the recordings of Can. “Very Friendly” features tape-editing techniques adopted from the avant-garde mixed with synthesizer patterns and loops that were placed around the tape edits in order to stretch and compress the musical phrases and create an ambient atmospheric effect. For example, Genesis’s voice floats above the music with endless echoes of the phrases “very friendly” and “there’s been a murder.” The echoed voices slide smoothly in and out of the foreground, mixing into the distance and hiding below the synthesizer hums and electric violin bowing (also treated with echo effects that frequently create what sounds like whale calls, or screeching birds). The words glitch in several places causing Genesis’ vocals to stutter, “there’s been a mu-mu-mu-mu-murder-er-er-er...” Samples of other voices taken from the radio speak too softly to make out what they are saying, but add to the overall texture of the section.

Another formative track from the early period is “Final Muzak,” also labeled “Industrial Muzak” on the later Industrial Records release IRC23. “Final Muzak” is a pure studio

experiment that creates a post-apocalyptic machine-sound world, a side of Industrial music that was more frequently taken up by other first-generation bands, and sets the foundation for the Experimental-Noise archetype. The track uses minimalist pitch and rhythmic patterns, extreme repetition, drones, electronic sound sculpting, and metallic percussion sounds playing factory-like rhythms—including several timbres that sound like John Cage’s prepared piano in *Sonatas and Interludes for Prepared Piano*.

The connections to Riley-style minimalism can be heard in the main rhythmic/pitch pattern that is constructed from three-note permutations of the pitches F, G, and A. These are pounded out while various types of distortion, delay, and ring modulation alter the notes with added side-bands and detuned doublings. The four measure section shown in example 4.1 occurs right at the start of the piece and demonstrates a number of the permutations and changes that are made in the metallic percussion sound throughout the five minutes of “Final Muzak.” Sometimes the pattern is altered so that the pitches play in a different order as in measures one, three, and four of example 4.1. Sometimes the pitches remain the same and only the rhythm is changed as in measures one and two. The patterns are also shifted rhythmically within the measure as seen in the difference between the placement in measures one and four. Sometimes the entire structure is radically upset with the addition of a single measure in a different meter, often 2/4 or 3/4, so that the meter shifts to shorten the length of the rhythmic/pitch pattern against the constant underlying pulse.

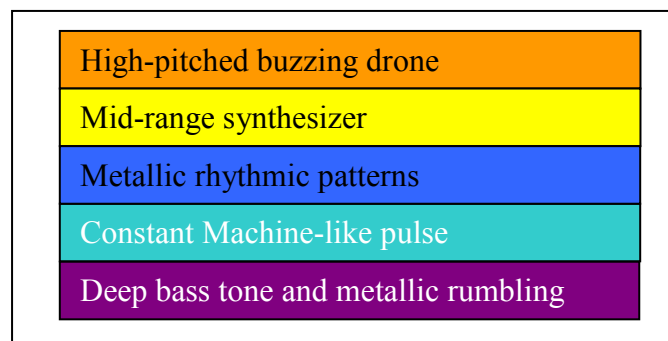
Example 4.1
Sample rhythmic/pitch patterns in Throbbing Gristle’s “Final Muzak”

Metal hits



The sound sources used to create this metallic percussion pattern are almost impossible to identify. It could be played on a synthesizer, picked bass guitar, or a guitar with slackened strings (depending on its timbre at any particular moment), but the sound also contains strong elements of metal being struck by metal. The pitches are easy to finger on the bass but the constant shifting rhythmic complexity of the part seems to be above the performance ability demonstrated by Genesis on other tracks. The sound is most likely the result of several instruments and metallic percussion edited together on a tape machine into specific patterns and loops that result in a complex sound mass that shifts its timbre from one moment to the next depending on how the elements are combined and mixed. The rhythmic/pitch pattern is used in conjunction with a high-pitched buzzing drone, a synthesizer hum, a constant machine pulse, and a low-pitched metallic rumble to create five layers of noise that fill the soundscape as is shown in example 4.2. Each of these sounds remains in its own respective register and space and never directly interacts with the other sounds. The only major changes from this blueprint during the entire five-and-a-half minutes come from the occasional vocal shouts and cries and noisy synthesizer blasts.

Example 4.2
Sound layers in Throbbing Gristle’s “Final Muzak”



The music is a mixture of John Cage’s percussion and prepared piano works, the sustained drones of LaMonte Young’s minimalism, and the repeated rhythmic/melodic patterns

of Terry Riley. There are, however, a number of major differences between the work of those composers and Throbbing Gristle. Riley's *In C* is a progression from one musical state to another through a process that, while indeterminate during performance, is still goal-oriented. Throbbing Gristle's music is not, and the changes in pitch and rhythmic placement never develop into a recognizable pattern or create a sense of progress. The overall sonic impression of "Final Muzak" sounds very close to the distorted and clipped machine-like sounds of Stockhausen's *Etude* [1952], although the composer's careful construction of noise-based melodic phrasing is almost nowhere to be heard in the Throbbing Gristle track. Both "Very Friendly" and "Final Muzak" show Throbbing Gristle experimenting with avant-garde and popular-music sounds within live performances and studio situations or, as in the case of "Very Friendly," finding ways to blend the sound of the two into one musical work.

Beginnings: The Formation of Industrial Records

Once Throbbing Gristle established itself as a live performing band, and started to release official recordings, they began to search for a record label to distribute their music. They quickly discovered that most labels were only interested in them as a novelty act. When the Artist and Repertoire (A&R) director of Virgin Records contacted them he had not even heard their music, and had only read about their live shows in *Sounds* and *New Musical Express*. Virgin offered to sign them but insisted that the label would have total artistic control of the music. This went against every fiber of Throbbing Gristle's artistic mission. They also discovered that their share of the money made from the sale of each album was a very small percentage of the retail price. This was common practice in the music industry but the members of Throbbing Gristle had not been exposed to this part of the music industry before. For them the solution seemed clear: create their own organization that could remain autonomous, an

independent record label and recording studio that would allow them to produce music by themselves as they saw fit. The creation of their own record label and business was the convergence of many of the musical and philosophical ideas they had been building over the previous several years. The way in which they framed and presented the label also served as an organizational prototype for the Industrial music subculture that began in the late 1970s.

To brand this new organization, Throbbing Gristle began using a word that would also serve as a musical stylistic marker, a philosophical ideology, and a marketing slogan: *Industrial*. Initially they considered the idea of calling it Factory Music, named after Andy Warhol's art factory, but decided that the word factory represented a place and not an ideal. What they wanted was something that could suggest a larger philosophical concept and the dilemma of the modern crisis. In late 1976 an American artist named Monte Cazzazza, whom Genesis and Cozey had recently visited in the US, suggested the slogan "Industrial music for Industrial people." Here, quoted at length, is Genesis' account of the reasons they finally decided to use the word *Industrial*:

There's an irony in the word "industrial" because there's the music industry. And then there's the joke we often used to make in interviews about churning out records like motorcars—*that* sense of industrial. And up till then [popular] music had been kind of based on the blues and slavery, and we thought it was time to update to at least the Victorian times—you know, the Industrial Revolution. . . . And "industrial" has a very cynical ring to it. It's not like that kind of romance of "paying your dues, man"; of being "on the road"—rock'n'roll as a career being worthwhile in itself, and all that shit. So it was cynical and ironic, and also accurate. And we liked the imagery of factories . . . we thought there was a whole untapped area of imagery and noise which was suggested when we thought of "industrial" And there's also *industry*, like *work*—putting a lot of work into it.³⁵

Genesis actually says very little about the connections between the word *Industrial* and the

³⁵ Vale and Juno, 10-11. The italics are in the original.

sound of the music although some key elements may be implied. Later in the same interview he describes industrial culture as being like a cut-up that takes in the noises and images of the modern world and uses them as material for a new artwork, but that statement is more about technique than it is about sound. Did he feel that the musical connection of the word was too obvious for him to mention, and thus giving only one reference to factory-like noise sounds? There was a connection back to Kraftwerk, who often used the word *industrial* during the mid-1970s to describe the sound and method of their music, and had also pushed the connection back further to the manifestos of the Futurists. While Genesis and Cosey had explicitly connected the name of the band Throbbing Gristle to the qualities of the sounds that they produced (throbbing, tough, etc.), it appears that the moniker *Industrial* was conceived to represent a larger unifying concept related to the modern crisis. Genesis' statement places a strong focus on visual imagery such as factories—the same imagery and language that was used by Kraftwerk to describe the musical influence of Düsseldorf. Genesis also relates the idea of a factory to the production methods of a record label churning out albums for consumption. Factories, industry, and work define what they do, an idea that conceptually connects back to the language and ideas of Karl Marx and the means of production within capitalist society.

His references to slavery also raise the issue of race and music. Genesis suggested that Industrial music was attempting to break away from the African-American blues-based modes of music making that rock-and-roll was built upon. The history of rock-and-roll and popular music in the United States was built on particular racial divisions, tensions, and overlaps, as Reebee Garofalo has suggested: “by all accounts, the eruption of rock ‘n’ roll entailed a profound shift in cultural values on the part of mainstream youth, a shift away from European

American sensibilities and toward African American ones.”³⁶ Genesis places the “new” Industrial music paradigm against the “old” blues music paradigm in a way that functions within the modernist ideal of originality, but it also prompts major questions regarding the idea of racial and social division in Industrial music. How much Genesis actually knew about the racial components of the history of rock-and-roll and American music is hard to determine, making it difficult to establish what implications he was purposefully constructing and what he may have simply stumbled upon (although based on his careful use of words to educate or entice it seems unlikely that he was unaware of the implications of this statement).

Genesis does not appear to be suggesting that the African-American basis of rock and roll is universally inauthentic or that it can have no meaning, but he does suggest that an updated and more European mode of expression is needed for the white, mostly male, teenagers in the UK during the 1970s. For TG, the idea of a 1960s band like Led Zeppelin or the Yardbirds traveling around playing the blues did not speak to the actual problems of the young white youth in England. Something new must be constructed. One of the most important aspects of Genesis’ statement is the active role that he suggests Throbbing Gristle should take in writing and controlling their own history. They must also be cautious not to adopt a history that is disconnected from their own experience. Unfortunately these very same statements set a precedent within Industrial music that was not quite racist, but did privilege a white working-class agenda—and one that was also predominately male. This also has the long-term effect of predisposing both the performers and audience for Industrial music as almost entirely educated working-class white males.

The name *Industrial Records* was officially registered on January 6, 1977 and the

³⁶ Reebee Garofalo, *Rockin’ Out: Popular Music in the U.S.A.*, Fifth Edition (Boston: Prentice Hall, 2011), 7.

members of Throbbing Gristle opened a recording studio and office in a rented old factory that Cosey and Genesis had been living in and working out of since 1973. The liner notes to a live concert released on Mute records as *TGCD1* [Mute, 1986] feature a mission statement written by Genesis in 1986. It was intended to be a reflective general history of Industrial Records, and while it was written almost ten years after the start of the label, and five years after it ended, it still remains one of the clearest statements regarding the mission of *Industrial Records*. It is quoted here at length:

Industrial records began as an investigation. The four members of Throbbing Gristle wanted to investigate to what extent you could mutate and collage sound, present complex non entertaining noises to a popular culture situation and convince and convert. We wanted to re-invest Rock music with content, motivation and risk. Our records were documents of attitudes and experiences and observations by us and other determinedly individual outsiders. Fashion was an enemy, style irrelevant.

We wanted to also investigate music as a Business phenomenon and propose models of commercial operation. . . . We wanted to make music and records more effective and relevant to our Industrial society, and we wanted to make business more efficient and creative as well. Industrial Records Limited was born. Named as the most unromantic yet appropriate title we could envisage. Big record companies produce records like cars; we are connected to a contemporary social situation, not a blues orientated past style; we work hard for what we want, we are industrious; we parody and challenge large industrial companies and their debasing ethics and depersonalization; we work in an old factory; industrial labor is slavery, destructive, a redundant institution so we call it the Death Factory. Music from the Death Factory, from the world, from life. . . . Our Records are a combination of files on our relationship with the world and a Newspaper without censorship. . . . You get what you are given, and what you are given is primarily conditioning that pushes you towards blind acceptance, wasted labor, frustrated relationships and a vast sense of hopelessness.³⁷

This mission statement was a performance in itself, referencing many of the various forms of modernism that Throbbing Gristle had engaged. The categorization of recordings as files and

³⁷ Genesis P-Orridge, liner notes to *Throbbing Gristle CD1* on Mute Records [The Grey Area of Mute, TGCD1, 1986]. This CD was a re-release of a live studio set from March 18, 1979. As a side note, Genesis ends the liner notes by referencing the title of the last Industrial Records release (IR0016, 1981), a recording of William Burroughs spoken-word tapes, “Nothing Here Now but the Recordings.”

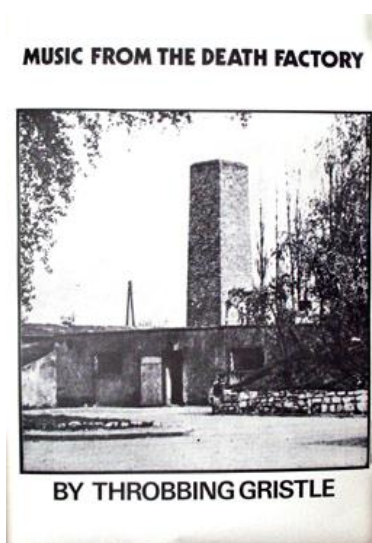
records of a particular moment in time, not as timeless art works, was an extension of the Dada ideals they had used years before in COUM. But the words *files* and *records* also had a second technological meaning that related to the synthesizers and computers they were using to produce musical records. There are references to Marxism and a denouncement of industrial labor. The way Genesis describes their work highlights the modernist rejection of the Romantic and pastoral with its mention of the “unromantic” and the denunciation of older musical styles and traditions such as the blues. It suggested that their music was designed for the modern world and proposed an alternative form of communication that speaks for the unspoken. The mission of Industrial Records declared that those in power were brainwashing the working class and shackling them in perpetual and unrecognized servitude via an invisible system of control. Industrial Records was conceived of as a step down the path to a new collective consciousness, a news outlet without censorship.

The philosophy behind the word *Industrial* permeated every aspect of their work, from the sounds of the music, the artwork in ads, posters, and album covers, their language in interviews and written documents, and their appearance and photographs. Each one of these manifestations connected to the larger philosophy and used some element of the system of codes that Throbbing Gristle had begun to develop in its music. Each artwork or business product would function within the larger Industrial philosophy.

Despite the radical musical changes Throbbing Gristle made in their six years of existence, the underlying philosophical concepts remained rather consistent. Throbbing Gristle were connecting the different parts of their work as one big concept; the music was Throbbing Gristle, the business was Industrial Records, and the studio/office space they created was named the Death Factory. The program from the very first TG performance at the AIR gallery, “Music

from the Death Factory” now served as part of the ideological framework for the entire endeavor. This seemed appropriate—the studio was positioned as a musical factory where human and machines created products and noise throughout the night. But even though the Death Factory name worked as a sonic and philosophical connection, the references to the Nazi Germany gas chambers at Auschwitz still remained.

Example 4.3
“Music from the Death Factory” artwork



This connection was made explicit in the black-and-white photo of the concentration camp used as the logo for Industrial Records and on posters like the one in example 4.3. The death-factory logo stood side-by-side on their album covers with similar-looking pictures of Tesco warehouses (a major British convenience store chain), and photos of the studio space. All of these combined to present an image of industrialized modernist society gone haywire, a world in which the good and the bad were undistinguishable from one another. The band’s contempt for the British social system in decline was juxtaposed with the idea of marching people into the ovens of Auschwitz and certain death, a theme that was also used on the previously mentioned “Zyklon B Zombie.”

The use of provocative historical images was part of a calculated chess game the band played against what they saw as the dominant forces of society. Throbbing Gristle and Industrial Records placed themselves as guerillas in the system, using the enemies' weapons against them. It was hoped that the reaction to the Industrial Records marketing campaign would force their audiences to realize that the same kind of propaganda techniques were being used against them in a more subtle way by those in power. When asked how they could put such images on their records Genesis responded that, "A factory has no guilt. It is just a building. It is the human beings who use it that determine our attitude."³⁸

The band also spread their anti-propaganda propaganda by releasing a small newsletter to anyone who purchased recordings from Industrial Records called "Industrial News." This small newspaper continued the informational focus of the group and also helped to create the Industrial-music subculture by educating their listeners in the social/political/philosophical interests of the group. Issue by issue, this paper helped to link together modernist thought from the last two hundred years and begin to tie it together into the history of the Industrial subculture. The last step in their aesthetic development came in the form of the very first official Industrial Records release.

Noise and Fury: *The Second Annual Report*

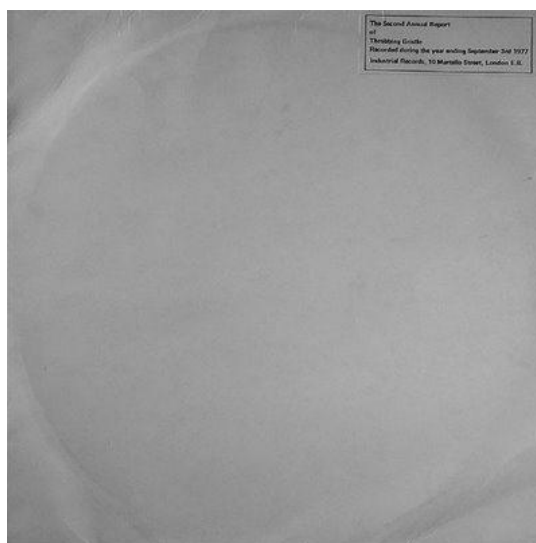
The Second Annual Report of Throbbing Gristle [Industrial Records, IR0002, 1977] is one of the most important albums in the history of Industrial music. It was the first official record released by Industrial Records under the misleading catalog number of IR0002, giving fans the idea that they had already missed out on something.³⁹ It was also the first album officially created in the Industrial-music style. The graphic design of the album was developed

³⁸ P-Orridge, "Hard Listening."

³⁹ There never actually was an Industrial Records release with the official catalog number of IR0001.

by Christopherson, who was tired of creating psychedelic gatefold album covers for Hipgnosis, and wanted the first TG/IR release to embody their industrial modernist philosophy. To accomplish this he packaged the record in a plain white sleeve with a small sticker attached to the upper right corner which read “The Second Annual Report of Throbbing Gristle. Recorded during the year ending September 3rd 1977. Industrial Records, 10 Martello Street, London, E.8.” This gave the record the appearance of a government document or a file as seen in example 4.4.

Example 4.4
Front cover of *The Second Annual Report of Throbbing Gristle*



This perception was reinforced by an insert placed inside the packaging that contained an essay written by Genesis (once again using the title “Music from the Death Factory”), a small photo of the band, and a photo of the Auschwitz ovens. The essay was written using the language and style of an annual corporate report written to stockholders. It stated that the band had established a solid business foundation and expected excellent progress in production, performance, and capital expenditures in the next year. It also briefly explained how and when each track of the album was created as if it were documenting the fact for business records. The

package also included a bumper sticker that read “Nothing short of a total war” and a red and black sticker which showed the Throbbing Gristle flash logo (discussed in chapter five).

The music of *The Second Annual Report* is harsh, tough, and unforgiving. There are no traditional songs and the sound of the album is closer to the electronic music recordings of Schaeffer, Stockhausen, and Cage in its use of timbre. Large swaths of buzzing sound flow into sharp rhythmic pulsing, despite the absence of percussion instruments. The electronic manipulation of found sounds and voices takes center stage. The record consists of only four songs: “Industrial Introduction,” “After Cease to Exist,” “Slug Bait,” and “Maggot Death;” however, the last two appear in multiple versions, bringing the total number of tracks to nine. The majority of the album consists of live recordings that capture the performative nature and unique sounds of each particular musical event. “Industrial Introduction” is a minute-long piece composed entirely for synthesizer in which three overlapping distorted tones rise from a low A up to the C above middle C. The timbre is best described as a metallic wind that becomes louder and closer to the listener as the track progresses. This short introduction serves to clear the listener’s aural palate and also builds tension. The entire second side of the album is filled by “After Cease to Exist,” which was originally the soundtrack to the film of the same name. It explored TG’s developing studio techniques and interest in Schaeffer’s *musique concrète*.

The different versions of “Slug Bait” and “Maggot Death” illustrate Throbbing Gristle’s philosophy regarding multiple musical realizations. The multiple versions of these two pieces stem from Throbbing Gristle’s belief in spontaneous performance, Dadaism, and indeterminacy, and they often resisted the urge to finalize any musical composition. “Slug Bait” and “Maggot Death” are both based on simple frameworks that appear in each version of the song, something as simple as a two-chord progression or a timbral sequence. These musical instructions were

not known to the audience, and in most cases still have not been revealed. Throbbing Gristle created the instructions as a frame for each particular performance and the execution of these instructions changed from one performance to the next (much like the composition of *Marcel Duchamp's Next Work*). The closest link is to LaMonte Young's concept-art pieces based around a simple instruction or a concept that allowed the piece to be open-ended in terms of time, frequency, and timbre. In a letter to a friend in April of 1978 Genesis commented, "Yes we improvise always on stage. Thee [sic] instructions we agreed 30 minutes before we played on March 3 were simply 'First 10 minutes slow ominous, then rhythm section, then 20 odd minutes, see what happens, 3 minutes of tapes, rhythm section, wall of sound.'"⁴⁰

"Slug Bait" is presented in three different versions that were edited from three separate live performances in the previous year. Much like the recording of "Very Friendly" from the early tapes, there is a tension at play between the live elements and the studio manipulations, except that *The Second Annul Report* presents a number of different interpretations that stand on their own. The first is a live performance that highlights the punk-like live sound of the band while the last is complete studio manipulation of recorded sounds. The second version of "Slug Bait" works as a kind of sonic bridge between the two worlds and contains aspects of the other two.

The first version is just over four minutes long and features synthesizer, guitar, and bass. All of the instruments stay in a low register and are processed with a tremendous amount of distortion and reverb. Each instrument plays a different rhythm and uses a different set of pitches, but the three frequently overlap and effectively mask each other, creating a mass of noise sound that rumbles, groans, and pulses with an undefined non-metrical rhythm. Over this

⁴⁰ Ford, 8.13. The members of Throbbing Gristle may have been inspired by similar ideas within the free jazz movement, but I have found nothing to confirm that connection.

foundation Genesis delivers a “dead-pan” spoken text with occasional sharp shouts or falsetto cries that are as disturbing as they are unpredictable. The lyrics to this version of “Slug Bait” tell of a vicious factual murder of a husband, wife, and their unborn child in a series of brutal torture scenes (a lyrical theme that was also used in “Very Friendly”).

The second version of “Slug Bait” is only two minutes long and is centered around a plucked A flat bass note (with an upper neighbor B) that is processed by an eighth-note analog delay that is set to repeat the note exactly one eighth note after it is first played. Unlike the first version the bass is played using a clear tone which allows space for a number of distorted guitar and synthesizer bends to play above it. The final version of “Slug Bait” is only one minute long and uses “sampled” spoken word texts. The murder theme of the first version continues as TG samples a Charles Manson interview where he describes the grizzly murder of Sharon Tate. This is followed by samples of a radio announcer reporting the murder. The dialogue was recorded off the radio and onto magnetic tape and was played by Peter or Chris during many live shows, at which time they could also process the tape with other effects or alter its speed. The interview is disturbing and begins with Manson saying, “Well, my first intentions were to rape her.” A low synthesized bass tone plays below the spoken-word elements.

The question remains whether or not we choose to hear any of their performances as music, or noise, or as nothing. Is it sound and noise as a political protest, or is it just unpleasant sonic rubbish that we are supposed to be fooled into believing has some cultural importance? In a 1981 interview Genesis reflected on the moments after the group finished editing the first *Throbbing Gristle* album: “When we finished that first record, we went outside and we suddenly heard trains going past, and little workshops under the railway arches, and the lathes going, and electric saws, and we suddenly thought, ‘We haven’t actually created anything at all, we’ve just

taken it in subconsciously and re-created it.”⁴¹ The release of *The Second Annual Report* found TG surprisingly accepted by many critics and their shows drew larger and larger audiences. As they became more popular, TG became ever more confrontational with their audience, wanting to “wake-up” the trendy kids who came to see the shows. They placed high-power Halogen lamps on stage and directed them at the audience. They used strobe lights and an industrial strength Negative Ion Generator and aimed them at the crowd. They placed a punch clock on stage and would only play for one hour—no more, and no less—punching in and out as they walked on and off stage. But the genie was now out of the bottle, and the sounds of Throbbing Gristle and Industrial Records began to spread and find other musicians willing to take the same journey. Musicians like Cabaret Voltaire, who had already been working on their own version of tape-edited noise music, were willing to join the club and become a part of the next Industrial revolution and a new musical subculture.

⁴¹ Vale and Juno, 11.

“Spread the Virus”: The First Generation of Industrial Music and Culture 1975-1983
Chapter Five

Cabaret Voltaire are out to clarify, not confuse. The Voltaire process is like keeping a diary. Their records are thoughts, essays, jottings, expressions of feeling, transmissions of understanding. It’s product and it’s not product. *The Voice of America* is a challenging, struggling, fascinating development upon the musics of the Velvet Underground and Faust, a radical hybrid of pop economy and avant-garde freedom. Cabaret Voltaire have matured their sound so that it is one of the most unsettling and effective distortions of pop music: that is parody and paean, violent and vivid. . . . This is my Cabaret Voltaire. It should be yours.

“The Heart and Soul of Cabaret Voltaire”
New Musical Express, 1980¹

The growth of the Industrial music subculture in the late 1970s was the result of musicians in England and Germany who actively incorporated and entwined the various ideologies, movements, artworks, sounds, and histories discussed in previous chapters. Throbbing Gristle had created a sonic and intellectual template and other musicians soon began to work with tape machines and synthesizers, jackhammers and sheet metal, to produce similar soundscapes. Many of these groups began to perform together in clubs and eventually formed a small music scene. Cabaret Voltaire, from Sheffield, who had been producing tape music experiments as early as 1974, began traveling to London in order to perform with Throbbing Gristle. Industrial Records expanded beyond the music of Throbbing Gristle and signed artists such as Leather Nun (Sweden), Monte Cazazza (USA), SPK (Australia), and Clock DVA (England).

¹ “The Heart and Soul of Cabaret Voltaire,” *New Musical Express*, November 29, 1980. All grammatical mistakes are reprinted as they were in the original text. The title of this chapter, “Spread the Virus,” is taken from a Cabaret Voltaire song on the album *Red Mecca* [Rough Trade, Rough 27, 1981].

Industrial music found a second home in Germany, where it reconnected with its Krautrock origins, and fashioned a new variant that used metallic percussion ensembles and factory rhythms while continuing to express a sense of political urgency. These musicians commented on Germany's recent past and posed poignant questions for its future, reflecting on what they believed to be the realities of life in post-WWII Germany. By the late 1970s and early 1980s independent record labels such as Factory Records, Some Bizarre, Mute, and Rough Trade appeared in England and released music by Industrial-minded bands including Joy Division/New Order, Cabaret Voltaire, Test Department, Coil, NON, The Swans, Einstürzende Neubauten, Deutsch-Amerikanische Freundschaft (DAF), and Die Krupps.

During the eight-year period from 1975 to 1983 Industrial music was shaped by a sonic collection of musical cues and archetypes, and a growing subculture whose members believed they could break down the retaining walls of society and reveal the rotted dystopian landscape that rested just beyond. First generation bands were serious about engaging the past, and creating a specific, relatively unified history for themselves. Musicians made a conscious effort to connect musical sounds and techniques with political strategies of activism and modernist modes of philosophical thought. Many of the cultural and musical elements put in place by Throbbing Gristle starting in 1975 were assembled into a larger subcultural style by a group of journalists, fans, musicians, and small independent record labels.

As mentioned in the introduction, the fans and audience members of the subculture tended to be white, Western, educated, middle-class males. While I have found many fanzine and magazine articles that discuss the general makeup of the Industrial audience, and provide excellent commentary on the musical and philosophical issues discussed by them, the descriptions of the audience are simply not detailed enough to create a more precise picture. My

own involvement in the subculture beginning in 1988 in the United States as a fan and musician confirms the same general demographic, as does the work of other authors such as Karen Collins.²

Jon Savage's "Introduction" to the *Industrial Culture Handbook* in 1983 serves as a starting point for this investigation by providing a glimpse into how the subculture viewed itself at the close of the first generation, and also allows for a critical look back on that assessment. While Savage's article remains an important historical document, it has tended to limit the understanding of Industrial music and led to many heated debates over the true nature of the style. Several authors studying Industrial music have taken Savage's article into consideration, including Brian Duguid's online article "A Pre History of Industrial Music" and Karen Collins' dissertation *The Future is Happening Already: Industrial Music, Dystopia and the Aesthetic of the Machine*, but none of them have analyzed Savage's assessment in connection with Industrial's self-created history or the musical lineage beyond 1983.³ Collins states that her focus is on the vague sonic "anti-music" aspect of Savage's assessment, which allows her to develop methods for popular music genre studies. While this focus lets Collins paint a broad picture of the style, it fails to capture the web of historical and cultural influences that are essential to an understanding of the subculture and the evolution of the music.

In this chapter I use Savage's categories as a starting point for an investigation into the major subcultural themes of the first generation while in the second part of the chapter I explore how specific social and cultural concerns led to the use of particular musical cues and the

² Karen Collins, "The Future is Happening Already: Industrial Music, Dystopia and the Aesthetic of the Machine" (Ph.D. Thesis, Institute of Popular Music, Liverpool, UK, 2002). Collins conducted a survey of Industrial music fans that yielded the definition of audience members. Any more detailed information she collected is not applicable to this current study since it relates to the audience in 2001 when she conducted her survey.

³ See Collins *The Future is Happening Already* and Brian Duguid, "A Pre History of Industrial Music" at <http://media.hyperreal.org/zines/est/articles/preindex.html>, 1995. (accessed May 6, 2010).

creation of what I call the five Industrial music archetypes. My reason for this approach is to bring together two critical viewpoints on the Industrial music subculture that have remained separate in engagements with the music until this point: a detailed musicological analysis of the ways that musicians created and performed their music, and an understanding of the self-created modernist history that allowed musicians and fans to bestow the music with social/political meaning and consider it as being equal parts popular music and avant-garde experimentation.

Reporting on the Subculture

During the 1970s British journalist Jon Savage reported on alternative and experimental music for publications such as *Sounds*, *The Face*, and *The Village Voice*. Early on he became a strong advocate for the new sounds of Industrial music and in November 1977 he contributed to an important issue of *Sounds* magazine that examined experimental bands such as Kraftwerk, The Residents, and Throbbing Gristle. The issue grouped these bands together under the single moniker of New Musick, reportedly in some vague reference to German electronic music and Krautrock, but it also gave credit to the sounds of Velvet Underground and Pink Floyd. Even though Savage and his fellow writers were looking to unite a broad swath of musical styles into the category of New Musick, their focus was on the growth of a musical sound that was based on the experimental popular music of the previous decade, particularly Krautrock, space-rock, and proto-punk.

Savage's close interaction with the first generation of Industrial musicians eventually gave him the status of cultural theorist within the subculture. Savage occupied a unique position since he was both a member of the subculture and a journalist reporting on the music to the wider public. He has since written liner notes to many compact disc reissues of early Industrial records. His introductory essay for the *Industrial Culture Handbook*, published by *RE/Search*

Press in 1983, is one of the most frequently quoted definitions of the goals and attributes of the first generation of Industrial music.⁴ In many ways it has become the manifesto of Industrial music, but Savage originally published this short two-page introduction as an obituary of sorts. This seemed like a reasonable assessment in 1983, especially since Throbbing Gristle had disbanded in June 1981 and Industrial Records ceased operation later that year. Several of his statements reveal how he and other fans were adopting modernist aesthetics in their discussion of the music. Originality and progress were valued while any manner of stagnation, formalization, or labeling represented assimilation into mainstream culture. When read after 1983, the article suggests a stylistic standard against which later generations of Industrial music were judged or criticized. As such, many purists still claim that anything created after 1983 is not, and cannot be considered, Industrial music.⁵

Savage enumerates several general factors that define the Industrial music subculture including the industrial nature of modern life; society's decay/decline; a period of dialogue between the avant-garde and the popular in the 1960s and 1970s; the failure of punk rock to develop into an intellectual confrontation with the problems of capitalist society (resulting in punk music's subsequent assimilation into consumer culture and fashion); and the overall dismal economic conditions in England between 1975 and 1977.⁶ He suggests that these historical factors gave rise to five central ideals within the Industrial music subculture: organizational autonomy; access to information; shock tactics; extra-musical elements; and the use of

⁴ This introduction has been reprinted in numerous liner notes, magazines, online discussion forums, and books including the foreword to Simon Ford's history of Throbbing Gristle, *Wreckers of Civilisation*.

⁵ Savage openly identifies himself as one of the purists. He believed that the true end of Industrial music was in 1983. Collins refers to this early period as "Classic Industrial" but then immediately splinters it into numerous sub-styles after 1985 without examining how the various post-1983 developments were linked to one another and developed out of first generation ideals and sounds.

⁶ In true Industrial music fashion Savage even quotes Lewis Mumford's 1961 book *The City in History* that proposes that industrialization created "degraded urban environments."

synthesizers and anti-music.⁷ Savage does not explain these categories in great detail, but they do serve as an excellent starting point for my own analysis, thus cultivating a deeper understanding of how the subculture viewed itself in the late 1970s. I view these categories as overlapping and complementary (as I believe Savage did to some extent), which allows for the development of a larger fabric of ideas, philosophies, and sounds that shape the musical cues and archetypes discussed later in this chapter.

Savage claimed that *organizational autonomy* was a deep-seated ideal of the Industrial music subculture. Most first-generation bands recorded for independent record labels such as Rough Trade, Mute, and Some Bizarre, or started their own labels such as Industrial Records. Major labels like Atlantic, Warner Brothers, and EMI were not interested in taking a chance on an album full of noise compositions, so for many Industrial bands, signing to an independent label was quite simply the only choice.⁸ New advances in recording technology made that possible. By the early 1970s TEAC was selling four-track, reel-to-reel tape recorders to the home-recording market for approximately one thousand dollars, and by 1979 Tascam released the famous four-track Portastudio that made it possible to record onto cassette tapes at a cost of under one thousand dollars. This allowed musicians to record music on a four-track tape recorder in an apartment, duplicate it onto cheap cassette tapes, and sell the tapes at live shows or through the mail. This had the somewhat unintended side effect of keeping the first generation of Industrial music rooted in what is now called “lo-fi” sound.⁹ While high profile producers of the 1970s like Alan Parsons found ways to make recordings shimmer and shine with clear and

⁷ Savage, “Introduction,” in Vale and Juno, 4-5. Savage states that he developed these ideas from his personal experience of the music, specifically through interactions with Throbbing Gristle and Cabaret Voltaire.

⁸ Lou Reed’s 1975 solo album *Metal Machine Music* [RCA Records, 1975] was just such an experiment that became a massive marketing and sales nightmare. The double-album was filled with four sides of electronic noise and guitar feedback, and record buyers returned the album in overwhelming numbers despite the fact that Reed’s name was on the cover.

⁹ This is the opposite of hi-fi, a purposefully produced low-quality sound.

crisp sounds by carving out EQ bands of audio frequencies to produce pristine mixes, Industrial bands blurred and meshed sounds, recorded live improvised performances on cheap equipment, and rarely attempted a sonic mix down for the sake of clarity.¹⁰ The sound was intentionally rough and raw and not the result of poor equipment or lack of expertise (although both of those elements did play a role at the very beginning, particularly in live recordings).

Industrial musicians' attraction to the idea of organizational autonomy developed out of the punk era's "do-it-yourself" (DIY) attitude. Industrial bands created their own advertisements, posters, and album covers from collage artwork in a style that was reminiscent of the Futurists, using imagery of machines and technology and symbols of Nazi/Fascist propaganda for shock effect and political messaging. By adhering to the ideal of organizational autonomy, bands had the freedom to advance their own political strategies, ideological agendas, and musical sounds in any way they saw fit without the need to seek approval from management or record label executives. As a result the musical and non-musical aspects of their projects used a similar set of artistic techniques, and both served as a form of access to new ideas and philosophies for audience members.

Savage saw Industrial musicians' engagement with William Burroughs' concept of the information war as part of a larger ideal within the subculture that he called *access to information*. In an era before the Internet allowed anyone with a computer to surf the vast sea of mainstream and grassroots media, Industrial bands believed that they could use the power of

¹⁰ Alan Parsons is a famous rock producer who first started working as an assistant engineer for the Beatles and then went on to engineer and produce the pristine sounds of albums like Pink Floyd's *Dark Side of the Moon* [Capitol, 1973] and his own band the Alan Parsons Project. He is representative of many rock producers from that era including Bob Ezrin (Kiss, Alice Cooper, Pink Floyd) and Jeff Lynne (Electric Light Orchestra), who sought the creation of higher standards for recorded sound in rock and roll.

popular music as a political weapon.¹¹ They made it their mission to fight the information war by providing access to new ideas and philosophies through their music. Industrial musicians recorded audio samples from popular culture, including film, historical audio, television shows, commercials, and radio broadcasts and then mixed it into the sound of their music. In many cases they simply positioned these audio samples to speak for themselves, but the voices and sounds achieved greater meaning and served as access to information when they were contained within the enhanced context of a particular album along with the artwork, lyrics, and sound. But the most direct method of communicating through popular music, the lyrics, also became the most problematic due to the extreme amount of noise and distortion present in the altered vocal sound of Industrial music. Because the lyrics were not aurally determinable, and because audience members were frequently drawn to the music because of the presumed political message, the lack of clarity spawned other outlets for fan and musician exchange and helped to fuel the sense of a cohesive subculture.

In order for a band's message to be understood and increase access to information, Industrial musicians frequently made use of what Savage called *extra-musical elements*. This category is the most redundant of Savage's five categories, but his intention was to communicate the degree to which literary elements played a role, not as a secondary effect, but as a primary function within the subculture and as a creative outlet for the band members. Industrial bands like Throbbing Gristle reinforced these ideals within statements like this one made by Genesis: "you can often trace the songs back to my book shelf. 50% to 60% of the songs were conceived

¹¹ Even in the era of Internet media the reality of a voice owned by the people still falls short of the Industrial music utopia. Al Jourgensen told me that he once believed the Internet would develop into a place for real social change and that it would develop into a locus for the many people around the world to share information without the filters and biases of the mainstream media, but he suggested that this has actually happened in a very limited way. In the end, he told me, all we ended up with was a new mall with a great big porno store in it.

after reading books.”¹² Even if the musical tracks did not (or could not) analyze the works of Huxley in depth, the musicians and fans could accomplish that in the broader range of activities and discussions within the subculture.

And while it is one thing to make vague references to literary works, films, or philosophies, Industrial musicians wanted to make those ideas an inseparable part of everything they did. When Richard Kirk, Stephen Mallinder, and Chris Watson adopted the name *Cabaret Voltaire* from Hugo Ball’s Zurich Dada nightclub, they commented on the philosophical connections the idea had for their music: “To us, what we were doing was a parallel to what Dada was doing. . . a reaction to the established musical mode and the way it worked, and we saw ourselves as a bit of a contradiction to that [the established music of the time].”¹³ Cabaret Voltaire wanted their audience to go and read Tristan Tzara. Throbbing Gristle wanted listeners to go and hear the Velvet Underground. They wanted their audience to think about how the mere existence of Nazi death camps affected life in the late twentieth century.

Savage simply points to the primary nature of extra-musical elements within the subculture, but as I have been arguing throughout this dissertation, the extra-musical aspects put forth by Industrial musicians worked on a deeper continuous level throughout the subculture: as a code. By developing an understanding of those codes, audience members were able to gain a deeper understanding of the music and the message. Fanzines, magazines, interviews, and leaflet manifestos became important tools in spreading information to audiences and helping them to interpret the music. The fanzines were printed on cheap paper, assembled in apartments and basements, with articles written by fans or band members. One of the earliest punk music

¹² Ford, 7.12.

¹³ Andy Gill, “This Week’s Leeds,” in *New Musical Express* 1978. This is a vague answer to be sure, but it does illustrate the degree to which the revival the Dadaist aesthetic impacted the arts in the 1970s.

fanzines in the UK was *Sniffin Glue*. Started by Mark Perry in July 1976 this labor of love only lasted for a year but inspired numerous other fanzines including two in Sheffield that were focused on Industrial music. One of them, *Gun Rubber*, was created by Paul Bower and Adi Newton (who was a member of both The Human League and Clock DVA). Industrial Records also released its own fanzine called *Industrial News*. In it they encouraged the growth of numerous fan clubs around the world to reprint and distribute the news further. These subcultural magazines allowed fans to read about the music and live shows, as well as the philosophies and music that had influenced Industrial groups in the UK.

Industrial musicians traced the use of shock tactics back to the early twentieth-century literary traditions of modernist anti-utopias by Huxley and Hesse and to the Dadaists. The goal of the shock tactic was to expose the problems of the world in vivid and often horrific detail in order to draw attention to the problem and hopefully inspire action. Infusing words, images, and sounds with that which was considered deplorable and improper almost guaranteed it would be noticed. A pervasive shock-and-awe posture can be detected in the artwork and graphics, the lyrics and sounds, and even as a justification for the overall punishing volume levels of Industrial music live shows.

Industrial bands used images that were upsetting, vulgar, or simply morally unacceptable in Western society as a whole, such as pornography, torture, violence, warfare, or animal vivisection. These images were used in everything from album covers and advertisements to press photos and music videos. Shocking images would often sit side by side with images of modernity (factories, machines, construction sites, men at work), or music technology (recording equipment, synthesizers, and early sequencing computers). Through association and juxtaposition a set of images could be used to symbolize the horrors of the modern crisis.

The Dadaists recognized this at the start of the twentieth century and frequently used shocking content in their anti-art works. Cultural theorist Walter Benjamin pointed out the aggressive nature of the Dadaists' artistic tactics: "their poems are 'word salad' containing obscenities and every imaginable waste product of language. . . . From an alluring appearance or persuasive structure of sound the work of art of the Dadaists became an instrument of ballistics. It hit the spectator like a bullet, it happened to him, thus acquiring a tactile quality."¹⁴ Industrial musicians adopted this mode of thought by turning art into a tactile experience, art as action, as a weapon. The social and sonic ferocity of Industrial music was created using shock tactic methods, but the musicians also realized that in order for subversive art to cut deep and resonate it had to be continually shocking. Industrial musicians wanted to create noise: visual noise, sonic noise, political noise—and the noise had to force people out of their daily lives and routines, to lead them to the access to information previously discussed.

On the surface the use of shock tactics suggested a frontal assault on the conventions of society, but on a secondary level it also allowed for the revelation of what modern society valued and what it despised. Industrial musicians claimed that the way audiences interpreted particular images and sounds was a symptom of the deeper sickness that infected society as a result of the modern crisis (and a statement like that was its own form of provocation to be sure). In this regard the underlying reason for the use of shock tactics in Industrial music was firmly rooted in the philosophy of Nietzsche's *Beyond Good and Evil*: "There are no moral phenomena at all, only a moral interpretation of phenomena."¹⁵ The shocking elements of Industrial music were

¹⁴ Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, 217-242 (New York: Harcourt Brace, 1968), 237-238. Originally published in Germany by Suhrkamp Verlag, 1955.

¹⁵ Nietzsche, *Beyond Good and Evil* (1886), trans. R. J. Hollingdale in *A Nietzsche Reader* (New York: Penguin, 1977), 104.

designed to act as a mirror turned on society—to be reflexive in nature—and asked audiences to question the use of symbols and signs in advertising, media, laws, and social structures. Peter Christopherson explained, “It’s easy for a person to interpret a photo of you holding a skull, but it doesn’t necessarily mean that you are a devil worshipper or a necrophiliac. It’s their interpretation which is at fault. . . . It’s a very dangerous thing that some of the newspapers and the media do. . . .”¹⁶

It is what Dick Hebdige refers to as *polysemy*—where each text generates an almost infinite range of meanings.¹⁷ But these readings are narrowed and shaped within a subculture that shared a set of codes. Hebdige described the same phenomenon in the early punk subculture stating, “Clothed in Chaos, they produced Noise in the calmly orchestrated Crisis of everyday life in the late 1970s—a noise which made (no)sense in exactly the same way and to the same extent as a piece of *avant-garde* music.”¹⁸ The images thus create one set of meanings for the members of the subculture and another to those on the outside. One positive result of this tactic was the resulting growth of an audience who actually became what Industrial musicians wanted—media-literate fans that questioned the use of images and sounds by bands, but also began to question the use of similar images in the rest of society, and debated these concepts in public through fanzines, leaflets, and discussions at home and in clubs. In this way shock elements became a form of media literacy and education.

Savage’s last category suggests that the simple act of using nontraditional means for the creation of music—what he labels the use of synthesizers and anti-music—is a core ideal of the Industrial subculture and that it defines the style’s sound and form. This notion certainly helps to

¹⁶ Neil, 125.

¹⁷ Dick Hebdige, *Subculture: The Meaning of Style* (New York: Routledge, 1979), 117.

¹⁸ Hebdige, 114-115

delineate Industrial music when it is compared to other popular music styles of the mid- to late-1970s that tended to use the standard rock instrumentation of drums, bass, and guitar, with a little bit of keyboard thrown in for good measure. It even helped to establish a substantial difference with contemporary punk rock like the Sex Pistols or the Damned who were guitar-based bands. But what Savage surprisingly fails to address is the manner in which Industrial musicians' use of anti-music and synthesizers differed from groups that had used such instrumentation before (The Velvet Underground, Pink Floyd, Kraftwerk, etc.), and the long line of avant-garde composition that Industrial musicians folded into their own musical history (Russolo, Schaeffer, Stockhausen, Cage, etc.).

What seemed the most self-explanatory to Savage in his short introduction is in many ways the most complex to decipher. To understand the use of anti-music and synthesizers in Industrial music it is necessary to focus on the sounds as sonic phenomena in much greater detail, to examine how these sounds were created and used compositionally by musicians. This also creates a space for a deeper understanding of the meanings that were attached to these sounds within the subculture at large. Even the term *anti-music* does not accurately represent the ideas and beliefs of Industrial musicians, because a large portion of them built their conceptions of sound on the musical theories of early twentieth-century avant-garde composers. They shared a belief that any organized sound was music, as Boyd Rice explains: "Music could be anything and I suppose anything could be considered music. . . . So, as far as I'm concerned, music can exist far beyond rhythm and melody, the important part of it is the response it causes in the listener, not the means used to get that response."¹⁹ These kinds of statements are commonplace in interviews with Industrial musicians, and the same language pervades liner notes, fanzines,

¹⁹ Neil, 174.

radio programs, and advertisements for recordings and club nights. Industrial musicians did not view their own work as anti-music in quite the same way that they viewed it as anti-art; they simply embraced a much more open definition of music.

As a result of their understanding of sound, Industrial music practice was not defined by skill performing on a traditional instrument, but instead by one's ability to control concrete and synthesized sounds through the use of technology that were based on a melding of ideas from Russolo, Cage, Schaffer, and Stockhausen. As Patrick Codenys of second-generation band Front 242 discussed in *Keyboard Magazine* in 1989, ". . . we speak about our opportunities to access the world of sounds. We don't even speak about the abilities of musicians anymore."²⁰ Even when Industrial musicians performed using traditional rock instrumentation, they performed in nontraditional ways that were similar to what had been done by Pink Floyd and the Velvet Underground. By mixing avant-garde music and technique with popular music experiments, Industrial musicians were able to represent themselves as modernist technological experimentalists and thus create an important musical definition for the subculture beyond anything that had been explicitly formulated by Throbbing Gristle.

From 1975 until 1983 the first generation of Industrial musicians used tape-recorded "found" sounds, synthesizers, drum machines, metallic percussion, and the expanded sonic palette of instruments performed in a nontraditional fashion. They favored abrasive machine-like sounds and used factory rhythms. They experimented with sound using new music technologies. What slowly arose was a series of musical cues and established archetypes. The remainder of this chapter looks at how these particular musical cues and archetypes were established, and how they relate to the sound and subculture of the first generation of Industrial music.

Tracks and Elements: Industrial Music Archetypes and Stylistic Cues

Industrial bands were purposefully bending and stretching the concept of a song, or in many cases disregarding it all together in favor of musical forms that were based in avant-garde composition such as sound-masses and moment form (as discussed in regard to the Throbbing Gristle set at the beginning of chapter four). It is for this exact reason that I suggest the use of the word “track” for the study of the first-generation of Industrial music. This decision to focus on the recorded track is more than an issue of nomenclature, and speaks to the sound, elements, and form of Industrial music.²¹ In his book *The Poetics of Rock*, Albin Zak explains the use of the term “track” within the popular-music lexicon and the difference it represents from words like song or arrangement:

The song is what can be represented on a lead sheet; it usually includes words, melody, chord changes, and some degree of formal design. The arrangement is a particular musical setting of the song. It provides a more detailed prescriptive plan: instrumentation, musical parts, rhythmic groove, and so forth. The track is the recording itself. As the layer that represents the finished musical work, it subsumes the other two. . . . Its identity lies in its actual sound, and while that may change somewhat from one reproduction system to another—like a painting hung in different kinds of light or space—it is essentially a fixed set of relationships.²²

As Zak suggests, a track can contain the idea of a song or arrangement, but the most important factor is that a track is a fixed set of sonic relationships. It contains any sound mixing that was done after the musicians recorded their particular performances, any effects added to the music, and all aspects of editing and mastering. The track represents a very particular relationship of sounds that includes both the musical performances and the technological performances of

²⁰ Robert L. Doerschuk, “Front 242,” *Keyboard Magazine*, September 1989.

²¹ This is not uncommon in other forms of popular music from the 1960s and beyond, including the Beatles experimentations from *Revolver* (1966) onward, and bands like King Crimson or the work of Brian Eno.

²² Albin J. Zak III, *The Poetics of Rock: Cutting Tracks, Making Records* (Berkeley: University of California Press, 2001), 24.

engineers, producers, and mixers. In the case of the first-generation of Industrial music those jobs (musical and technological) were typically done by the same group of people, but it points out how each person approached his/her own involvement in the track from a number of different perspectives. Within the tracks created by first-generation Industrial musicians it is possible to discern the particular musical stylistic cues and examine how they functioned as the lexis of Industrial music.

Stylistic Cues

Developing a specific list of musical stylistic cues is a difficult task due to Industrial musicians' modernist agenda. Bands such as Cabaret Voltaire, Throbbing Gristle, and Einstürzende Neubauten desired to continuously surprise and shock their audiences with each new recording and live performance, and because of this most attempts at uniformity were squarely rejected by the subculture at large. In her 2007 dissertation Karen Collins makes an ambitious attempt to define what she calls the "structural determinants of the most popular of industrial styles," resulting in lists of musical traits that are used to analyze several different musical examples. In a similar vein to the work of her dissertation advisor Phillip Tagg, Collins' overall goal was to find the smallest number of musical traits that could be applied to the largest spectrum of music. The resulting list created by Collins is too general for my purposes here, especially since her list lacks a historical connection to particular periods of Industrial music style and the subculture, although a number of her basic determinants do find their way into my musical cues (such as the use of samples or the use of modes to organize pitch).²³

²³ To develop her list she considered a large number of tracks from various time periods including a preference for more recent Industrial music, and also used examples from further afield, what she calls Industrial rap for example. Many of her determinants were fashioned from the analysis of listening logs done by "coders," people who listened to musical examples and labeled (or coded) particular musical features that they noticed. But many of the coders were not fans of Industrial music (something Collins did on purpose to help identify determinants she believes can be heard by everyone). It should also be noted that Collins labels much of the music discussed in this dissertation as "classic industrial," and limits that term to music made before 1985.

Defining a broadly based, statically defined list of musical traits such as the one Collins presents creates a misleading picture of any one group of musicians. My approach throughout this dissertation is to always consider Industrial music as a self-constructed and historically minded endeavor that involves both sounds and ideas. As such, overlaps between music of 1975 and 1997 are much less important than finding a set of musical cues used by each particular generation of Industrial musicians and then explaining how these cues were altered, abandoned, or reinforced from one generation to the next (and the same can be said for tracing the path of philosophical ideals).

Table 5.1 shows the most common musical cues used by musicians in the first generation of Industrial music and as a group they define a baseline sound for the style between the years 1975 and 1983. Many of these cues have already been discussed in this dissertation in association with the musical works adopted into the Industrial music history, such as the preference for noise sounds taken from the Futurists and Pierre Schaeffer, or the use of repetition and short melodic patterns pulled from the music of the minimalists and Krautrock. The cues are not a strict checklist, and not all of the cues must be present in order to make something sound Industrial. This fact was reinforced by the ideals of originality and progress that stopped Industrial musicians from directly copying the music of other bands.

Table 5.1
Musical Cues of the First-Generation Bands

- Noise sounds
- Analog synthesizer timbres
- Repetition
- Drones
- Spoken vocal samples (especially from mass media)
- Processed male vocals
- Vocals mixed at a volume consistent with other sounds
- Short, repeated vocal phrases
- Modal melodies and dissonant harmonies
- Two-note instrumental patterns (frequently dissonant dyads)

- Harmony based on two chords (often nonfunctional harmony)
- Tape editing (*musique concrète*) and sound processing
- Creation of sound-masses
- Use of moment form (à la Stockhausen)

Most of these cues have been chosen to represent a particular sound, such as processed male vocals, while others represent a technique or technology, such as tape editing. For cues that are based in musical technique it was important to make sure that I could actually hear the technique, that it was an overall part of the listening experience. If I was unable to determine if a sound was created through the use of a particular technique it was removed from the list. This was the case with the use of indeterminacy. While the idea taken from John Cage influenced how Industrial musicians thought about sound and the act of composition, it cannot actually be heard in the music. Therefore it remains an important technique for Industrial musicians, but it does not function as a stylistic cue. Tape editing on the other hand can be heard, as previously shown in the discussion of “The Dada Man” by Cabaret Voltaire. These musical cues were used freely at first, but as the subculture coalesced so did the use of these cues in the composition of music, and slowly a set of five musical archetypes took shape.

Industrial Music Archetypes

Charles Rosen, in his discussion of the classical style of Haydn, Mozart, and Beethoven, claims that what held these three composers together under one stylistic banner was “their common understanding of the musical language which they did so much to formulate and to change.”²⁴ Rosen’s argument helps to clarify my particular approach to analyzing the first generation of Industrial music through the use of musical archetypes. While it is possible to find variations of the basic archetypes, they represent a shared language at work that involves an understanding of the modernist history of Industrial music. Musicians worked to combine the

²⁴ Charles Rosen, *The Classical Style: Haydn, Mozart, Beethoven* (New York: Norton, 1972), 23.

many stylistic cues into sonic archetypes and by 1983 this had resulted in the evolution of a definite Industrial sound that was passed on to the second generation in the birth of three distinct sub-styles.

The five archetypes, Punk-Garage, Ambient Noise, Experimental Noise, Metallic Percussion, and Synthesizer-based, are joined by a sixth possibility which I have called mixture, recognizing the fact that these archetypes, even at the height of their use in the early 1980s, were never viewed as exclusive. Musicians often mixed the cues of one with the other, leading to mixed hybrid tracks. What follows is an examination of each archetype that describes the sound, the historical influences utilized in the development of the archetype, and the performance practice associated with that archetype. By analyzing tracks created by first-generation bands I will show how the general stylistic cues were used along with archetype specific cues to create the sound of Industrial music.

Punk-Garage

For Industrial musicians in the late 1970s the Velvet Underground and early Krautrock functioned as a bridge between the avant-grade experiments of the early twentieth-century concert tradition and the late 1960s popular music scene. As a result the Punk-Garage archetype makes use of experimental sounds and modernist artistic methods, while simultaneously being firmly rooted in the proto-punk songs of the Velvet Underground and the rhythmic jam sessions of Can. This archetype is the closest to the structure and sound of a rock song, although most tracks deconstruct the idea of a song at the same time they use it as a model. The simplicity of the tracks and the raw live music bears a close resemblance to the garage rock of the 1960s, and as a result I have given this archetype the name *Punk-Garage* in order to both capture its historical roots and reflect its raw unpolished sound.

The musical features of the Velvet Underground loom large within the Punk-Garage tracks, including the use of traditional rock instruments (guitar, bass, and drums), an unpolished, DIY live-music sound, dark urban lyrics, and noise elements. In a manner similar to music of the Velvet Underground and Pink Floyd, Industrial musicians played their instruments by banging on a guitar or bass with a metal pipe, or electronically manipulating the sound of an instrument using a fuzz box, phaser, distortion, or flanger. Even when a performer plays the guitar using standard rock technique, the technological alteration of the effects distorted the pitch by blurring its edges, or in the most extreme cases, making the experience of a central pitch nonexistent. In these tracks the distortion itself becomes the main component of the sound—making pitched instruments sound like shifting shades of timbre. The punk-garage archetype also made use of instruments that were less traditional to rock and roll but had been used by the VU and Krautrock bands including the electric violin, clarinet, flute, and the occasional synthesizer.

The vocals are typically performed as a series of short chanted phrases that punctuate the texture, and are mixed into the track so that they cease to function as words. The bass and guitar parts are created from a limited range of notes, and harmonic progressions commonly never use more than 2 chords. The tempo is similar to the standard tempo of the songs they were modeled after, approximately 120 beats per minute (BPM). Table 5.2 lists the specific stylistic cues found in the Punk-Garage archetype that work together with the more general cues that were listed in table 5.1.

Table 5.2
Additional Stylistic Cues in the Punk-Garage Archetype

- Instrumentation based around Guitar, Bass, and Drums
- Heavily distorted or altered instrument sounds
- Sung vocal melodies (often without harmony vocals)
- Dark urban lyrics

- Melodic riffs
- Core percussion consisting of a drum machine
- Found sound percussion
- Tempos around 120 BPM
- Extended jam sections
- Deconstruction of popular-music song forms

These stylistic cues can be found in the Cabaret Voltaire cover of the Velvet

Underground song “Here She Comes Now” from *White Light/White Heat* album [MGM, 1969].

The Cabaret Voltaire cover [Rough Trade single RT3P, 1978] takes the mellow two-minute proto-punk song and deconstructs it into a five-minute exercise in repetition similar to the music of Can, as shown in example 5.1. The song form of the original Velvet Underground version is eradicated, and once the Cabaret Voltaire version begins, it stays on the same path until the end.

Example 5.1
Musical Form and Chord Progression in “Here She Comes Now”

Velvet Underground, “Here She Comes Now” (1968)

	Pre Verse (A)		Verse (B)	Chorus (C)				
Chord:	DM	D sus [GM]	DM	DM	GM	DM	GM	Dm
Bass note:	D	D	D	D	G	D	G	F

Musical Form: A₈ B₈ C₆ A₄ B₈ C₆ A₁₆

Cabaret Voltaire, “Here She Comes Now” (1978)

Musical Form: based on instrumental (I) and vocal (V) sections
I₂₄ V₂₀ I₄ V₈ I₁₂ V₄₀ I₈ V₁₆ I₄ V₁

The formal structure of the Velvet Underground version is straightforward and uses typical pop-song devices to signify formal changes including lyrics, chord changes, volume, and

instrumentation. The song opens a pre-verse section featuring soft electric-guitar strums on D Major (played on the guitar as D, A, D, F#) that moves to a D suspension (the F# on the guitar's b string moves up a half-step—D, A, D, G) while the bass guitar holds a steady pulse on D for both chords. In the third bar a second electric guitar enters playing a short repeated melody that outlines the harmony of the two chords, but plays the second chord as GM (by replacing the A of the chord with a B). The second guitar creates a sense of uneasiness in the opening of the song by muddling the harmony and foreshadowing the chord progression used in the chorus. After twenty seconds the song moves into the verse where the harmony sits firmly on a D Major chord as Lou Reed begins to groan, “Now, if she ever comes now, now; if she ever comes now, now; if she ever comes now.” These words are repeated by Reed like a musical mantra. At thirty-four seconds the song changes to the chorus and the harmony fully embraces the DM/GM alteration that was implied by the second guitar in the opening. The bass guitar plays the root of each chord reinforcing the blues style I-IV harmony as Reed sings, “Oh, she looks so good, she’s made out of wood, just look and see,” and the guitar, bass and drums all rise in volume. This section resolves back to the pre-verse and the whole process repeats until a final coda section using the opening chords ends the song (see the form listed in example 5.1).

The Cabaret Voltaire cover reduces the Velvet Underground music to its most basic components: two chords with lyrics. The Cabaret Voltaire version begins similar to the original, but changes the harmony to an E flat7 chord with a B flat or D in the bass, that moves to an E flat suspension with B flat or E flat in the bass (shown in the first two measures of example 5.1). The guitar only uses the two highest notes from the Velvet Underground guitar strumming pattern to create a stark and distorted dyad that is played against a two-note dyad in the bass. In fact, other than allowing for a comparison with the Velvet Underground song, a harmonic

analysis (chord labeling) becomes somewhat meaningless in the context of the Cabaret Voltaire version of “Here She Comes Now” because the chords don’t actually function that way. Cabaret Voltaire collapses the harmony down to two sets of dyads (an important first-generation musical cue) that are played a perfect fourth apart: one in the guitar (E flat/G) and one in the bass (B flat/D). At :30 the first guitar stops and a new distorted guitar part establishes a new set of strummed dyads. The first on D and G moves up a semitone in the next measure to E flat and A flat. The bass guitar does not change from the opening section (see measures three and four of example 5.1). The new patterns remain for the rest of the track and result in an uneasy semitone alteration between the two sets of dyads. The I-IV blues progression relationship that was featured in the chorus of the Velvet Underground is never used. Like Throbbing Gristle’s interpretation of “I Heard Her Call My Name,” the blues music components are erased, severing the ties to the American music tradition, and the new distorted and repeated guitar and bass riffs form the basis of the entire track.

The form that arises in the Cabaret Voltaire version is a result of instrumental and vocal sections that are grouped into multiples of four measures. Each section is different from the one before it and the one after it (the common structure of most popular songs is in sets of 8, 12, or 16 bars). Cabaret Voltaire’s “Here She Comes Now” rejects pop-song structure and replaces it with an alteration of dyads and sounds more akin to early minimalism and Riley’s *In C*. At the center of the track is the unchanging rhythmic pattern of the drum machine playing at 120 BPM that keeps time for the other instruments, which are much less rigid in their adherence to the central beat. The lack of any large-scale formal pattern gives the music a hypnotic character and as a result the ear begins to focus on smaller changes in melodic riffs or timbre more than harmony, which floats away. This is similar to the Can song, “Hallelujah” [1971] where a

number of repeated patterns allow the musical form to expand and contract based on instrumental entrances, and the vocals function as just another instrumental layer. To keep the listener off balance the Cabaret Voltaire track even ends on a ten-measure segment, the only one in the entire five minutes that is not divisible by four.

The difference between the lyrics of the two versions also reveals a similar level of reduction. In the original Reed's four-line lyrical melody becomes a steady drone, but the Cabs degrade the words, making them vocal sounds. They take the opening phrase and slur it into two nonsense word/sounds "Ifshever" and "Comenownow," that combine into a melodic and rhythmic chant of, "Ifshever comenownow, Ifshever comenownow." This vocal delivery blurs the words of the original song and it also contains a particularly interesting connection to the word-art and nonsense poems of the Dada movement. The main vocal line is supported by a second voice, but this line does not sing a harmony as is typical of most pop songs. Instead it repeats the same vocal phrase an octave lower and rhythmically out of sync with the rhythm of the lead. The two word/sounds are reduced further, resulting in a heavily stylized "ever" that sounds more like "ev-a" repeated over and over. When the Cabaret Voltaire version finally makes a change just past the minute-and-a-half mark (the first V8 in the formal diagram) to the chorus lyrics, the music responds with the arrival of a distorted synthesizer and organ that functions in call and response with the lines "Oh, she's made out of wood." The change to something resembling the chorus still makes for a shift in the soundscape of the Cabaret Voltaire track but change quickly subsides and the track quickly returns to its motoric pulse.

While the Punk-Garage archetype is very closely related to the sound of the Velvet Underground, the first-generation Industrial musicians approached it from a viewpoint that was closer to the sounds of Can and the musical ideas of the minimalists. These tracks never quite

became the “songs” they were modeled after, but in concert they served as a moment where the audience could sing along to the repeated vocal lines, especially if audience members were familiar with the original song, and they served their purpose well as the tracks released on 45-rpm singles.

Ambient Noise

While many first-generation tracks consist of aggressive noise sounds played at a very loud volume, there are some that develop a more subtle musical soundscape. Industrial bands realized that a constant sonic assault dulled the ears, and that the use of changing dynamics within a track, or between one track and the next, could refresh the listener. The Ambient Noise archetype exhibits Industrial musicians using techniques from the electronic music avant-garde, particularly Pierre Schaeffer’s *musique concrète* methods for the accumulation and manipulation of found sound objects.

Ambient Noise tracks were primarily created in the recording studio through the use of electronic equipment and tape recorders. When these tracks were performed, live bands used pre-recorded tape loops and synthesizers to generate sound and the majority of the performance consisted of band members manipulating control knobs on the electronic devices in order to manipulate the sound in real time. This type of performance practice was not something unusual for first-generation Industrial musicians. Many of them grew up with tape machines in their home, and many have spoken about having a father who would experiment with electronics at home in the evening. Together with their fathers they would build radios, tape machines, or rudimentary synthesizers out of parts by using blueprints published in hobbyist electronic magazines. On occasion this even became a family affair, with the father asking his sons and daughters to help out in the basement with the equipment. The electronic hobbyist phenomenon

of the 1950s produced an entire generation of popular musicians who came of age in the 1960s and whose first musical experiences were connected more to use of a tape recorder than to performing on a piano or guitar as in previous generations. Many of these naïve technological experiments yielded artistic techniques that were quite similar to what Pierre Schaeffer had discovered in the 1940s when developing *musique concrète*. As such when these young musicians finally encountered the ideas of Schaeffer and Stockhausen years later they easily accepted it as a mode of performance.

Industrial musicians also developed a part of their understanding about tape editing and the use of found sounds from other popular musicians. Brian Eno, former member of the band Roxy Music where he was listed as playing “synthesizer & tapes,” was the first popular musician to suggest the idea of ambient music in the liner notes to his 1975 solo album *Discreet Music* [EG Records, 1975]:

In January this year I had an accident. I was not seriously hurt, but I was confined to bed in a stiff and static position. My friend Judy Nylon visited me and brought me a record of 18th century harp music. After she had gone, and with some considerable difficulty, I put on the record. Having laid down, I realized that the amplifier was set at an extremely low level, and that one channel of the stereo had failed completely . . . the record played on almost inaudibly. This presented what was for me a new way of hearing music—as part of the ambience of the environment just as the colour of the light and the sound of the rain were parts of that ambience.²⁵

Industrial musicians were well aware of Eno and his work. The sound of Roxy Music circulated in the same places as the Velvet Underground, Pink Floyd, and Krautrock, and by 1977 Eno was famous as the producer who worked with David Bowie on his Berlin Trilogy, three albums that were inspired by the sounds of Kraftwerk and the cut-up of Burroughs. Eno’s statements about ambient sound contain numerous references to previous modernist ideas such as Erik Satie’s

²⁵ Brian Eno, liner notes from *Discreet Music* [Editions EG, EEGCD 23] originally published 1975.

furniture music, John Cage's *Silence*, and Pierre Schaeffer's *musique concrète*. Because of this, Eno's concept of ambient music fit well within the Industrial-music modernist framework. Eno developed this idea further in a series of albums he began in 1978, all with the basic title *Ambient*. Each album in the series was assigned a number and was conceived of as ambient music for a particular location, the first and most famous being *Ambient 1: Music for Airports* [EG Records, 1978]. As the liner notes for *Ambient 1* Eno only included four graphs, each one representing a visual pattern of the four tracks on the album, "1/1," "2/1," "1/2," and "2/2." The concept of ambient sound also circulated within popular music due to the work of other musicians like Holger Czukay who championed the sound in his solo music in the 1980s.

The character of Ambient Noise tracks is more subdued than the other archetypes, but it still presents the soundscape of an industrial world consisting of noise elements. Much like the Futurist visions, the Ambient Noise archetype contains the sounds of a city that hum and moan around the listener, with the occasional crash and boom at irregular intervals. The texture never stays entirely quiet, and in this way they differ from Eno's conception. As a general rule Ambient Noise tracks featured a limited vocabulary of sounds and sometimes contained long stretches of silence. The rate of change from one sound to the next is very slow and the idea of small-scale repetition becomes central to the musical structure.

Table 5.3
Additional Stylistic Cues in the Ambient Noise Archetype

- Recorded found sounds
- Use of Tape loops
- White noise (soft as static)
- Long-held synthesizer clusters
- Long-held guitar and bass tones
- Effects used to alter sound sources (delay, reverb, flanger, ring modulation, distortion)
- Spoken-word vocals
- Non-metrical or slow tempos
- Use of silence

Spoken vocal samples, a main stylistic cue of the first generation, are prominently featured and typically taken from a variety of sources including radio and television broadcasts. These samples range from the vulgar and bizarre (reports of gruesome murders) to the historical (Nazi radio broadcasts) to current political issues (such as Baader-Meinhof-gang audio used by Cabaret Voltaire). Once the sounds were recorded they were manipulated using the tape-machine techniques established by Pierre Schaeffer but with Burroughs' ideological spin of re-contextualizing the propaganda of modern society, and as such these samples were frequently used to grant access to information. Table 5.3 lists the additional stylistic cues found in the Ambient Noise archetype.

An early example of the Ambient Noise archetype created entirely from recorded sounds is Throbbing Gristle's "Valley of the Shadow of Death" composed by Peter Christopherson and featured on *D.o.A.: The Third and Final Report of Throbbing Gristle* [1978]. Christopherson took a portable tape recorder and a high-powered microphone with him while walking around town—a conceptual connection to the Futurists' trope of walking through the modern city. He recorded many sounds on the streets including numerous conversations people were having as he passed by (some recorded with permission and others without). The recorded sounds chosen for use in "Valley of the Shadow of Death" were culled from conversations between male prostitutes and their male clients.

The way that Christopherson recorded and used the samples makes it is hard to tell what is being said, except for the constant use of the words "fucking" and "cunt" that pepper the conversation and a number of exchanges about how much money a particular sexual act might

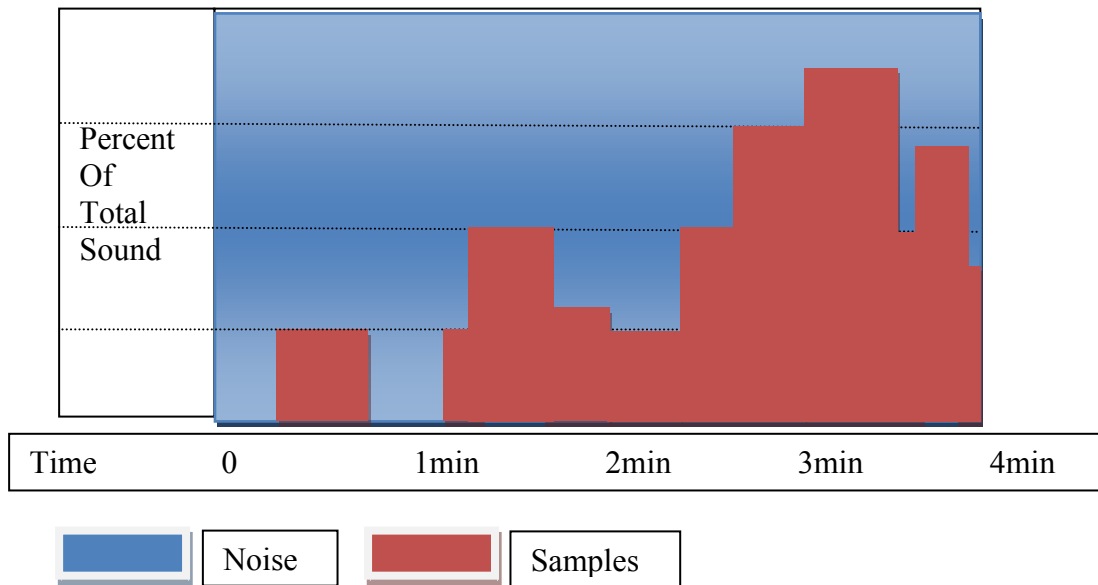
cost (the use of shock tactics to be sure).²⁶ What is particularly interesting is how Christopherson makes the sound of the tape-recording technology and the phenomenon known as tape-hiss the primary sounds heard throughout the entire four minutes. When a microphone is used to record sound a recording engineer will look to balance the gain of the recording (how much energy is pushed through the recording system and microphone) in order to allow for the clearest possible recording. If the sound source is further away from the microphone then the engineer will need to boost the gain so that the tape machine is able to record the sound at an adequate volume. The side-effect of this technique is that the volumes of the other sounds closer to the source (the ambient sounds) are also raised. The resulting recording will feature a fair amount of white-noise hiss that can be difficult to remove. The first fifteen seconds of “Valley” is created from nothing but the fluttering of white-noise tape hiss at a soft volume which soon becomes the rhythmic pulse for the entire track.²⁷ While the listener’s ear may be drawn to the vocal samples of “Valley” it is inevitably the hiss, crackle, and pops of the recordings that take center stage. The tape noise “gets in the way” of the vocal samples and becomes noise in its most basic definition—as a detriment to clear communication. The ambient sound of the white noise overtakes the entire experience and the rise and fall of the ambient noise against the vocal samples creates a sense of forward motion in the piece. Example 5.2 represents the two major parts of the four-minute track, the tape noise (blue) and the vocal samples (red), as a percentage of the entire soundscape.²⁸

²⁶ “Cunt” is a common British profanity and while it makes no direct reference here to the act of male prostitution I am sure Christopherson was well aware of the contradiction between the constant mention of female genitalia in a conversation between male prostitutes and male clients in a song released by a band called Throbbing Gristle.

²⁷ There is a precedent for this within the avant-garde. Alvin Lucier’s 1969 tape music composition “I Am Sitting In A Room” does much the same thing, but I was unable to confirm if Christopherson was aware of this piece.

²⁸ The graph is based on numerous close listenings and is not meant to represent a scientific or statistical analysis.

Example 5.2
Ambient noise versus vocal samples in “Valley of the Shadow of Death”



The goal of this graph is to portray how the vocal samples rise out of the tape-noise hiss. At the beginning of “Valley” the tape noise is dominant, but over the course of the four minutes the relationship between the two changes, and by the end the vocal samples are at the forefront of the listening experience. At random intervals there are strange anomalies, such as the muted sound of a sustained orchestral chord, or the sound of a glass bottle clanking on a hard surface. It is hard to know if these sounds were part of Christopherson’s original field recordings or were edited in after the fact during the compositional process.

By the two-minute mark the listener begins to notice that he/she is not listening to a single conversation, but a series of different conversations edited together, panned to the left and the right speakers, and overlapped so that the creative process of editing obscures any attempts to clearly understand the resulting dialogue. These sounds are further altered by audio effects such as reverb or delay. At different points Christopherson even enhances the artifice of the tape recording process further, so that the listener can hear the tape machine speed up or slow down,

can hear the hiss and crackle of the recording as it is looped and repeated in the background, and even notices the hum of the tape machine itself. At the four-minute and two-second mark all sound suddenly stops and the track ends with a sonic “pop,” as if cut off in mid-utterance. From the very beginning to the very end it is the technologically enhanced sounds of modern technology itself that make up the core of “Valley of the Shadow of Death.”

Experimental Noise

The first-generation Industrial musicians used sounds that were easily considered noise by mainstream tastes, and then pushed the threshold of that definition so that even members of the subculture were continually stunned by the extreme amount of noise. The sonic arrangement of the Experimental Noise tracks can make them very difficult to listen to and even harder to analyze. The typical tools of musicological analysis are rendered ineffectual. Tracks using this archetype were composed in the studio and/or performed live and featured electronic instruments and tape-machine manipulation, over-amplified and distorted instruments played in a nontraditional manner, found objects played as instruments, and percussion. The Experimental Noise archetype relied heavily on repeating rhythmic patterns as a form of organization. The specific stylistic cues for the archetype are shown in table 5.4.

Table 5.4
Additional Stylistic Cues in the Experimental Noise Archetype

- Extreme volume
- Harsh electronic timbres
- Distorted (over-amplified) sounds
- Percussion
- White noise (loud as an attack)
- Multiple layers of sound that clash or conflict with each other

Tracks created using the Experimental Noise archetype contain the most aggressive and violent sounds in the first generation of Industrial music. It deserves repeating that many first-generation bands wanted their music to be an assault on the audience, a form of shock tactics.

As Genesis P-Orridge had suggested, he wanted the experience to be like kicking the audience in the teeth.²⁹ Many Experimental Noise tracks sound as if they border on complete cacophony and madness, where individual aspects of sound break down in a cloud of audio masking and become one giant roar. The narrowing of the field of audio perception that results from listening to these tracks is caused by the ear's inability to distinguish between individual sounds in a meaningful way. Because of this there are a limited number of musical cues, and those that are identifiable are connected to the use of extreme volume and noise.

In thinking about the methods of composition and modes of reception for this archetype I return again to Attali's ideas on noise: "the musician, once outside the rules of harmony, tries to understand and master the laws of acoustics in order to make them the mode of production of a new sound matter. Liberated from the constraints of the old codes, his discourse becomes nonlocalizable. Pulverizer of the past"³⁰ First-generation Industrial musicians sought to move outside of traditional musical forms and structures and embrace experimentalism and originality. They used electronic technology to compose with the acoustics of sound—music made concrete. They imagined the abrasive sounds of the Experimental Noise archetype as a way to capture the sparks and explosions that came from pulverizing and ingesting the past, the sounds of the machines in a dystopian landscape, and the words of Marx's and Nietzsche's interpretations of the modern crisis.

While I have purposefully avoided scientific quantitative analysis (spectrum analysis, counting occurrences of hammer sounds, etc.) in favor of an experiential-based listening that corresponds to the heard phenomena of each musical selection, I now turn to the use of computer-based waveform analysis as a means to represent particular acoustical aspects of the

²⁹ Genesis P. Orridge quoted in John Gill, "Forgive Us Our Synths." *Sounds*, January 10, 1981.

³⁰ Attali, 113.

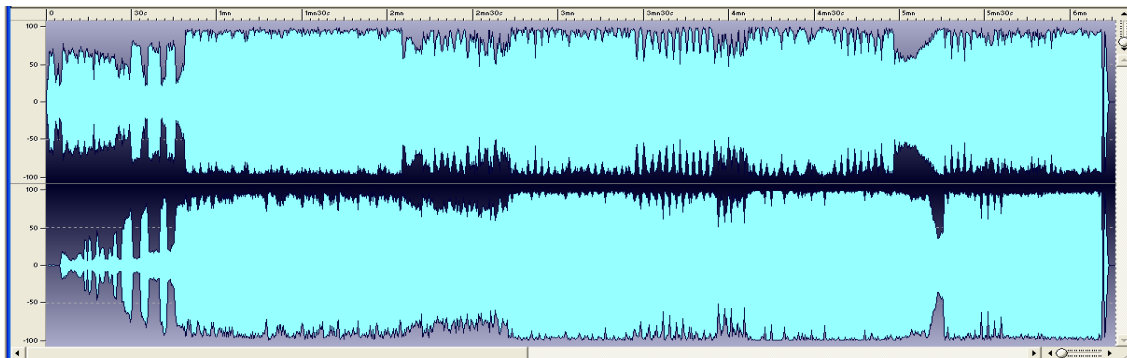
Experimental Noise archetype. For the analysis of the track “Slogun” [Industrial Records single IR0011, 1980] by the band SPK, I have used a commercially available computer program called Wavelab from Steinberg. The two modes of analysis I have used are: 1. a stereo amplitude waveform graph; and 2. a harmonic spectrum analysis graph. These graphs allow for a standard frame of reference by which to analyze the physical aspects of the sound such as pitch and volume, and relate them to the heard noise phenomena.

Before using the stereo amplitude waveform graph to examine how volume and distortion are used in “Slogun,” I must first clarify some basic concepts concerning volume and recorded music. Volume is a function of energy. In live acoustic music this formula is straightforward; the more force a musician uses to strike, pluck, strum, bow, or by other means cause an instrument to vibrate, the louder the sound will be. Things work differently in the world of electric amplified instruments. As Theodore Gracyk discusses in regard to the high volume used by rock guitarists, “. . . amplification is not just a question of volume (and thus not just noisy aggression). High volume is employed to produce sound of a certain character, unique to electronically amplified music. There is a special reciprocal relationship between volume and sound quality; increasing the amplitude of a sound wave alters its characteristic pattern and thus its timbre.”³¹ For amplified instruments the very timbre of the sound is altered when the volume is increased or decreased. Overdriving a guitar into an amplifier will cause it to distort, to lose clarity of tone in favor of noise elements that eradicate the central vibrations of the sound. The more the sound is overdriven the more it will lose its identifying characteristics in favor of random noise elements.

³¹ Theodore Gracyk, *Rhythm and Noise: An Aesthetics of Rock* (Durham: Duke University Press, 1996), 109.

This relationship is cemented in the process of recording music to tape. Once a series of loud noise sounds are recorded in the studio they will retain that particular timbre when played back. Lowering the volume of the playback will not remove the overdriven aspects of the sound.³² The sounds used in “Slogun” were recorded at a very high volume levels, resulting in a large amount of distortion on the tape. There is very little variation in volume throughout the six minutes of the track, and that level of intensity can become overwhelming. The recorded volume of the track can be seen in the amplitude waveform graph shown in example 5.3, which contains two waveforms, one on the top representing the sound of the left stereo channel and one on the bottom representing the right. While the right channel of “Slogun” begins with silence, the left channel (on the top) begins with a high pitched squeal and a distorted howling sound.³³ The most interesting aspect of the graph can be seen in the blitz of volume that occurs just before the one-minute mark when the amplitude of both channels rapidly increases to almost one hundred percent.

Example 5.3
Amplitude waveform graph of “Slogun” by SPK



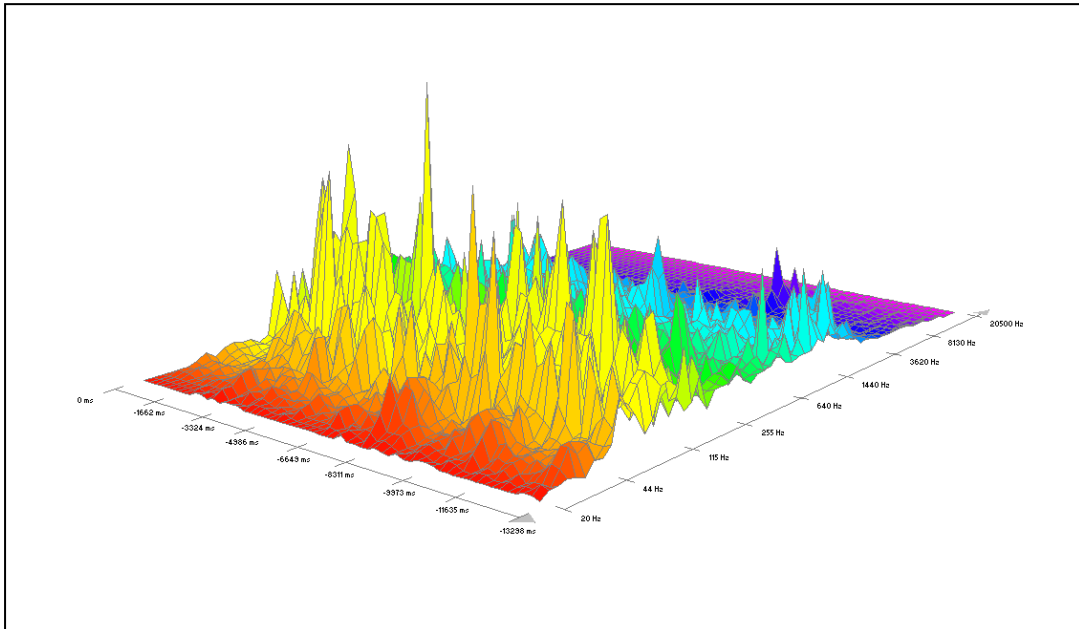
³² It is important to understand that even while the actual play back volume of the track is determined by the listener who can simply turn the volume of the device up or down; the timbre of the sounds therein recorded still retain their basic shape. Therefore I can further enhance the noise sounds of the track by turning my stereo all the way up (and potentially risking destroying my speakers and suffering from hearing loss) or somewhat reduce the noise level by turning the volume down—but the recorded quality of the sounds will remain the same.

³³ This type of amplitude graph is common to most digital recording software. It represents time on the X axis moving from left to right, and amplitude on the Y axis emanating from a zero point in the center of the graph.

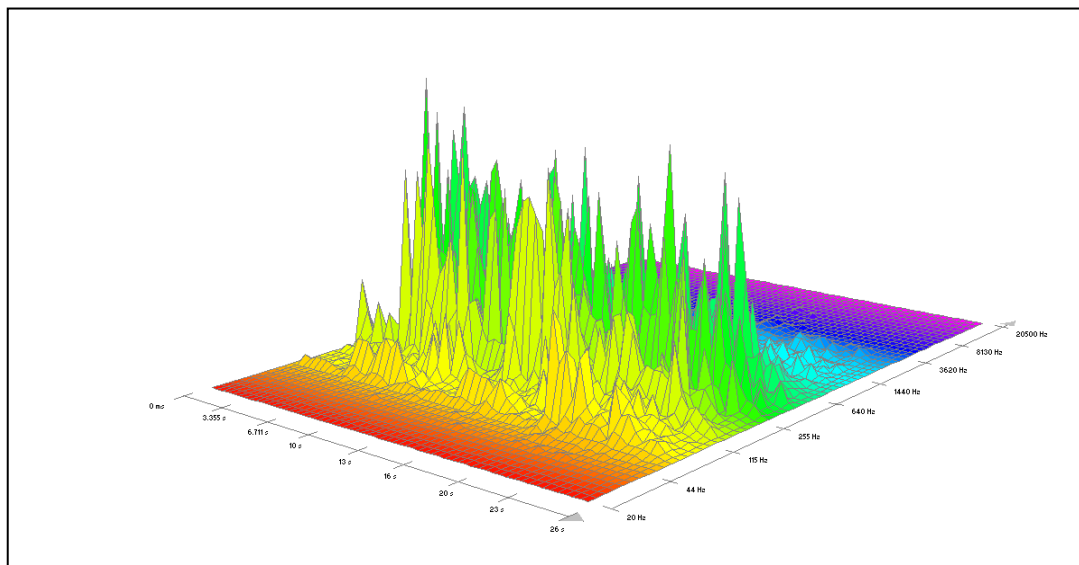
In many rock songs variations in volume often correspond to changes in musical form. As a result it is possible to “see” the musical form of the song within the amplitude-wave graph, as each section, instrumental, verse, chorus, takes on a different amplitude profile. The SPK example on the other hand shows shifts in volume that are not directly associated with formal-sectional changes, and the few formal changes present are not represented by changes in volume. The graph of “Slogun” serves as a visual analogue for the sonic bombardment of volume and reveals the constant energy of the recording. It also shows how a quieter moment, like the one at the five-minute mark, is still producing a large amount of energy. The volume then slopes upward over the next thirty seconds to return to the 100 percent mark.

The second graph of “Slogun” I produced using Wavelab was a frequency spectrum analysis graph shown in example 5.4, and for point of comparison I also produced a frequency spectrum analysis graph of the Velvet Underground’s “Here She Comes Now” shown in example 5.5. I used Wavelab to analyze the overall frequency (pitch) of each song and programmed the software to display the results as a three-dimensional graph showing the progression of time from left to right, and representing low-to-high frequencies from front to back. Prominent frequencies show as taller spikes on the graph. In example 5.5 it is possible to see that in the Velvet Underground song the majority of the harmonic spectrum is confined to mid-range frequencies with the most common pitches at the center (green spikes). Additional frequencies then fall off on either side with very little activity in the extreme high or low ranges. This sort of clean and organized profile is common to rock songs that are performed in a key by traditional instruments; the Wavelab software even suggested that the song was most likely in the key of D based on the relationships between the tones analyzed.

Example 5.4
Frequency Spectrum analysis graph of “Slogun” by SPK



Example 5.5
Frequency spectrum analysis graph of “Here She Comes Now” by the Velvet Underground



A visual reading of the “Slogun” graph shows a far less organized set of relationship that is an analogue to the listening experience. The sound occupies a much wider range of frequencies from the very low (red) to small rumbles in the very high (purple). The most

common frequencies appear to hover in the low registers (yellow and orange), but are not uniformly dominant over time. Because noise sounds contain randomly shifting frequencies, the graph shows many ripples and spikes that change over time (and Wavelab was unable to determine the musical key of this example). The sonic picture that develops is a fascinating one in which the physical attributes of the noise sounds on a micro level (randomly shifting frequencies across a broad spectrum) are then replicated at the macro level (randomly shifting frequencies across the six minutes of the track). It is remarkable that Luigi Russolo, through his study of Helmholtz and acoustics, had defined noise sounds in almost the same way in 1913: “Noise [arrives] confused and irregular from the irregular confusion of life.”³⁴ He even connected the confusion and disorder of the sounds themselves with the chaos of the modern world. When the noise sounds are combined with the loud and distorted volume levels of Industrial music it results in what I have described as “harsh” and “brutal” sounds, a definition that attempts to capture both acoustical structures of the noises as well as the heard and emotional response. Even on an aesthetic level noise sounds were defined in much the same way by Russolo who claimed that “the characteristic of noise is that of reminding us brutally of life.”³⁵

At times the noise of “Slogun” sounds like screams, guitar feedback, wild animals, exploding television sets, white noise, trains, and machinery. Whatever the source of each sound might have been is irrelevant, its sonic fingerprint erased by distortion and extreme volume. The consequential sound-mass is held together by the white noise pulses of a drum machine and the screamed vocals that shout, “kill kill kill for inner peace, bomb bomb bomb for mental health,

³⁴ Russolo, *The Art of Noises*, 27.

³⁵ Russolo, 27.

therapy through violence, working circle explosives, spk / spk / spk / spk” The intensity of the lyrics and the sound of the track were not lost on fans.

A review in *Slash* fanzine stated, “This bastard is diseased from cover to core, a bad virus that only incidentally infects plastic, paper, or canvas. Maybe it’s the nearest soundtrack available for S.P.K.’s own home movie—the sickly yellow one that flickers incessantly in their raving noodle.”³⁶ The liner notes of the record reinforce the violent interpretation of Marxist philosophy, “the strategy is catastrophic—pushing the situation to the limit. The strategy is symbolic—using the system’s own intolerable signs against it.”³⁷ So despite the utter noise and extreme volume of “Slogun,” SPK still refer to their compositional method as a strategy: noise in the system.

Boyd Rice, also known as the Industrial artist NON, explains the effect that extreme volume and noise have on an audience during live performances:

In some cases, the sound has been so loud that audience members claimed they could no longer hear it, they could only feel it. . . . Because at certain levels of volume you cease to think, and when you can no longer think about it, you’re forced (allowed) to experience it. As long as people use the intellect and try and interpret and understand what they see, everything they view is tainted by what they think. . . . So in order to get them, you’ve got to override the mind.³⁸

This suggestion of a strong physical force used to induce a new mental state is a violent process, an actual shock to the system that is potentially damaging to one’s hearing. It is easy for that kind of physical force to have the opposite effect of turning potential fans away from the music. This reflects back to the comments of Benjamin who called the Dada work of art “an instrument of ballistics.” But while Benjamin was suggesting the artistic tactic as a negative, the Industrial musicians viewed the use of experimental noise as a positive weapon of action.

³⁶ Reprinted online at <http://killyourpetpuppy.co.uk/news/?p=4600> (accessed February 11, 2011)

³⁷ Liner notes to CD reissue of SPK album *Auto De Fe* [Mute Records, SPKCD 4, 1993].

³⁸ Neil, 175-176.

Metallic Percussion

It was the band Einstürzende Neubauten, from Berlin, that brought the burgeoning German Industrial music scene into a tight focus through their use of avant-garde compositional techniques, performance-art stage shows, and an almost total reliance on “instruments” including pneumatic drills, springs, air-conditioner ducts, metal pipes, sheet metal, plastic buckets, power sanders, and even the support structure of an overpass on the Autobahn.³⁹ In what seems like a Futurist dream, Einstürzende Neubauten took the physical machines and tools of the modern world and turned them into a percussion orchestra. Throbbing Gristle was the band that established the style and substance of Industrial music during the first generation, but Einstürzende Neubauten was the band that defined the sound for the second generation. Their music was severe, in the truest sense of the word, and few bands ever matched their sonic intensity. They cemented the concept of factory rhythms performed on percussion instruments as the basis for the Metallic Percussion archetype.

The band’s conception of their metallic percussion sound was rooted in musical pieces that used similar orchestration including the organized sound of Varèse in *Hyperprism* and John Cage’s “First Construction (in metal).” The band also found inspiration in the Futurist writings of Luigi Russolo and his *Inonarumori*. During a 1993 interview with *Industrial Nation* fanzine, band leader Blixa Bargeld showed a nuanced understanding of the political issues raised by Futurist art: “You have to be a bit careful with the Futurists anyway, because . . . a lot [of them] were pro-fascistic. From the point of view of nowadays this is pretty hard to accept, that they have been so technology and mechanistically friendly”⁴⁰

³⁹ Einstürzende Neubauten was commonly called *Neubauten* or simply EN.

⁴⁰ June Schuler, “Einstürzende Neubauten,” *Industrial Nation* 8 (Winter 1993): 76.

Table 5.5

Additional Stylistic Cues in the Metallic Percussion Archetype

- Metal objects used as percussion
- Soundscapes created from percussion instruments
- Found objects
- Power tools
- Loud blasts of sound
- Machine timbres
- Tape loops
- Factory rhythms

The Metallic Percussion archetype is one of the easiest to define since it is created by using metallic objects as percussion instruments, augmented by power tools, machine sounds, and loud blasts of electronically produced noise. The cues of the archetype are shown in table 5.5. Much like John Cage's construction compositions, the music of Neubauten sounds as if it emanates from a construction site. The unifying factor of many Metallic Percussion tracks is the use of a particular type of rhythm that I designate as a Factory rhythm. The essence of the rhythm can be found in its mechanical nature: repetitive with a strict tempo and rhythmically precise timing. The rhythmic groove is created by a number of different metallic sounds that work together and independently as a series of interlocking patterns. Together they recreate the many machine sounds that pound and hiss in a large factory. The factory rhythms drew influence from the motoric drumming style of Can's drummer Jaki Liebezeit and the additive rhythms of minimalist composers.

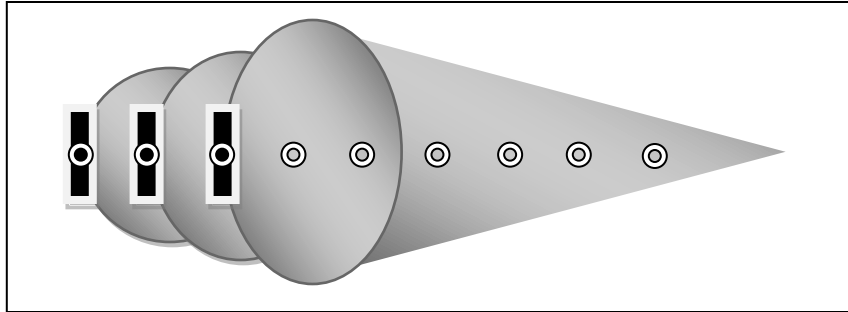
A perfect example is Einstürzende Neubauten's first recorded release, a June 1980 single featuring the tracks "*Für den Untergang*" and "*Stahlversion*." The b-side, "*Stahlversion*" (or "*Steel Version*"), is interesting due to the circumstances of its creation and recording. Band members Blixa Bargeld and N.U. Unruh took power tools, sledgehammers, and a tape recorder and set up a mobile recording site under an overpass of the Autobahn. They then proceeded to perform on the bridge itself, hammering away at the steel support columns and girders or

grinding their power tools against its walls. This turned the overpass itself into a giant percussion instrument that simultaneously served as its own colossal amplifier and reverb chamber. During the recording Bargeld and Unruh bang away but many of the individual hammer strikes are subsumed into the resulting wash of sound as they all overlap within the unremitting echo and reverb caused by the physical location. The result is a hum and buzz across the sonic spectrum, and a sense of place and space.

The musical activity of “Stahlversion” can be broken down into three intensity levels: foreground, middle-ground, and background. In the background of the entire track is the sound of tape hiss, similar to the one heard on Throbbing Gristle’s “Valley of the Shadow of Death.” It is not amplified to the same extreme as in “Valley” but the sound serves much the same function, of giving the entire track a live field-recording sound. The very first sound heard, a tape machine coming up to speed, reinforces that conceptual frame.

In the middle-ground there are three metallic percussion sounds that form the basis of the track’s factory rhythm. Steel support columns are struck on the first three eighth notes of a 9/8 rhythm. Although the column is only struck three times it causes the entire structure of the overpass to vibrate, producing a reverberating low bass tone along with the actual rhythmic pulse. The reverberation of each successive strike is added to the one before it, resulting in a billowing cloud of sound that takes the remainder of the measure to trail off. The column strikes are shown in example 5.10 as three black bars, and the reverb is represented by the grey shaded areas. The reverb clouds bring the space of the Autobahn overpass into the recording in a way that is even more substantial than the struck columns themselves.

Example 5.6
Metal columns reverb effect in Einstürzende Neubauten's "Stahlversion"



The second percussion instrument is muted, played at a softer volume, and keeps a steady pulse on each eighth note of the 9/8 meter. This muted metal instrument occupies an interesting sonic place in "Stahlversion" and is represented in example 5.6 by the small circles in the center of the graphic. Because the instrument plays the same basic eighth-note pulse as the column strikes, it can often sound like an echo of those louder beats. And because the muted metal sound is so quiet, it is easily subsumed by the pluming reverb of the columns. Added to these two elements is something that sounds like a metal trash can lid being stuck on beats four and seven of the 9/8 meter.

In the foreground an electric guitar plucks a pair of staccato B notes at the end of a rhythmic pattern that is a total of four dotted quarter notes long (a 12/8 meter). Because of this it shifts its position within the bar during each four-measure phrase of the prevailing 9/8 factory rhythm. Since the very first guitar notes actually occur on the fifth dotted quarter of the track it pushes the 12/8 part to a repeating cycle that runs m. 2-5, m. 6-9, etc. The relationship of the metallic percussion factory rhythm and the 12/8 guitar part are shown in the musical score of example 5.7.

Example 5.7
Opening Factory Rhythm of “Stahlversion” measures 1-8
 (Transcribed by Jason Hanley)

The musical score is arranged in two systems, each with four staves. The top system starts at measure 1. The GTR staff (top) is in treble clef with a 9/8 time signature. It features a melodic line with eighth and sixteenth notes, including a triplet in measure 2. The Trash Can staff (second) shows a steady eighth-note rhythm. The Muted Metal staff (third) consists of a continuous eighth-note pattern with accents. The Columns staff (bottom) has a rhythmic pattern of eighth notes and rests. The bottom system starts at measure 5, with the GTR staff continuing its melodic line. The other three staves (Trash Can, Muted Metal, Columns) maintain their respective rhythmic patterns throughout the second system.

Another important aspect of the Metallic Percussion archetype is that it had an influence on the subculture beyond the musical stylistic cues, one that involved the visual and performance aspects of Industrial. While Kraftwerk had conceived of their album *Autobahn* as an homage to modernism, Einstürzende Neubauten turned the physical substance of the modern world into their instrument in “Stahlversion,” an act that justifies their name. Translated from the German their band name means Collapsing New Buildings, where collapsing is an adjective not a verb, and it was an image pulled directly from the concept of the modern crisis. The band members embraced the idea that the wasteland of the modern era would be their playground. The first full-length Einstürzende Neubauten album was called *Kollaps* [Zick Zak, 1981], and it was at the opposite end of the Industrial music spectrum from Throbbing Gristle’s *Second Annual Report*.

While Throbbing Gristle used tape machines and electronic effects to manipulate and distort sounds, Einstürzende Neubauten performed using found-sound percussion instruments. Band member Mark Chung claimed that the *Kollaps* album was intended to be the most unlistenable album they could possibly create, and that they were shocked by the positive critical and audience reception that they received.

The back cover of the album featured a photo of the band in a scene that closely resembles the album cover of Pink Floyd's *Umma Gumma* [EMI, 1969]. Both records feature the musicians standing with all their instruments. The Einstürzende Neubauten picture shows the band members standing behind several amplifiers and guitars that sit next to pieces of sheet metal, jackhammers, sledgehammers, blow horns, televisions, synthesizers, metal pipes, wrenches, and power tools. The backdrop of the photo is the massive portal of the Berlin *Olympiastadion* constructed in 1936 as the central building in the Reich sports field for the 1936 Olympic Games—often described as the Nazi Olympics. During the 1936 games the stadium had been covered in Nazi flags and the audience was frequently subjected to Nazi propaganda speeches. It was the first time that the Olympic Games were televised (to closed circuit theatres around Berlin), and was the setting for Leni Riefenstahl's famous film *Olympia* (1938). Riefenstahl's film is a dreamlike fantasy about athletic beauty and motion, but it also contains some intense propaganda regarding Hitler's visions of a pure Aryan race and the dominance of the German people. Einstürzende Neubauten wanted to suggest that their metallic factory sounds were part of a collapsing modern world, and they placed themselves in front of a location known for its images of Nazi modernism gone astray.

In the early days Neubauten concerts often involved the literal destruction of the stage and the nightclub itself, causing fans to riot and resulting in condemnation from club owners. It

is rumored that on occasion they used jackhammers to crumble the actual walls of the club. Subcultural lore has it that they created their own exit from a club in Norway in this manner—which, even if it is not true (and I would imagine that it is not), still shows what their fans were willing to believe about the them, and the public image the band members worked to present.

Synthesizer-based

The Synthesizer-based archetype descended from the Krautrock sounds of Kraftwerk and Tangerine Dream who had already combined many concepts of musical modernism including the rhythmic-pattern-based style of the minimalists and the electronic clouds of Stockhausen. The first-generation Industrial musicians created their music through the use of voltage-controlled analog modular synthesizers. The sounds could be modified via a series of electronic devices that alter the shape of the waveform, including filters, delay, and ring modulation. While many of these effects were previously available as stand-alone electronic devices, the new synthesizers of the late 1970s made the practical improvement of including the generation, modification, and articulation aspects of sound all in one unit, and it allowed control of its various parts via control voltages. The result was the ability to create impressive swaths of sound without the need for traditional instrumental virtuosity.

The synthesizer is used in a large number of tracks in all five archetypes, but in most cases it was part of improvisational forms and featured as a special effect. This was primarily due to the fact that it was almost impossible to keep the synthesizer tuned to the rest of the instrumentation, or to synch its various rhythmic effects to the other kinds of tape manipulation (remember that part of Tangerine Dream's "Phaedra" discussed in chapter three goes out of phase for this exact reason). This problem was solved in the first generation of Industrial music by placing the rhythmic pulsing of one synthesizer at the center of a track, and allowing the other

synthesized sounds to build around it. The stylistic cues common in the Synthesizer-based archetype are shown in table 5.6.

Table 5.6
Additional Stylistic Cues in the Synthesizer-based Archetype

- Use of synthesizer
- Repetitive rhythmic/pitch patterns
- Timbres that are “clean” or “cool”
- Use of filters and effects
- Use of drum machines

As an example of a track that used the Synthesizer-based archetype is “Blank Clocks” [Demo recording, 1977] by The Future. In 1976 in Sheffield, England, musician Ian Marsh built his first synthesizer from a kit he had ordered through the mail and he began to experiment by designing sounds. These fascinating sounds inspired his friend Martyn Ware to purchase a Korg 770 synthesizer (an inexpensive dual oscillator monophonic synthesizer with ring modulation capability first sold by Korg in September 1976). The two formed a band they called The Future and asked their high school friend Adi Newton to join. The three young men wanted to create music using only electronic instruments and they based their sound on the records of Kraftwerk. The Future soon purchased a new Roland System 100 synthesizer that possessed new features that allowed them to create constant cycling rhythmic/pitch patterns by using the arpeggio feature. Both instruments were monophonic (allowing for only one note to sound at a time) and were limited to a two-and-a-half-octave keyboard. The various dials and switches on the upper section of each instrument allowed the performer to alter the sound in real-time by changing aspects of the oscillator or the parameters of the on-board effects.

These synthesizers are prominently featured on “Blank Clocks.” The track opens with a series of Ambient-Noise-style sounds, but quickly shifts gears to center on a particular rhythmic/pitch synthesizer pattern shown in example 5.8. The pattern is created with a synth

arpeggiator that was available on a number of early analog synthesizers. With the arpeggiator turned on, any note or group of notes that was held down by the performer were automatically performed as a series of single notes—an arpeggio. Most synthesizers allowed the user to alter the pattern and rhythm of the notes played. In “Blank Clocks” one of the primary repeating patterns played is based off of the single note C. The rhythm used is a series of straight eighth notes, and the pattern moves up and down over four octaves. This pattern fits perfectly in a 4/4 measure and forms both the basic rhythm and pitch center of “Blank Clocks” to which a number of other patterns are later added. These rhythmic/pitch patterns are important to the development of the Industrial music sound and will play a large role in the second generation of Industrial music.

Example 5.8
Synthesizer Rhythmic Pitch Pattern in “Blank Clocks” by The Future



Marsh and Ware worked day jobs as computer operators and they used these skills to develop a computer program they called CARLOS (Cyclic And Random Lyric Organization System), which allowed them to create Burroughs-style cut-up lyrics out of material that was fed into the program. The lyrics “Blank Clocks” were created with this program and generated a randomization of several words that are recited in word pairs such as “blank clock,” “your pain,” “my heart,” “blank heart,” “your pain,” “my clock,” etc. The pairings continue to change throughout the course of the track.

The Future actively placed themselves within the Industrial Music subculture in many of their public interviews. Martyn Ware's statements about the city of Sheffield are similar to those made by Cabaret Voltaire and remind us of the statements made by Kraftwerk in reference to Düsseldorf: "In Sheffield, you're surrounded by strange sounds, with the steel works all the time, you know? You're surrounded by Music Concrete. The drop forges hammering away at night. It was a natural environment for us, they sounded like very natural sounds, not alien at all. We grew up with the sound of machinery."⁴¹ Early tracks such as "Dada Dada Duchamp Vortex" and "New Pink Floyd" make direct connections to modernist movements as well as to both the avant-garde modernist composers and to the popular-music avant-garde. Eventually Adi Newton wanted to explore even more experimental areas of sound production but Marsh and Ware were reluctant. Newton soon left the group to form the Industrial band Clock DVA, and Ware and Marsh went on to form the Synth-pop group The Human League along with singer Phil Oakey.

Mixture

Many first-generation tracks mixed together the different styles into one composition, and in some cases like Throbbing Gristle's "Slug Bait" a particular musical concept was interpreted and performed in several different archetypes depending on when and where it was recorded. A studio version might conform to the cues of the Ambient Noise archetype, and when performed live the band might utilize the cues of the Experimental Noise archetype. Cabaret Voltaire claimed that their audience was varied depending on the performance venue, and because of this they persistently made attempts to blur the lines between the archetypes. The band claimed that the avant-garde noise sounds in their music became more palatable due to their consistent use of the drum machine and a reliance on rhythm:

⁴¹ Martyn Ware quoted in the liner notes to *The Golden Hour of the Future: Recordings by the Future and the Human League* [Black Melody, MELCD 4, 2002]. Liner notes written by Sean Turner.

The whole rhythmic side of things came about from banging on anything that was around the loft at that time—pure percussion. Whatever sounded good, you hit it. Also we used a lot of tape loops . . . the whole notion of the tape loop is based on repetition, and it therefore becomes a percussive pulse. Leading on from that, as another way of generating rhythm we bought a drum machine. What appealed to us was the idea of providing a faultless beat, a pulse behind what we were doing to link things together. . . . We wanted to juxtapose different forms of music, such as the avant-garde experimental tradition, with a parody of rock music.⁴²

The Cabaret Voltaire track “Do the Mussolini (Headkick)” was one of the band’s most popular and it became one of the first Industrial-music dance-floor hits in 1978 along with Throbbing Gristle’s “United.” The track shifts between aspects of the Punk-Garage, Synthesizer-based, and Experimental Noise archetypes. Like many of Cabaret Voltaire’s tracks it features repetition with minimal variation. The bass line drifts between a small set of pitches. The synthesizer plays a square-wave timbre that uses two oscillators slightly out of tune that repeat an arpeggio rhythmic/pitch pattern. The guitar sound is drenched in large amounts of delay, reverb, and flanging so that it produces grating factory-like buzzes, sweeps, and chinks above the drum, bass, and synthesizer groove. Lyrically the track contains equal part shock tactic and political message. The title of the song refers to WWII Fascist Italian leader Benito Mussolini and the well-known fact that after he was hung and killed at the end of the war his body was dragged down the street as citizens kicked his dead body. Cabaret Voltaire had seen a documentary film about this event and decided to use it was their lyrical inspiration for a song. What they created was an anti-dance dance song along the lines of Throbbing Gristle’s “Zyklon B Zombie.” It was a song that worked as a parody of the dance-craze songs of the 1950s, asking the audience to “do the Mussolini,” but it also poked fun at the punk style of dancing that was popular in punk and ska clubs in England at the time called Skanking, which involved dancers kicking their feet out in front of them. The vocal refrain “Head-kickkkkkkkkk,” is sung through

⁴² Mick Fish and D. Hallbery, *Cabaret Voltaire: The Art of the Sixth Sense* (Harrow, UK: SAF, 1989), 22.

a ring-modulator that is processed with reverb and delay and appears at the start of almost every other measure of the song. In the chorus the lead vocal prefaces the refrain of “head-kickkkkkkkkk” with the words “Do the Mussolini.” The rest of the lyrics are mixed low in the track and are processed with so many effects that almost all of it is almost incomprehensible.

This reveals a contradictory compositional development in the first generation of Industrial music. While the message is stressed as being of the utmost importance, as a vehicle to grant access to information, the textural concerns of the music, including distorted vocals mixed deep within the noise sounds of the track, work against that goal. This was especially true in tracks that mixed musical cues from the Punk-Garage archetype with the Experimental Noise and Synthesizer-based archetypes. Cabaret Voltaire vocalist Stephen Mallinder commented, “We were interested in the voice as a rhythm, using it as just another instrument rather than straight singing.”⁴³ Musically this produces a track that is aligned with modernist ideals of noise, but it is a problem when considered within the access-to-information objective of the subculture.

Cabaret Voltaire was asked about this very problem in their music during an interview with *Breach Of The Peace* fanzine in September 1980. Mallinder tried to push the question aside by claiming that it is too self-indulgent to print the lyrics with the record, but Watson quickly adds (half-jokingly) that even he doesn’t understand the lyrics.⁴⁴ The interviewer includes an aside to the reader in which he exclaims, “To my mind, it seems rather stupid not to include lyrics with the records in Cabaret Voltaire’s case. Lyrics are an important facet to any song, and if, as in this case, they cannot be properly understood (due to distortion of vocals) then it would seem a logical thing to include lyric sheets.”⁴⁵ While Cabaret Voltaire held true to their Dadaist

⁴³ Mick Fish, *Industrial Evolution* (London: SAF, 2002), 222.

⁴⁴ *Breach Of The Peace* #2, September 1980. Reprinted online at <http://www.brainwashed.com/cv/publications.php>. (accessed January 20, 2011).

⁴⁵ *Breach Of The Peace* #2

philosophy, the growing subculture took them to task for this contradiction of intent—a consequence of the clash between Cabaret Voltaire’s aesthetic goals and their musical textural goals. Their continued use of coded language within lyrics and interviews signifies the development of subculture communication, in which each artist speaks his/her own dialect but also makes use of a shared set of codes that the fans can interpret. Throbbing Gristle began to use many of the same visual/verbal/musical codes as early as 1976 and by 1980 they were being adopted by other bands including Cabaret Voltaire.

If audience members wanted to find out the exact lyrics they needed to look other places, such as fanzines and newsletters that printed the lyrics and/or discussed their content. During a 1980 interview with the *New Musical Express*, Cabaret Voltaire members Richard Kirk and Stephen Mallinder discussed the overall concept of the album *The Voice of America* [Rough Trade, Rough 11, 1980] and were asked by the reporter why they so frequently mentioned philosophical themes in interviews:

Kirk: “Oppression, control, the general state of what's happening in a lot of western countries. It's always been happening, it's happening in Britain right now, especially under this government.”

Watson: “I think the main theme running through *America* is control used as a weapon, and, if you like, it's a question of bringing thoughts like that into people's minds. The idea that you are under so much control, that is ignored to a large extent.”

NME: You think it's important that you make these comments, drop these hints?

Watson: “I think it's part of our job actually We've got the facilities through this recording studio, and we've got the access to distribution”⁴⁶

Fully in line with the Dadaist nightclub they named themselves after, Cabaret Voltaire suggest that art is action, and that access to information as a form of resistance is a central component of

⁴⁶ “The Heart and Soul of Cabaret Voltaire.”

that art. But even within the interview the band does not offer up any specific actions or answers, only the “idea” that their audiences should fight against control. Cabaret Voltaire used the interview with a mainstream music publication to discuss general concepts, but this required listeners to go back to the album to investigate, and eventually one step further back to the source material—purposefully involving the created history of Industrial music. By looking at the entire project as a whole, audience members could work out details by noticing the tape machines in the album cover photo, then by reading Burroughs, and going back further to Marx and the history of the Zurich nightclub Cabaret Voltaire took their name from.

The hybrid mixture tracks can be seen as the culmination of the achievements of the first generation of Industrial music, the point when musicians were finally able to synthesize the various musical and cultural concepts they had adopted and focused all of it into a single style and sound. The five individual archetypes and their mixture into a combined sound had a great effect on the development of the second generation of Industrial music. The Synthesizer-based archetype found a direct progression into the sounds of the Electronic Body Music sub-style, while the Metallic Percussion archetype was more generally folded into many different sounds and styles during the 1980s. The music and culture of the first generation had established a specific history that was adopted by second-generation musicians who then shifted their interest to the assimilation of other forms of popular music such as synth-pop and heavy metal.

“Assimilate”:
Dance Beats, Electronic Noise, and Rock and Roll 1983-1989
Chapter Six

Everything that we put down, we try to flavor with some pieces of a fragmented world, with fragments of this society.¹

cEvin Key of Skinny Puppy

Our problem, then, is to make these methods both new and old available for utilization by all, in fact, to positively encourage their assimilation (but not their dilution or corruption). . . . By the intelligent use of this tool . . . a mirror can be cast up apart from communicating with symbols open to many different interpretations, one that brings us HERE, to come to NOW.²

The Hafler Trio
From *Metanoia: Theme for “Captured Music”* (1987)

The word “assimilate” appears time and time again during the second generation of Industrial music. It carries a particular vivid significance within this context, building on the philosophies of the first generation of Industrial music regarding the modern crisis, and signifying a particular battle strategy for the information war. But what does it mean to assimilate? It can be the action of making things alike, or causing them to resemble one another. It can be the action of taking something unto one’s self. As such, the act of assimilation can be viewed as a peaceful and harmonious union between two or more things. When the second generation Industrial band The Hafler Trio, led by Andrew McKenzie along with former Cabaret Voltaire member Chris Watson, speaks of assimilation, they are envisioning the incorporation of ideas and concepts—techniques and strategies—into their own artistic tactics. This was not an ideology designed to create a homogeneous whole or a single faceless artistic method. It was a statement about the development of Industrial music’s modernist ideology throughout the 1980s:

¹ Kevin Shurtluff, “Skinny Puppy Interview,” 1988 www.litany.net/interviews/shurt88.html (accessed February 16, 2010). Note that cEvin Key spells his first name with a lowercase “c” and an uppercase “E.”

² The Hafler Trio, *Metanoia: Theme for “Captured Music,”* in Neal, 181-84.

the assimilation of new artistic methods and musical sounds into the Industrial-music vocabulary without their corruption or dilution.

The concept of assimilation is based in the modernist artistic tactics of the first generation, but with a number of key differences. The first generation actively sought out the past in order to borrow specific elements in order to construct a history for Industrial music and form the set of subcultural and musical ideas that were discussed in chapter five. For the second-generation musicians the Industrial subculture already existed. Thus, they entered into it, and by doing so they were granted access to the history, artistic methods, and subcultural attributes of the first-generation bands. In turn, second-generation Industrial musicians looked to assimilate contemporary styles of popular music and fuse them into the Industrial-music archetypes developed by the first generation. Because of this there are very few new historical connections made to the early twentieth century during the years 1983 to 1989. As cEvin Key of the second-generation band Skinny Puppy has stated, they tried to “flavor [the music] with some pieces of a fragmented world, with fragments of this society.” These methods of assimilation took elements of the world and ingested the sights and sounds, cut them up, and recontextualized them, hopefully making the hidden agendas of modern society visible. This process tilted toward a postmodern understanding and use of source material, although the second generation managed to stay grounded in the philosophy of modernism.

Assimilation was also the means by which the second generation continued the information war by creating a critical commentary on modern life, political relations, and global injustices, and further developed the Industrial music sound and style. But the process of assimilation was not always a harmonious one. Assimilation can also be a forceful action. One can be assimilated or witness the forceful assimilation of an entire group of people. In many

ways the word, and what it represents, reeks of the modern crisis. When considered within an ideology based on the philosophies of Marx and Nietzsche it brings into question the act of assimilation itself. Does assimilation allow for advancement and development only at the cost of individuality, of difference, or both? When the second-generation band Skinny Puppy sings of assimilation in the song “Assimilate” [Nettwerk, 1984], it is represented as a selfish and violent act.

Example 6.1
Lyrics to “Assimilate” by Skinny Puppy (1984)

protect design
the moral plan
infallible as propaganda
completely black, with no steps back

hot to assimilate
[distorted response, sounds like “go nowhere”]
we’ll rot or annihilate
[distorted response, sounds like “tell yourself”]³

The lyrics shown in example 6.1 are parsed out by vocalist Nivek Ogre in a sharp, rasping, distorted vocal timbre. The word “assimilate” sounds abrasive when it is spit out through clenched teeth, with the syllables rubbing and grating against one another. It is not bluntly shouted out as a punk-rock disruption. The element of aggression is internalized and expelled through a violent act of vocal production layered with electronic effects and distortion. The lyrics speak of those who must protect social design and the moral plan. We are never told who the protectors are, but it is made clear that their methods are akin to propaganda and annihilation. Humanity is in a crisis at the edge of the precipice and there is no way back. Assimilate or annihilate. But are the listeners (the audience) the ones assimilating or are they

³ Lyrics to the end of the second verse and the second chorus of “Assimilate” by Skinny Puppy from the album *Bites* [Nettwerk Records, 3002, 1985]. The distorted responses are difficult to understand and change throughout the song. At various times it sounds like “go nowhere,” “tell yourself,” and “show no faith” among other things.

being assimilated? There is some suggestion in the hostility of Ogre's voice as he screams, "lock me up, lock me up," against the "crazy world of weary thought" that others may be trying to assimilate him. But the disjointed lyrics, created through cut-up technique, remain vague without specific signification, and it is possible that Ogre is suggesting that we may be assimilating others and ourselves at the same time (like a snake eating its own tail). Either way, both ways, things are dark with no way out; thus it brings us to the here and the now (as The Hafler Trio suggested).

Assimilation was the core philosophy of the second generation who rebooted the Industrial music subculture in 1983; this new group of musicians took the musical experimentation of first generation and integrated new sounds and techniques from other styles of popular music, specifically synth-pop and heavy metal. This often brought the music closer to a "popular" sound, but it also meant that the music reached a larger audience. Between 1983 and 1989 the music moved out from England and Germany and made its way to the rest of Europe and finally to North America. Throughout this chapter I will weave together music and events from three crucial years in the second generation of Industrial music: 1981, 1983, and 1988. Many second-generation bands formed in 1981, released their first full-length album in 1983, and produced what is often considered to be their defining masterpiece in 1988. One could very well consider 1988 as the year that forever changed the geography of Industrial music, and opened up a very different world of possibilities for the third generation.

This chapter begins with an overview of the second generation of Industrial music that examines the musical cues and archetypes and shows how they were organized into three distinctive sub-styles during the 1980s. The second part of the chapter is a historical interlude that relates musical developments that occurred between 1977 and 1983 in the related musical

style called synthesizer pop, or synth-pop for short. The style had developed from the experimental music of Kraftwerk in the late 1970s and was refined into a commercially successful pop sound by the Human League in 1981. Just a few years later, synth-pop bands like New Order and Depeche Mode expanded their musical horizons by incorporating the sounds of Industrial into their music, thus serving as a vital bridge between the music of the first and second generation of Industrial music. The chapter closes with three detailed case studies that analyze the formation, philosophy, and sound of the second-generation Industrial bands Front 242, Skinny Puppy, and Ministry.

Reboot'83: The Second Generation of Industrial Music

The Industrial-music style and subculture underwent a number of significant changes in the years between 1981 and 1983. Industrial Records officially closed its doors after Throbbing Gristle performed their last live concert in San Francisco on Friday, May 29, 1981 (a live recording was later released as *Mission of Dead Souls* [Mute, 1983]). The members of Throbbing Gristle all continued to make music on their own, but the sounds of TG and the business of Industrial Records were both finished. Chris Watson left Cabaret Voltaire in 1981 to form the Industrial band The Hafler Trio. The remaining members signed to the Some Bizarre record label in 1983 and released *The Crackdown* [Some Bizarre, 1983]—their most pop-sounding album ever. DAF completed an Industrial synth-pop trilogy in 1982 and parted ways shortly afterwards. In 1983 Einstürzende Neubauten recorded their second full-length album, *The Drawings of Patient OT* [Some Bizarre, 1983], and it was the last album to utilize the Metallic Percussion archetype that had been so prominent on *Kollaps*.⁴ By 1983 many in the subculture, including Jon Savage, felt that Industrial music was defunct, that the slow formation

⁴ Their later albums are still considered Industrial by many fans, but the sound of the band changed dramatically moving into more ambient and sound-collage territories.

of the five musical archetypes had established a formula and as a result had made the music acceptable.

For many Industrial music fans, the second generation that began in 1983 was either viewed as a high point—a period that rebooted the first generation’s ideals and sounds into a noisy but sleek musical hybrid that assimilated popular music styles—or as an era in which the popular-music industry began to co-opt Industrial music, as many believed had already happened to punk rock. In many ways, both of those viewpoints were true. Industrial music did change rather substantially after 1983. It became increasingly “popular,” moving closer and closer to song forms and college-radio airplay, all the while gaining a larger and more diverse audience in dance clubs where it was played by DJs. The question was whether or not Industrial music was able to retain its Marxist political stance along with its power to shock and upset its audience as it began to reach a broader audience around the world.

There were other factors involved in Industrial music’s increasing connections to popular culture. Images of a dystopian future began to gain a broader cultural popularity in the United States during the 1980s, particularly in films such as *Mad Max* (1979), *Bladerunner* (1982), and *The Terminator* (1984). In some cases these movies drew from the same inspiration as Industrial music. For example, the film *Bladerunner* (1982) was based on the Phillip K. Dick novel *Do Androids Dream of Electric Sheep?* (1968), but was named after the William Burroughs novel *Blade Runner (A Movie)* (1979). These dystopian movies presented futuristic worlds that were in a state of decline, and drew much of their overall character and inspiration from the Futurist images of the past. In the *Mad Max* films the automobile becomes a sign of importance and power during the post-apocalyptic future in a way that recalls the car culture of the 1950s, or even the Futurist fascination with the automobile in Marinetti’s “The Founding and Manifesto of

Futurism.” In *Bladerunner*, the main character Dekker appears to inhabit a *film noir* detective world reminiscent of the 1940s, even though the future he lives in is filled with “high-tech” innovations including flying cars and androids. Images of a dystopian future even became more commonplace in the music videos of many new wave artists such as “Synchronicity II” (1983) by the Police, and Duran Duran’s “The Wild Boys” (1984), which was based on the Burroughs novel of the same name. The Industrial music subculture continued to present itself as a dystopian endeavor and even adopted many of the current film images as their own, but the musicians had to cope with the fact that their ability to use dystopian images as an intense shock tactic were waning.

The second-generation musicians sustained many of the core subcultural ideals discussed in chapter five (access to information, shock tactics, and the use of extra-musical elements) and expanded the use of electronics and synthesizers. Similar to the first generation, they constructed their own recording studios and made music through a process of experimentation. The majority of bands also continued to practice organizational autonomy by signing recording contracts with small independent record labels and retaining artistic control over their music and messaging. Towards the end of the 1980s, however, many of the small record labels began to cultivate distribution deals with major labels. This allowed for larger dissemination of the Industrial music product, but it also reduced the level of control bands had over how the final product was advertised and disseminated. As Industrial music moved closer to popular sounds, and popular music like synth-pop moved a little closer to Industrial, the style started to become commercially (financially) successful. Newer fans might hear the music on the radio or MTV where it was

mixed in with a number of other “alternative” music styles.⁵ Albums were sold by major record store retailers in more markets. While college-radio disc jockeys often talked at length on air about the music and philosophy of a band, mainstream radio did not. As a result the music reached listeners who often had little or no contact with the subcultural aspects of Industrial music—the fanzines, club shows, and community that helped to contextualize the music. Music videos that used shock tactics and the Industrial-music visual codes established by the first generation were difficult, if not almost impossible, for new audience members to decode—and in some cases this was even dangerous as I will later discuss in relation to the music videos of Ministry.

This shift to a larger and more diverse audience was purportedly a large part of what caused Throbbing Gristle to stop making music as early as 1981. The members of TG felt that they had become too successful for the mission of the band to continue as it was.⁶ Tutti commented after the break-up, “The thing that killed off TG in the end was that people took it as their safe haven. We became like the Arts Council. That’s why we disbanded it. We didn’t want fans who sat there idolizing us.”⁷ Many second-generation bands exhibit this contradiction as a sense of dualism in their music, one that positions commercial success against the desire to continue the political and educational aspects of the music as a form of access to information. The musical cues and archetypes of the second generation represent that dualism of popular music elements and experimental noise.

⁵ By the 1990s the term *alternative* was widely used in the music industry as a marketing term that attempted to group together various subcultural styles under one roof, including but not limited to Industrial, goth, post-punk, new wave, ska, and even later on styles like grunge and electronica.

⁶ This was also a common reaction from modernist composers in the concert-music tradition during the twentieth century.

⁷ Ford, 11.12.

Stylistic Cues

Industrial music was the sound of machinery, the tools of industry, creating a ravaged, aural nightmare of the sewer we were creating for ourselves. It was all very bleak.

Paul Lemos (Controlled Bleeding)⁸

Sonically the second generation was more coherent and unified than the first. In my analysis of the second generation I wanted to make sure that the cues were common enough that they could be identified in a large number of tracks and were audible to a listener. The number of general musical cues I have identified is larger than the ones established for the first generation for several reasons. General concepts had become more specific; thus a cue from the first generation may now have become two or three distinct cues. The philosophy of assimilation also meant that there was an influx of new musical cues from a variety of popular-music styles like synth-pop and heavy metal. Table 6.1 shows the most common musical cues used by musicians during the second generation of Industrial music and as a group they define the baseline for the style during the seven year period from 1983 to 1989.

The cues listed at the top of the table (and marked with an asterisk) have been carried over from the first generation and build a certain sense of musical continuity between the two generations. First-generation cues that split into a number of more specific cues are listed with sub-categories. A number of cues that carried over from the first generation to the second underwent a small amount of reformulation, such as the cues concerning tape editing being replaced with ones regarding the digital sampler. A number of the cues that were originally associated with the five individual archetypes became standard practice and now show up in the general cues. For the sake of clarity the list is also broken down into several categories that relate to the elements of music: rhythm, pitch, timbre, and form.

⁸ E-mail interview by author, August 2003.

Table 6.1
Musical Cues of the Second-Generation Bands
(Cues marked with an * were also first generation cues)

- Noise sounds*
- Use of synthesizer* (Synth-based)
 - Filtered/Gated sequencer patterns
 - Long sustained background chords (often called synthesizer “backing pads”)
- Repetition*
- Drones*
- Spoken vocal samples (now includes Hollywood films and TV shows)*
- Processed male vocals*
- Politically minded lyrics*
- Harmony consists of a small number of chords*
- Sound processing*
- Factory rhythms* (Metallic Percussion)
- Soundscapes created from percussion instruments* (Metallic Percussion)
- Machine timbres* (Metallic Percussion)
- Harsh electronic timbres* (Experimental Noise)
- Drum Machine*
 - Low frequency kick drum
 - Sampled sounds clipped
 - Tight, gated drum sounds
 - reverb washed sounds
- Repetitive rhythmic/pitch patterns* (Synth-based)

Rhythm

- Strict tempo between 100 and 125 BPM (1980s dance-club tempos)
- Simple quadruple meter
- sixteenth-note rhythms
- Limited drum fills

Pitch

- Modal melodies and harmonies
- Chromatic voice-leading
- Riffs/motives
- Use of power chords (open-fifth harmonies)

Timbre/Soundscape/Production

- Low-frequency sounds (typically synthesized)
- Guitar emulating a machine
- Syllabic vocals
- Wet production sound
- Use of digital sampler (replaces the role of the tape recorder)
- Ambient sounds

Form

- Deconstructed song forms
- Vocal phrasing at odds with instrument phrasing
- Lack of transitional moments
- Long noise/texture intros
- Call and response

First-Generation Archetypes and Second-Generation Sub-styles

Some scholars and fans view the second generation of Industrial music as a considerable number of diverse styles spiraling out from the first generation, but what these views fail to realize is that there was a continuum between the archetypes of the first generation and the sub-styles of the second. Three of the archetypes from the first generation had transformed into distinctive sub-styles as shown in table 6.2. The Synthesizer-based archetype was the basis for the Electronic Body Music (EBM) sub-style, the Experimental Noise archetype became the Industrial Noise sub-style, and the Punk-Garage archetype is represented in Industrial Rock. The musical cues from the first-generation Metallic Percussion and Ambient Noise archetypes became so pervasive during the second generation that they no longer comprised a separate definable sound, and the cues from those two archetypes are now included in the general cues of the second generation. While many bands tended to work within one of the three second-generation sub-styles, these were not hard and fast distinctions. Some bands, like Nitzer Ebb or Laibach, developed a musical sound that used cues from more than one sub-style. To show this I have listed these bands in table 6.2 within columns that sit between the three sub-styles. Several groups drastically changed their style from one album to the next and moved between the sub-styles.

Table 6.2
Sub-styles of the Second Generation

Synthesizer-based	-	Experimental Noise	-	Punk-Garage	
◀ EBM	-	Industrial Noise	-	Industrial Rock	▶
Front 242		Skinny Puppy		Ministry	
Neon Judgment		Controlled Bleeding		KMFDM	
Clock DVA	Nitzer Ebb	Einstürzende Neubauten	Laibach	Die Krupps	Moev
Cabaret Voltaire	Frontline Assembly	Non			
		Foetus			
		The Hafler Trio			

In the final part of this chapter I chose to focus on three of the most successful second-generation bands with each one epitomizing one of the three sub-styles: Front 242 for EBM, Skinny Puppy for Industrial Noise, and Ministry for Industrial Rock. Classifying these three bands as representatives of these sub-styles allows me to detail the sonic and subcultural ideals that served as a framework for other bands. Although it might be difficult to confuse Ministry's *Land of Rape and Honey* with Front 242's *Front by Front* or Skinny Puppy's *VIVIsectVI*, the three bands were still bound together as Industrial music and not as something else. As I will show, these bands and others like them used the larger pool of second-generation musical cues and the particular sound of each sub-style was determined by which musical cues are emphasized and/or deemphasized rather than by the creation of an entire separate list of cues. All three of these groups started as synth-pop bands in 1981, drawing on the sounds of the Human League, New Order, and Depeche Mode. These synth-pop groups had a tremendous influence on the sound of the second-generation Industrial bands. New Order translated the use of factory rhythms from the steel and hammers of Einstürzende Neubauten to the sounds of the synthesizer and drum machine, and Depeche Mode figured out how to record metallic and machine sounds and perform them using a digital sampler. And much like Industrial music, the story of synth-pop is deeply rooted within the sounds of Kraftwerk.

Historical Interlude: Synth-Pop 1977-1983

By the mid-1970s Kraftwerk had progressed from their early Krautrock style into the creation of proto-Industrial soundscapes on the albums *Radioactivity* [Capitol, 1976] and *Trans-Europe Express* [Capitol, 1977]. During that time their music began to influence a growing number of musicians, and Hütter and Schneider listened carefully to the ways their sound was

combined with the sounds of disco and soul.⁹ In 1977 producer Giorgio Moroder, inspired by the sounds of Kraftwerk, recorded the Donna Summer song “I Feel Love,” and it was unlike almost anything that had come before it. Moroder was enamored of music technology and was one of the first people to purchase a Moog 3 synthesizer. He used the synthesizer and a drum machine to develop a signature sound consisting of “motoric” beats and pulsing 16th-note sequencer rhythms. The sound was relentless, with rising and falling synthesizer arpeggios and white noise high hats, but the juxtaposition with Donna Summer’s voice made the recording feel natural and intimate. The Euro-disco sound created by Moroder served as the inspiration for the next Kraftwerk album *The Man Machine* [Capitol, 1978]. Kraftwerk used the constant moving sounds of Moroder’s sequenced arpeggios on their song “The Robots,” but they gave the music more depth by sculpting every note of the rhythmic/pitch pattern and the individual parts of the electronic percussion. Instead of creating snare-drum hits and high-hats from short bursts of white noise sound as Moroder had done, Kraftwerk gave each layer of the percussion rhythm its own distinct timbre and altered it over time. At times the synthesized snare drum changes its articulation during a drum fill and gives the impression of an actual drummer who is shifting the weight, accent, and position of each drum stick strike. Kraftwerk believed that this replicated the dense sounds of funk music recordings from the late 1960s that featured several drummers playing simultaneously.¹⁰ To create the multiple-layered minimalist rhythmic/pitch patterns, Kraftwerk built several large analog 32-step sequencers that could synch to a device that controlled the drum machine patterns. In 1978 this was a tremendous task. By using various

⁹ While composing *Trans-Europe Express* the members of Kraftwerk began listening to David Bowie who was recording in Berlin with Brian Eno and Iggy Pop (i.e., the Bowie albums *Low*, *Heroes*, and *Lodger*). Of course Bowie and Eno had been listening to early Kraftwerk albums while they were recording the Berlin Trilogy, and had attempted to infuse the Kraftwerk sound with elements of Detroit punk rock through the contributions of Iggy Pop.

¹⁰ This is one of those fascinating stories of “influence” from one popular musical style to another. Of course the Kraftwerk album sounds nothing like James Brown, but it does utilize the concept of multi-layered rhythms with subtle variations in timbre and short melodic riffs. Kraftwerk had already worked with the idea of varied musical layers, but their interest in James Brown’s music pushed the concept into the groove of the song.

effects such as delay and filtering, Kraftwerk was able to expand the sound of just a few synthesized layers and give them a more expansive sound.

Kraftwerk remained too experimental to ever truly embrace the world of the pop song, but the synthesized sound they started was quickly embraced by a number of bands in England, none more fervently than The Human League. When the first-generation Industrial band The Future broke up, Adi Newton went on to form another Industrial band called Clock DVA, while the other members Ian Marsh and Martyn Ware recruited a new singer named Philip Oakey to form the Human League. Early demos by the trio were based on the Euro-disco of Moroder, as on the instrumental track “Overkill Disaster Crash (V.1),” or they were connected to *The Man-Machine*-era Kraftwerk, such as the song “Year of the Jet Packs.” But the Human League quickly moved towards a mainstream pop-music sound, primarily due to Oakey’s musical tastes, which were rooted in early 1960s American popular music including the Righteous Brothers and the “wall-of-sound” recordings of Phil Spector. An early press release for The Human League shows their unusual mix of musical influences:

The Human League are one of the numerous drummer-less bands from Sheffield. Their influences include Kraut Rock, Gary Glitter, Captain Beefheart and Phil Spector—they include the Righteous Brothers, “You’ve Lost That Loving Feeling” in their set.¹¹

Marsh and Ware eventually left the Human League, looking to return to their avant-garde roots by forming the band The British Electric Foundation, but Oakey recruited several new members and recorded the first full-fledged hit synth-pop record called *Dare!* [A&M, 1981]. As Theo Cateforis discusses in his recent new-wave study *Are We Not New Wave?*, “The group that would finally broker a true breakthrough for these new synthesizer pop bands was the Human League, specifically their single “Don’t You Want Me,” which first topped the British charts at

¹¹ Quoted in the liner notes to *The Golden Hour of the Future: Recordings by the Future and the Human League*, [Black Melody, MELCD 4, 2002]. Liner notes written by Sean Turner.

the end of 1981 and then repeated the feat six months later in the United States.”¹² The liner notes list nine synthesizers from manufactures including Roland, Korg, Casio, and Yamaha. This was a far cry from the single (often homemade) synthesizers used by the first-generation Industrial musicians. The sound of *Dare!* was one-hundred-percent pop music using verse/chorus forms, diatonic scales, pop-song chord progressions, vocal harmonies, and clean, well-produced synthesizer tones. “Don’t You Want Me” was based on minimal monophonic synthesizer parts that played a bass line and a melodic lead to accompany the vocals sung by Oakey, Joanne Catherall, and Susanne Sulley. Other synthesizers filled out the background with subtle string pads, and occasional stabs that mimic the sound and function of a horn section, and a sequenced arpeggio. The entire song is held together by the consistent beat of the Linn LM1 Drum computer (first built in 1980, it was the first drum machine to feature sampled sounds).

The British music press had acknowledged the early The Human League recordings as a part of the experimental New Musik scene along with Throbbing Gristle and Cabaret Voltaire, but was quick to criticize the League for being too pop after the release of *Dare!*. But that didn’t matter to the members of The Human League, as Phil Oakey told *Sounds* magazine in March 1981: “We did get the grim industrial bit didn’t we? Because of the factories in Sheffield. Then there was the local thing, then the electronic thing, now the Futurist thing. We are popular now.”¹³ Synth-pop had moved out of the shadows of subcultural electronic music and as a result many doors opened for synthesized music within the music industry, eventually spreading the sound beyond the British Isles and Europe. As Cateforis points out, “In 1981 and 1982 the new devotion to synthesizers reached its zenith . . . as a number of British bands gained notoriety for

¹² Theo Cateforis, *Are We Not New Wave?: Modern Pop at the Turn of the 1980s* (Ann Arbor: University of Michigan Press, 2011), 48.

¹³ Betty Page, “Human League: Half a League Onward,” *Sounds*, March 7, 1981 www.rocksbackpages.com (accessed February 28, 2011).

casting guitars and drums completely out of their ensembles in deference to a lineup consisting exclusively of electronics.”¹⁴ Two bands that developed out of the synth-pop boom that had the most substantial impact on the second generation of Industrial music were New Order and Depeche Mode.

New Order

New Order made several important contributions to the sound of second-generation Industrial music. They represented a link between the punk sounds that were common in British cities like Sheffield and Manchester during the late 1970s and the synth-pop sounds of the early 1980s. New Order mixed the synthesized sounds of Kraftwerk with a punk-music aesthetic and the factory rhythms of Industrial music to create something that was fresh. This sound was showcased in their dance-floor hit of 1983, “Blue Monday.” The song set a new standard for musicians in electronic-based music and particularly affected how second-generation Industrial musicians thought about rhythm and pitch.

In 1977 in Manchester, England, Ian Curtis, Peter Hook, Barney Dicken, and Stephen Morris decided to start a punk band after they attended a live performance by the Sex Pistols. They called themselves Joy Division, and like so many of the punk and Industrial bands of the era the name was inspired by a dark Nazi connection. In the book *House of Dolls*, author Karol Cetinsky mentions the “joy division” as an area of Nazi concentration camps where women prisoners were forced to act as prostitutes for German soldiers. The band made friends with Tony Wilson who owned the nightclub The Factory, and would later turn that endeavor into the famous Factory Records—the label that released Joy Division and early Cabaret Voltaire

¹⁴ Cateforis, 194.

singles.¹⁵ Joy Division's music was dark, played in minor keys with melodic bass lines, occasional synthesizer sounds, and the deep brooding voice of Curtis. The lyrics delved into the subversive components of human emotion and behavior and were greatly influenced by David Bowie and The Velvet Underground. The sound of Joy Division represents the beginning of punk rock's transformation into Gothic rock (commonly known as Goth). The band and its somber music became immortalized on Sunday, May 18, 1980 when lead singer Ian Curtis hung himself in his apartment while listening to the Iggy Pop record *The Idiot*. Faced with the dilemma of what to do next, the surviving band members decided to change the name of the group and move forward into the 1980s by focusing on their fascination with the synthesizer. Out of this tragedy was born New Order who released their first album *Ceremony* on Factory Records in January 1981.¹⁶

Hook, Dicken (now going by his given surname Sumner), and Morris hired the female instrumentalist Gillian Gilbert to fill out the band. Sumner took over the lead vocal spot, and even though he was not a skilled singer, his vocals had the perfect flat and distant quality needed to fit in with the synthesized sound of the band. They began recording music that kept Joy Division's dark atmospheres, but mixed in the crisp synthesizer timbres of Kraftwerk and Tangerine Dream, and the pulsing dance beats of Euro-disco. They worked with new producers who would help to shape their sound, including the young musician and sound engineer known only as Flood (Mark Ellis). In 1983 New Order released the twelve-inch dance single "Blue

¹⁵ The first Factory record was the sampler featuring Joy Division, Cabaret Voltaire, The Durutti Column, and John Dowie, discussed in chapter five. Joy Division and Cabaret Voltaire also played many live shows together including one show at Plan K in Brussels that also featured readings by Brion Gysin and William Burroughs.

¹⁶ While the name *New Order* had no direct connection to Nazism, it still has an air of fascism about it, and was supposedly taken from the name of a Cambodian military unit. The fact that the band used Italian Futurist imagery in their artwork only helped to fan the flames. The name struck the music press as a bold and rather distasteful choice, especially after the former lead singer had committed suicide.

Monday,” a synthesizer and drum machine fantasy that is as crisp and penetrating today as it was then.

Morris had begun building drum machines from mail-order kits and experimenting with rhythmic patterns that had a danceable feel but were impossible for a single drummer to play live. One such kick-drum heavy rhythm became the basis of the twelve-inch single “Blue Monday.” Over the drum machine rhythms playing at 130 BPM Sumner added a steady galloping eighth-note synthesizer bass, Hook played melodic lines on the bass guitar, and Gilbert created dissonant synthesizer pads and arpeggios (one of the synthesizer pads is sampled from the Kraftwerk album *Radio-Activity*). The final step was for Sumner to add his detached brooding vocals and patches of guitar. The song was motoric in the Kraftwerk sense and as Bernard Sumner described it, “It wasn’t really a great song; I saw it more as an amazing sonic event. It’s got this amazingly propulsive beat, a great bottom end.”¹⁷ The signature drum pattern features the kick drum playing eighth notes on beats 1 and 2 and four sixteenth notes on beats 3 and 4 of a four-four time signature, as shown in example 6.2.

The song is composed from a series of interlocking rhythms that are created by individual musical parts much like the gears of a machine, interlocking at times and open at others. It uses the concept of the factory rhythm developed by first-generation Industrial musicians from the music of Varèse, but New Order applies the sound to the use of the drum machine and synthesizer—a crucial shift that would influence the second generation of Industrial musicians. The musical sounds are staccato and clipped and the majority of the rhythms consist of eighth-note and sixteenth-note patterns. Many of these rhythms are altered and complicated by the use of audio effects in the recording, an essential part of the New Order synth-pop sound. Each sound in “Blue Monday” is treated with a generous amount of reverb, making the entire song

¹⁷ Ian Harrison, liner notes for *Power, Corruption & Lies* CD reissue [London, RS 516186, 2008].

feel like it takes place inside a large warehouse, much like the metallic percussion sounds of Einstürzende Neubauten in “Stahlversion.” The synth 1 line is saturated with delay. It becomes difficult to hear what is actually being played on the synthesizer and what is created as a phantom note by the digital delay effects unit.

Example 6.2
Factory Rhythms in “Blue Monday” by New Order (1983)
(Transcribed by Jason Hanley)

17

The image displays two systems of musical notation for the 'factory rhythms' in 'Blue Monday' by New Order. The first system is marked with the number '17' at the top left. Each system consists of five staves: Kick drum, High Hat, Snare, Synth 1, and Synth Bass. The Kick drum and Snare parts are written on a grand staff (treble and bass clefs). The High Hat part is on a single staff with a double bar line. The Synth 1 part is on a treble clef staff, and the Synth Bass part is on a bass clef staff. The notation includes various rhythmic patterns such as eighth notes, sixteenth notes, and rests, with some notes having stems pointing downwards. A double bar line is present in the middle of each system. Below the first system, there is a double bar line symbol (two parallel lines) indicating a section break. The second system is a duplicate of the first, showing the same rhythmic patterns for the same instruments.

The effect of using digital delay on a sound is demonstrated in example 6.3, which shows an amplitude graph of a simple quarter-note kick drum pattern created in the software program Reason (I used a kick drum because it has a short attack and sustain, allowing each occurrence to be apparent on the graph). The first eight quarter notes are unaltered, but the second eight are processed with an eighth-note triplet setting on the digital delay resulting in echoes of the original sound. These effects can be made to change over time if the algorithmic values are altered during the recording process by turning one of the control knobs on the device. Many of the instrument sounds in “Blue Monday” are treated with independent delay units creating a series of sounds that are essentially in time with one another, but pulse, move, and echo against each other. The overall sound created is an “unnatural” one, because each instrument sounds as if it is in its own space, a common technique used in Industrial music.

Example 6.3
Delay effect added to a quarter-note kick-drum pattern



The pitched sounds in “Blue Monday” are based on rhythmic/pitch patterns that enter and drop out, alter rhythmic placement slightly, but are hardly ever developed. Musical depth is achieved through effects processing and the use of factory rhythms. New Order refined the idea used by Kraftwerk and several first-generation Industrial bands, to set out a series of short repeating motives that could cycle around throughout the track. The overall harmonic motion of

“Blue Monday” is almost static throughout its entire seven and a half minutes and is based on the musical ideas established at the start of the song (shown in example 6.2).

When I interviewed Peter Hook in November 2010 he recalled how difficult it was to create these signature drum-machine and synthesizer patterns on the equipment of the time:

I remember how difficult it was to write, because how difficult it was to sequence. The sequencer that we were using was custom built, in binary code, 15 on, 1 off, to play the riff. You were programming a nine-minute song, and if you made one mistake at eight and a half minutes, you had to go back to one and start over again to get back until you did one pass where everything [was correct.] I remember Barney sitting there going, “right,” and he had it all written out on paper, and he’s going “one: on, on, on, on, on, on, on, off [steps on the floor miming a pedal] on, on, on, on, on, on, on, off [steps on the floor]. And you know, doing it absolutely ridiculously with a Prophet Five [synthesizer] and the home-built transcendence sequencer using control voltage to get the sounds.¹⁸

This particular system described by Hook reveals two important things. First, the creation of electronic music in the 1980s could be controlled and programmed with incredible accuracy on affordable equipment. Popular musicians felt the same level of exuberance that Stockhausen expressed when he began creating electronic music and exclaimed that the synthesizer proved “my dreams could be realized”—the feeling that ideas were now only limited by what you could program, but not by what a human being could perform.¹⁹ But secondly, Peter Hook’s comments show how the process of making music in this fashion skewed the creation process in the direction of precision and preplanning and away from live performance and improvisation. Hook told me that he and the band recorded the early Joy Division albums in a matter of days, while the later New Order albums verged on the edge of years. This same level of technical expertise and pre-compositional planning became important to the second-generation Industrial musicians, and it allowed them to compose music that moved beyond the preset beguine drum-

¹⁸ Peter Hook, interview by author, Rock and Roll Hall of Fame and Museum, Cleveland, November, 30, 2010.

¹⁹ Stockhausen, 130.

machine patterns and single-synthesizer lines used by the first-generation musicians, but it also limited the open and often indeterminate/improvisational nature of Industrial music; now many of the musical ideas needed to be charted out before recording.

Depeche Mode

The band Depeche Mode was the first synth-pop group to blend the abrasive metallic percussion sounds of Industrial bands like Einstürzende Neubauten and the song-based sounds of synth-pop music.²⁰ This was an incredibly important development in the early 1980s and it influenced the entire second generation of Industrial music. By using new digital sampling keyboards, Depeche Mode was able to sample metallic percussion timbres and create factory rhythms through synthesizer-based techniques. Like Industrial music the image and lyrics of Depeche Mode presented a modern, futuristic world, but one that was populated by something that Industrial music often seemed to lack: normal people. With lyrical themes of romance, heartache, and lust, Depeche Mode's songs spoke of relationships, jobs, faith, love, anger, and hope. The band also hinted at politics and philosophy, but their focus was on the personal consequences of the modern crisis. The combination of the modern crisis and a personal viewpoint had an effect on Industrial musicians, a building trend that would only be fully realized in the third generation of Industrial music.

Depeche Mode began in October 1980 when Andrew Fletcher, David Gahan, Martin Gore, and Vince Clark recorded a three-song demo. This tape allowed them to obtain a number of gigs at a London club called the Bridgehouse. The club featured a "Futurist" evening once a week where it promoted the sounds of new-wave and electronic bands. Musician and producer Daniel Miller, who recorded music under the band name *The Normal*, heard Depeche Mode

²⁰ The name *Depeche Mode* means "fast (or rapid) fashion" and was taken from a popular French fashion magazine. The original name for the band was the very Industrial-sounding Composition of Sound.

perform one night and asked them to record a single with his new record label Mute. Miller and Mute would eventually go on to be one of the major electronic independent record labels of the 1980s.²¹ Depeche Mode perfected their style in a string of albums recorded in the mid 1980s, but two of them recorded back-to-back in 1983 and 1984 and produced by Daniel Miller had the greatest impact on Industrial music, *Construction Time Again* and *Some Great Reward*.

Released in August 1983, *Construction Time Again* was Depeche Mode's third full-length album, and featured Alan Wilder replacing Vince Clark who left to form the synth-pop band Yaz, and later Erasure. The album is a dark, brooding record whose nine songs concern themselves with the effects of the modern crisis on the working class, corrupt politics, unchecked globalization, greed, class difference, the threat of nuclear war, urban sprawl, and even a call to "pull it all down and start again" in the lyrics of the final song "And Then" The light synth presets and drum-machine sounds of their first album *Speak and Spell* [Mute, 1981] were replaced by synthesizer tones that are thick and filled with a pulsing underbelly, giving them an almost physical weight to mirror the seriousness of the lyrics. The band brought in the pioneering sample master Gareth Jones to help them create and mix the music at the Hansa Mischraum studios in Berlin.

With the sounds of Kraftwerk and Einstürzende Neubauten playing in the city around them, Depeche Mode and Jones used the digital sampler to create metallic percussive rhythm tracks and sound effects. It has been rumored for years that they not only listened to the music of Einstürzende Neubauten but even directly sampled their sounds to create many of the metallic

²¹ Miller and his band The Normal had a hit song in 1979 with "Warm Leatherette." The lyrics were based on the J. G. Ballard novel *Crash*. Both the book and the song characterize a future where a group of young adults are numbed by the pressure of modern industrial society. They can only truly "feel" emotions during the violence and pain evoked as the result of literal car crashes. During these moments they feel the warm leatherette of the car seat on their skin as the vehicle rips and tears around them. The music is sharp and stoic with a constant pulsing beat created from white noise bursts and synthesized bass-note hums.

sections of the album. In the third song on the album “Pipeline,” Gahan sings about never ending work to construct a pipeline: “Get out the crane / Construction time again.” The music of the song uses the sounds of construction—metal on metal, scraping sounds, smashing bricks, and heavy machinery—to create the rhythm. Andrew Fletcher described recording the song in a 1984 interview with *Melody Maker*: “When we actually made the album we did go on a sound-hunting expedition. We went down Brick Lane and just hit everything and then recorded it and took it back to the studio and then put it into the keyboard. . . . we was [sic] like smashing corrugated iron and old cars. The vocals were recorded in a railway arch in Shoreditch.”²² Recording the vocals live in the railway station recalls Einstürzende Neubauten’s attempts to capture the real sounds of the Autobahn and industrial modernism in “Stahlversion,” and also accounts for the train sound that runs through portions of the second half of “Pipeline.”

Example 6.4
Factory Rhythms and Musical Layers in “Pipeline” by Depeche Mode (1983)
 (Transcribed by Jason Hanley)

The musical score for "Pipeline" by Depeche Mode is presented in five staves. The first staff, labeled "Boom," consists of a series of quarter notes with rests. The second staff, labeled "Scrape," features a rhythmic pattern of eighth notes with rests, some of which are beamed together. The third staff, labeled "Hammers," shows a complex rhythmic pattern with eighth and sixteenth notes, including triplets. The fourth staff, labeled "Bass Hum," contains a steady eighth-note pattern. The fifth staff, labeled "Ping Pong," features a rhythmic pattern of eighth notes with rests, also including triplets. The score is marked with a "13" at the beginning, indicating the measure number.

“Pipeline” is filled with rhythmic/pitch patterns produced by the group’s synthesizers and samplers as shown in example 6.4. The track uses the concept of factory rhythms, allowing the

²² Lynden Barber, “Depeche Mode: Crushing the Wheels of Industry,” *Melody Maker*, January 7, 1984 www.rocksbackpages.com (accessed February 28, 2011).

various instruments to repeat one musical motive or phrase with little or no change throughout the length of the entire song, but developing the larger soundscape from these pieces. The various parts do not always overlap evenly and they frequently rub against each other. While “Pipeline” keeps a 4/4 time signature as it organizing beat, the individual sounds cross over the bar lines, start in the middle of measures, and sometimes push against the pulse of the meter.

None of the instruments begin a pattern on the downbeat, so despite the fact that the music is structured within a 4/4 meter, the opening section of the song feels very open and random—as if one were standing in an actual construction site. The first sound heard is the low boom (transcribed on the top staff of example 6.4) that plays on the third beat of each measure, or what we actually hear as the downbeat at the beginning of the song. It is only when the vocals sung by David Gahan enter that we have a musical performance that sets a definitive pattern of 4/4 phrasing and a clear downbeat. The vocal performance pushes our perception of the boom sound to the third beat of the measure where it suddenly works well as a perceived backbeat accent common to most popular music. But it is an uneasy truce that feels like it may fall apart at any moment as new sounds continue to enter. The vocal phrasing of “Pipeline” is at odds with much of the instrumental phrasing and rhythmic structure, and this type of rhythmic and even formal tension also becomes a musical cue for second-generation Industrial bands.

Depeche Mode became so popular that their music eventually reached audiences in Canada and the United States, where the next wave of Industrial music would find its newest practitioners. Depeche Mode’s massive success and fame in the early 1990s made them unpopular with many underground Industrial musicians who viewed the group as a “sellout” and no longer cited them as an influence. During the 1980s, however, it was common to hear the music of both Depeche Mode and New Order played in clubs during a DJ set that consisted of

Industrial music. There can be no denying the influence Depeche Mode and synth-pop had on the entire second generation of Industrial music, particularly on the Synthesizer-based sub-style of Electronic Body Music (EBM) pioneered by the band Front 242.

Front 242 and RRE

In 1981 a new group from Belgium called Front 242 released their first single, “Principles” backed with “Body to Body,” on their own record label New Dance Records. The group consisted of only two members: Daniel Bressanutti (AKA Daniel B), who later became the behind-the-scenes electronic wizard of the group, and Dirk Bergen, who quit shortly after the release of the first album in 1983.²³ The music was made up of synthesized bass, pads, and filter-sweep arpeggios, along with distorted and filtered electric guitar, white noise percussion, and unidentifiable male vocal samples. The two tracks sound similar to Cabaret Voltaire, especially the distorted and compressed guitar that is mixed into the background, the repetitious vocal shouts and samples, and the various noises that Front 242 created with a Korg MS 20 synthesizer.²⁴ “Principles” is based on a small set of pitches that shows the second-generation preference for modal scales. The song centers on D with occasional auxiliary tones a whole step down to C, a half-step up to E flat, or a minor third up to F. The guitar plays open-fifth power chords based on the D to E flat chromatic motion with the occasional jump down to C. In total the collection of pitches used makes up a D minor scale with a lowered second degree, or a Phrygian mode on D. The harmonic arrangement of the track is based on movement around the final note and not traditional popular-music chord patterns.

²³ The single would be one of the first and last times that Daniel B would be heard performing vocals on a Front 242 album.

²⁴ Front 242 would later remake “Body to Body” on the 1985 album *No Comment*. The synthesizer work is more complex and the vocals are expanded to feature the signature sound of the group’s dual lead vocal created by Richard 23 and Jean-Luc DeMeyer. While some of the basic musical ideas are the same it is almost an entirely new song.

The sonic core of both tracks was produced with a Roland System 100 synthesizer connected to a Roland 104 hardware sequencer. The Roland 104 allowed Daniel B to program a sixteen-step rhythmic/pitch pattern that could be played, looped, and manipulated throughout the song—a much more advanced technique than the simple arpeggio function of the Roland System 100. Unfortunately for Front 242, the single went almost entirely unnoticed outside of the local Brussels club scene.

Bressanutti and Bergen soon crossed paths with another electronic duo, Underviewer, consisting of Patrick Codenys and Jean-Luc DeMeyer. Underviewer also created their music with synthesizers and was similarly influenced by the Krautrock soundscapes of Tangerine Dream, the early tape-music experiments of Cabaret Voltaire, and the Minimalist music of Riley.²⁵ Low frequency arpeggios chatter continuously while long, filtered melodies slowly make their way over the top. Codenys had no musical background and was not concerned with the use of “proper” chords, rhythms, or even keeping the various pieces of equipment in tune with one another. This makes for some interesting sounds and often unnerving music. One Underviewer track titled “Trouble” features DeMeyer singing over a synthesizer oscillation between two sets of tones. His smooth tenor voice evokes the timbre and monotone delivery of Philip Oakey on early Human League recordings along with the coolness of Kraftwerk. When Front 242 and Underviewer eventually combined efforts, their various musical abilities and compositional techniques became more than the sum of the parts.

Their first full-length Front 242 album, *Geography*, was released in Europe late in 1982 by RRE/Play It Again Sam, and in 1983 in the U. S. by the Wax Trax! label. While their record label Red Rhino Entertainment (RRE) in England was able to produce the physical product (the

²⁵ Many of the early CV experiments had just been released on vinyl for the very first time by Industrial Records. So even though some of the CV experiments were almost seven years old, they were heard as a new release by some audiences in 1981.

albums and artwork), it distributed the records through another European label with a wider network called Play It Again Sam (PIAS). When PIAS wanted distribution in the United States they worked with the American independent label Wax Trax! Records based in Chicago. Wax Trax! would distribute PIAS in American and PIAS would distribute Wax Trax! in Europe. The ramifications of this simple business deal on the Industrial music subculture were tremendous. It was because of this business deal, at least initially, that most American audiences associated European groups like Front 242 and the Neon Judgment with North American-based Industrial bands. And because Wax Trax! was the home to North American bands such as Ministry and Controlled Bleeding, it allowed them to be heard in Europe.

Starting in 1983 Front 242 set out to connect themselves to first-generation Industrial bands such as DAF and Cabaret Voltaire, electronic pioneers including Kraftwerk, and synth-pop groups like The Human League and Depeche Mode. But the members of Front 242 did not want to copy the sounds of those who came before them; they wanted to assimilate those sounds into something unique. Patrick Codenys discussed this very concept with *Keyboard Magazine* in 1989: “We were somewhere in between Throbbing Gristle, Kraftwerk, and bands like that, but we wanted to be exclusive, and to have nothing to do with any fashion. It’s not a question of fashion for us: It’s more a question of doing sound research We call what we do electronic body music.”²⁶ Their method of sound research pulled strongly from first-generation ideals of organizational autonomy in the recording studio, of being technically savvy in a way that allowed them to create a music that was not quite the same as anyone else. They adopted Industrial conceptions of modernism and originality and expressed it in their desire to avoid being tied to any one “fashion” or style (most likely in reference to synth-pop or new wave), but

²⁶ Robert Doerschuk, “An Interview with Patrick Codenys: Front 242, the Aggressive Edge of Rhythm and the Power of Recycled Culture,” *Keyboard Magazine*, September 1989, 57. The quote is spoken by P. Codenys.

this did not stop them from drawing on the musical and philosophical history already established within the Industrial music subculture.

Front 242 often discussed what they called a cultural heritage that connected to a broad swath of modernist ideals including musical predecessors such as the Futurists and Russolo, as mentioned by Daniel B in an interview with Simon Reynolds in 1991:

We have a cultural heritage When I say heritage, I don't just mean electro-pop innovators like Kraftwerk or DAF, I mean something that encompasses philosophy, classical music, art, architecture, history. Front 242 draws on Wagner, Shostakovich, the Italian futurists, Russolo, Graphism, so many European artistic initiatives.²⁷

The predecessors mentioned by Daniel B connect to a European artistic tradition, and Front 242 were constantly setting a foundation for their music in the ideals of the modernist avant-garde and in the history of Industrial music built by the first generation of the subculture.

The band members refused to make any specific comments on the meaning of the name Front 242, but the name resonates strongly with the ideals of the Industrial subculture. On one hand it sounds like the name of a company. Front 242 were well-known for their strong beliefs in Organizational Autonomy, creating every aspect on their own, from the music to album artwork and live stage shows. As such the Front 242 corporate image functioned in much the same way that the Industrial Records entity had for Throbbing Gristle. The word *front* could also mean a person who obscured the activities and objectives of another (e.g., the business was a front for the Mob's real agenda); in this case the idea of hiding a political agenda behind the pop-music façade and Dada elusiveness. The idea of being at the forefront of something could suggest the avant-garde modernist leanings of the group and their desire to innovate new musical and cultural ideas. On the other hand, the name invoked some aspect of being on the frontlines

²⁷ Simon Reynolds, "The Grating Dictators," *Melody Maker*, January 19, 1991, 8. The text quoted is spoken by Daniel Bressanutti (AKA Daniel B).

of a war or revolution. In 1991 Daniel B commented about Front 242's views on what this war might be and in the process revealed their connections to the ideals of Marx and Nietzsche, and Burroughs' information war: "Front 242 view human existence as a kind of perpetual war: globally (peace as war pursued by other means), socially (capitalism's war of all against all), even within the microcosm of the individual soul (the war between desires and aspirations). A war in which there is no right or wrong, just 'strong' and 'weak' forces."²⁸ In the tradition of the Futurists, Front 242 would often compare the process of making artwork in the twentieth century to the work of engaging in warfare and the need to create a battle plan or strategy.

Art + Strategy: The Sound of Front 242

Early on Front 242 began to identify their brand of Industrial as Electronic Body Music (EBM) in order to convey both the modernist electronic nature of the music and the fact that it was intended as dance music featuring sounds and rhythms that would affect your body. Their dance-music connections were highlighted on album covers that listed the BPM of each song (a tool for club DJs), and their numerous twelve-inch remixes. Front 242's EBM sound grew out of the Synthesizer-based Industrial music archetype and shares many of its musical cues, but they also assimilated elements directly from synth-pop. The top of Table 6.3 shows the second-generation Industrial music cues that were the most significant in the creation of the Front 242 EBM sound, and the cues listed at the bottom of the table are new cues explored by Front 242 in a number of their recordings.

Table 6.3
Musical Cues in the Music of Front 242 (EBM)

- Use of Synthesizer and sequencer
- Repetition
- Use of sampling (particularly media and films)
- Harmony consisting of a small number of chords

²⁸ Reynolds, "Grating Dictators," 8.

- Factory rhythms
- Repetitive rhythmic/pitch patterns
- Modal melodies and harmonies

EBM-specific cues:

- Use of sixteenth-note rhythmic cells (based on 3+3+2 rhythms)
- Dual vocals (deep tenor smooth melodies vs. shouted, barked repetition phrases)
- “Mistranslated” lyrics
- Chant chorus

Originality in the use of electronic equipment was a fundamental issue for second-generation Industrial musicians despite the fact that programming synthesizers and drum machines was getting easier all the time. Because of this a fundamental division formed between Industrial music and other synthesizer-based music of the 1980s. Many musicians in other styles of popular music began to use electronic equipment to create sound quickly and cheaply by using synthesizer presets. Starting in 1982 digital synthesizers such as the PPG Wave and the Yamaha DX7 allowed users to program and store a patch of detailed settings in the memory of a synthesizer so that he/she would not have to reset every knob and control on the instrument in order to recall that sound. The ability to create and store sounds quickly spawned an entire cottage industry of companies who developed “preset” sounds that could be purchased on a memory card and loaded onto a synthesizer. Many of these presets were intended to sound like real instruments with the idea that a keyboard player in a band could stand in for a string or horn section in a recording session or on tour. For Industrial musicians the music-instrument industry’s move to preset sounds was a retreat from the importance of the synthesizer as a unique tone generator, creating new tones in the way that early modernist composers had envisioned. The use of presets also represented a commercialization of synthesized sound as Paul Théberge explained in 1997:

This general phenomenon has had a significant influence on the character of popular music production since the 1980s. In effect, musical production has

become closely allied to a form of *consumer* practice, where the process of selecting the “right” pre-fabricated sounds and effects for a given musical context has become as important as “making” music in the first place. . . . Consumption—the exercise of taste and choice—has become implicated in their musical practices at the most fundamental level.²⁹

The idea that synthesizer “sounds” were becoming a part of consumer practice, a form of consumption, was something Industrial musicians were well aware of in the 1980s, and the concept stood in direct opposition to the core values of Industrial music and the Marxist principles it was based on. Because of this Industrial bands in the second generation vehemently avoided present synthesizer sounds and continued to develop complex and distinctive timbres for each track they composed.

A large part of Front 242’s particular sound was their use of various spoken dialogue that was recorded into their digital samplers. In an interview with *Technology Works* magazine Jean-Luc DeMeyer explained their use of samples in the music: “We have no message. We don’t want to say anything to the people. We just take samples from the world around us, the news, television, movies, the street. We put them together and we work a little bit like journalists. We act as a reflection of what’s happening and what’s interesting for us in the world. We put those songs together to make a collage of news.”³⁰ In DeMeyer’s words one can hear the influence of William Burroughs’ words from *The Third Mind*: “the mechanism has no voice of its own and can talk indirectly only through the words of others.”³¹ Front 242 envisioned themselves as audio terrorists who used the sounds and words of others as their own voice, including the voice of Burroughs himself in the track “See the Future” from 1984.

The members of Front 242 often commented on what they called a formula for making music. Their methods were similar to the Krautrock band Can—long improvisational jams

²⁹ Paul Théberge, *Any Sound You Can Imagine* (Hanover: Wesleyan University Press, 1997), 200.

³⁰ Quoted in Paul Moore, “Front 242 Interview,” *Technology Works* fanzine 7.

³¹ Burroughs, *The Third Mind*, 178.

followed by a period of assessment, and eventually editing the material down in order to cull and collate the most interesting sections. All four members of Front 242 participated in experimental jams. Sessions that were judged as “successful” were then shaped into something more substantial. This philosophy permitted the band to create a space in their music for improvisation and spontaneity, but it also allowed them to refine their sound through the meticulous process of programming the electronic systems as described by Peter Hook—a process that was required to program the drum machines, synthesizers, sequencers, and samplers.

Front By Front [RRE/PIAS/Wax Trax, 1988]

The sound of Front 242 matured quickly between 1983 and the release of their landmark *Front by Front* in 1988. The album set a new standard for synthesized music and garnered praise from journalists including Dave Thompson who called the album “a storming tour de force which erupts out of the record player with the finesse of an anti-personal bomb.”³² Front 242 had established their music as a form of audio warfare, and fans in subculture were quick to receive their music in that way.

The original artwork for the record was self-designed.³³ The black front cover was interrupted by a minimal amount of text reading “Front 242!” The text is written in an early computer font that would have appeared futuristic in 1988 but now betrays its age. The cover also features a small red block with black numbers 242 printed upside-down. The inside of the CD booklet contained blurry low-resolution computer photos of the band members showing them as silhouettes against electronic equipment and stage lighting. The band members are not “seen” as actual people, only as cogs in the Front 242 machine. The theme of the album was that humanity was already in a countdown to the disaster and the modern crisis was about to consume

³² Dave Thompson, *Industrial Revolution* (Los Angeles: Cleopatra Press, 1994), 42.

³³ When Front 242’s catalog was re-released by Sony Music in the 1990s, they created a new series of album covers that featured a unified set of computer graphics.

everything. During the second generation it was common for bands to represent the modern crisis as an actual disaster (nuclear war, economic crash, etc.) rather than just a philosophical idea symbolizing the decline of humanity. Nietzsche's philosophy was still present, but the path to the dystopian future now ran through an actual disaster forecasted to happen in the near future.

The rhythmic pulse and factory rhythms of the first track "Until Death" immediately set a mood and feeling that is maintained throughout the rest of the album. The tracks go back and forth between instrumental synthesizer music and songs with verse-chorus structures—an element assimilated from synth-pop. While it is not a concept album *Front by Front* does strive to create a unified sound across all ten tracks and maintain danceable rhythms throughout. The album is based on variations of a particular rhythmic idea created by Front 242 to replace the standard rock-music four-four backbeat.

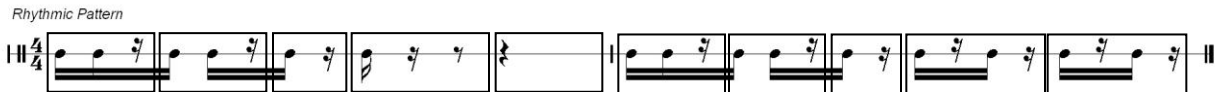
Throughout the record Front 242 use multiple layers of percussion to create polyrhythms, and then create shifting rhythmic accents within each song. Example 6.5 shows how the rhythmic patterns on *Front by Front* work as a combination of sixteenth-note rhythmic cells that push and pull the music between triple and duple groupings.³⁴ The top staff in example 6.5 shows a specific rhythmic pattern that appears many times on *Front by Front* including the first song "Until Death." The first half of each measure tugs against the 4/4 meter using a sixteenth-note triplet feeling. The second half of each measure, however, is rhythmically grounded in a duple pulse, especially in the second measure. Listening to the rhythm on the level of the sixteenth note allows one to hear the music as a series of sixteenth-note cells that repeat in a regular pattern: 3+3+2+4+4 as shown by the boxes grouping the pattern in the top staff. This

³⁴ Because second-generation bands rely on the use of eighth and sixteenth-note rhythms in their music I have notated the rhythms in my transcriptions with these note values. I also have used shorter note values and rests in several circumstances in order to show accurate note lengths. For example a synthesizer part with all eighth notes versus one with sixteenth notes and sixteenth-note rests will sound very different, especially when treated with digital delay.

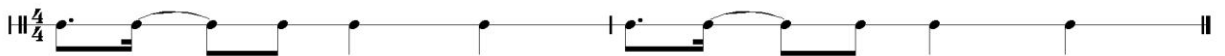
pattern forms a rhythmic base for a number of songs on the album, with slight variation in the order of the cells. The lower staff of example 6.5 represents this pattern of sixteenth-note cells as a rhythmic base that underlines much of the entire album. It is fascinating to see that Front 242 designed their new rhythmic system around the same 3+3+2 pattern that Cabaret Voltaire and other first generation bands had used out of necessity due to the restrictions of the early drum-machine patterns.

Example 6.5
***Front by Front* 3+3+2 Sixteenth-Note Rhythmic Pattern**

Rhythmic part:



Rhythmic base:



The seventh song on *Front by Front*, “Headhunter V 3.0,” was an underground club hit. The song had an infectious rhythm, a deep bottom end, and pulsing sixteenth-note rhythms—and more than that it was a *song* with an actual verse and chorus. “Headhunter” contains all of the elements that Front 242 had been working towards crammed into four minutes and forty-five seconds, and the factory rhythm it used is more complicated and developed than anything produced by the first-generation bands. The song begins as if it had already been playing, with a cloud of background noise and the sound of crisp drum-machine high-hats processed through a digital delay unit. Over the first twenty seconds of the song a factory rhythm builds, as shown in example 6.6. Each percussion sound is created using a drum machine and is tightly gated so that the sound cuts off quickly after it starts and the rhythms are constructed from sixteenth-note rhythmic cells.

Example 6.6
Opening Factory Rhythm in “Headhunter V 3.0” by Front 242 (1988)
 (Transcribed by Jason Hanley)

The musical score consists of six staves: High Hat, Snare 1, Snare 2, Kick, Synth 1, and Synth bass. The High Hat part is the most complex, featuring a pattern of eighth and sixteenth notes. Snare 1 plays a standard rock backbeat on beats 2 and 4. Snare 2 plays a pattern of eighth notes. The Kick drum plays a pattern of eighth notes. Synth 1 and Synth bass are mostly silent, with Synth 1 playing a melodic line in the third and fourth measures.

The opening high-hat rhythm is organized into eight cells of four sixteenth notes. The first five cells are made up of three sixteenth-note high-hat clicks followed by a sixteenth-note rest [3+1]. This is followed by two cells where the high hat plays on all four sixteenth notes. The eighth and final cell returns to the original pattern, playing on the first three sixteenth notes and resting on the fourth. This results in a total pattern of cells that runs 5 (three clicks, one rest) + 2 (four clicks) + 1 (three clicks, one rest). The entire eight beat pattern is then shifted two sixteenth notes to the right so that it begins just after the downbeat of each measure, and the last cell of each pattern plays over the bar line into the next measure. While this pattern changes from time to time it is relatively consistent throughout the entire song.

Five seconds into the song the other electronic percussion instruments enter into the factory rhythm. They are announced by quarter-note cowbell hits created on a Roland 808 drum machine. There are two different snare-drum sounds used. The first (snare 1 in example 6.6) plays a standard rock-and-roll backbeat (on beats two and four), and lends elements of the rock/pop vocabulary to the rhythm. The second snare drum is lower pitched and plays on the

first beat of each measure and the second eighth note of beat two. Each measure of snare 2 creates a 3+3+2 pattern on the eighth note level: 3 [quarter note + eighth note rest] + 3 [quarter note + eighth note rest] + 2 [quarter note rest]. The kick-drum pattern plays the core *Front by Front* 3+3+2+4+4 sixteenth-note rhythmic base but alters the make up of the first two cells every other measure. During the first two cells the rests and kick-drum notes are exchanged from one measure to the next as shown by the red numbers in example 6.7.

Example 6.7

Kick-drum Rhythm in “Headhunter V 3.0” by Front 242

Notes are shown in **bold** text; rests in plain text, changed rhythms are in **red**.
All beats counted in sixteenth notes.

Measure 1: 3 [**2** +1] + 3 [**2** +1] + 2 [**1** + 1] + 4 [**2** + 2] + 4 [4]

Measure 2: 3 [**1** +**2**] + 3 [**1** +**2**] + 2 [**1** + 1] + 4 [**2** + 2] + 4 [4]

Just after the twenty-two-second mark of “Headhunter” a synthesizer enters playing constant sixteenth notes on B flat. As the pitched instruments enter the song they work within the basic arrangement of the factory rhythm while they simultaneously build model pitch structure in the song. At twenty-six seconds a synthesized bass sound enters as shown in example 6.8. It is a low deep sound with a lot of resonance. There is a component to the timbre that makes it sound like it is bowed on an electronic upright bass as opposed to the flat pluck of an electric guitar. This is part of the depth of sound Front 242 put into creating each sound and sculpting them to create dynamic motion within the actual timbres—an idea that connects back to the avant-grade interest in the creation of new timbres and timbre phrasing.

The bass plays only one pitch, B flat, with a jump down an octave at the end of every other measure, and it locks into the rhythm of the kick drum, including the note-rest cell exchange.

Example 6.8
Factory Rhythm and Synthesizer Parts in “Headhunter V 3.0” by Front 242
(Transcribed by Jason Hanley)

The image displays a musical score for the song "Headhunter V 3.0" by Front 242, transcribed by Jason Hanley. The score is arranged in a system with six staves. From top to bottom, the staves are: High Hat, Snare 1, Snare 2, Kick, Synth 1, and Synth bass. The High Hat part consists of a continuous, rapid eighth-note pattern. Snare 1 features a simple backbeat pattern with a double snare hit on the second beat of each measure. Snare 2 plays a more complex, syncopated pattern. The Kick drum part follows a similar syncopated pattern. Synth 1 is a high-frequency synthesizer line with a steady eighth-note rhythm. Synth bass is a low-frequency synthesizer line with a steady eighth-note rhythm. The score is divided into four measures, with a measure number '17' indicated at the beginning of the second measure.

The two sounds become the rhythmic center of the song and the shifting, herky-jerky rhythm becomes a freight train pushing the rest of the music forward. The factory rhythm remains unchanged in the majority of the song except for the addition of a double snare hit on the second beat of snare 1. Like the backbeat it replaces, the double snare hit is another pop-music cliché, and it appears that the first snare-drum part was designed to perform the only “expected” pop-music cues of the song.

To fully understand how Front 242 advanced the idea of the factory rhythm in the song “Headhunter,” it needs to be compared to previous examples. Einstürzende Neubauten’s “Stahlversion” was one of the earliest examples of the factory rhythm created within the Metallic Percussion archetype of the first generation. The various metallic sounds each beat their own rhythm with constant precision and repetition. While it was not rhythmically complicated the clang and bang of the repeating instruments created a hocket of sorts, with each sound filling in the rests of the other patterns, and together forming the factory rhythm. When Depeche Mode used a factory rhythm in “Pipeline” they expanded the idea, meshing it with synth-pop aesthetic

and the use of rhythmic/pitch patterns. The two musical features worked together to create a texture that was organized within a single meter but whose sounds ran over the bar line, or produced patterns that obscured the overall rhythmic pulse, creating tension. Front 242 took this idea one step further. They used rhythmic factory pulses and minimalist synthesizer patterns, but they infused both with a new level of complexity. They developed their own approach towards rhythmic cells, creating rhythmic groupings that worked within the meter, and pushed against it, but also varied over time so that the sound of the music was always changing.

The chorus of “Headhunter” is eight measures long, as shown in example 6.9, and is sometimes doubled or tripled to extend the section. The factory rhythm plays without change and the most striking alteration is the removal of the synth-bass line. It is replaced by two different instruments, each one substituting a key element of the bass line, rhythm or pitch. The rhythmic pattern is taken over by a drum-machine auxiliary percussion patch whose timbre is close to a timbale or congas. The percussion uses the bass rhythm for the first four measures but then switches to constant sixteenth notes that alternate between two pitched sounds. Like most of the factory rhythm elements the alteration is unequally divided between groups of ten and six sixteenth notes. The constant sixteenth-note pulse builds tension at the end of the chorus and creates a sense of release when the sound stops at the beginning of the next section.

The element of pitch is replaced by a new synthesizer sound (synth 2) in the bass register. Its tone is thick and sustained and is filtered over time to create a sense of motion within the timbre. Each pitch is held for two measures and is the longest note in the entire song. The sound fills up the empty holes in the chorus and also introduces the first harmonic motion away from B flat. The part moves through four pitches—B flat, F, A flat, to E flat—as shown in example 6.9.

Example 6.9
Chorus of “Headhunter V 3.0” by Front 242 (1988)
(Transcribed by Jason Hanley)

Vocal Lead (JLD) 37

One you lock the tar get Two you bait the line

High Hat

Snare 1

Snare 2

Kick

Aux Percussion

Synth 2

Vocal Lead (JLD) 41

Three you slow - ly spread the net. and four you catch the man.

High Hat

Snare 1

Snare 2

Kick

Aux Percussion

Synth 2

This is the first time in “Headhunter” that there are enough pitches to even venture a guess at the key of the song—b flat minor. In the minor key the four tones can be heard as a progression from the tonic (b flat) down to the dominant (f), then up a minor third to the subtonic seventh scale degree (a flat) and finally down to fourth scale degree, the dominant of seven (e flat), or the subdominant of b flat. This is a surprising feature for a piece of Industrial music, which typically avoided or deconstructed chord progressions that could be found in other rock styles. The fact that “Headhunter” deals with organized pitch in such a direct manner shows the impact that synth-pop had on the sound of second-generation Industrial bands who were now willing to integrate pitch into their music as an organizing feature.

The last aspect of “Headhunter” I would like to examine is the lyrical melody sung by Jean-Luc DeMeyer and Richard 23. DeMeyer sings the main melody of the song in his deep tenor voice. The monotone delivery did not change much from his days in Underviewer, and his voice still recalls the synth-pop styling of The Human League and Depeche Mode. Richard 23’s performance is the exact opposite. His vocals are shouted and aggressive and usually function in response to a line sung by DeMeyer—call and response. This dual vocal arrangement was common in Front 242 songs and added a heightened level of energy to the songs.³⁵ Both of their voices are altered by audio effects, but because they do not use distortion it is often possible to understand what they are saying. This was also something new for Industrial music and helped to support the idea that Front 242 were now purposefully writing songs with some semblance of a verse and chorus structure. The lead vocal sung by DeMeyer during the chorus of “Headhunter” is transcribed on the top staff of example 6.9. Looking at the transcription there are two things that become immediately apparent. First, the vocal melody begins in the second

³⁵ In fact my friends and I used to call Richard 23 the “exciter” since he was the only member of the band to move around during live shows and would shout his lines directly at the audience when he sang.

measure. This allows Front 242 to position the four vocal phrases to end on one of the major pitch changes played by synth 2. The straight quarter-note rhythm and static pitch produces a vocal chant that pushes back against the 3+3+2 rhythmic structure of the song. It is carefully designed as a moment that will allow the audience to shout the steady quarter note lyrics along with the band—what Industrial fans often call “joining in the chant.”

The lyrics tell the listener about the mission and tactics of a man who is hunting another man. The chanted chorus lyrics make one think of a bounty hunter who is out to capture his prey as Richard 23 yells in the later choruses, “lock the target, bait the line, spread the net, catch the man.” We may even think of an FBI or police chase in a crime drama. But the lyrics of the verse present a different picture one that involves money, power, and capitalism. The emotional content of the song makes it feel like it should be called “Bounty Hunter.” A headhunter is someone at a business search firm who looks for a job candidate with a particular skill set and then receives a commission for doing that job. The lyrics portray the greed of the song’s narrator, “I’m looking for this man, to sell him to other man, to sell him to other man, at ten times his price at least.” It is the corporate jungle of capitalism presented as guerrilla warfare in the trenches, a significant parody for a band that openly supported Marxist philosophy.

The lyrics also feature what I call Front 242’s lyrical “mistranslation” technique. The words make sense in English, but the grammar is incorrect and awkward. This technique was used in almost every Front 242 song, and while one might imagine it originally stemmed from an actual language barrier, their lyrics did not alter when their English improved, or when they could have afforded someone to help them write in English. I believe this mistranslation was done on purpose. While it is not quite the same as the radical effect achieved by cut-up lyrics, it does put a distance between the actual words themselves and the meaning they represent, forcing

the audience to do a fair amount of decoding. In some cases the lyrics of Front 242 songs are so cryptic that it is difficult to interpret what they mean even if you are able to hear what they are saying.

Writing about Front 242 in his 1990 book *Blissed Out*, Simon Reynolds talked about his fascination with the sound and vision of Front 242 and “Headhunter” in particular:

There’s no margin for error, no flaws or frailty, in their impregnable, marauding sound. . . . What thrills about a song like “Headhunter” is that Front 242 feel of impeded but implacable motion, of progress through hostile, slightly viscous territory. . . . As “Headhunter” reveals, Front 242 see the Nietzschean “values” of rapacity, single-mindedness and will at large today in the corporate jungle. It’s a vision of *Übermensch* in business suits . . . Front 242 have an amoral fascination for this future now of information war, cybernetic hacking, computer viruses, industrial espionage and sabotage. They envision capitalist society, correctly, as a barely disguised state of total war, the war of all against all. . . . the ideas aren’t communicated so much as embodied (in the sheer visceral putsch of their rhythms) and emblazoned (in the sheer spectacle of their show).³⁶

Reynolds relays the various parts that make up what Front 242 is, as well as situating them firmly within the ideology of the Industrial music subculture. The intense sound, the (rather distorted) Nietzsche philosophy, Burroughs’ information war, the references to computer technology and the business world of the twentieth century—all of it serves Reynolds in his encapsulated understanding of the band. Front 242 reflect the world around them through aspects of the modern media (movies, television, radio, and journalism) assimilated through the use of digital sampling. They claim that they do not “comment” on these juxtapositions; they make them and let their audiences figure out how to interpret them. But as I have shown the web of cultural references they spin, their place within the Industrial music subculture, and their use of particular musical cues all work to allow audience members to decode the music and message of Front 242.

³⁶ Simon Reynolds, *Blissed Out: The Raptures of Rock* (London: Serpent’s Tail, 1990), 161-163.

In Brussels, Belgium, Front 242 used the synthesizer and the technology of the recording studio to develop Industrial music with synth-pop sensibilities that they called Electronic Body Music (EBM). Their brand of Industrial music was strongly rooted in the Dada tradition of Cabaret Voltaire and in the Synthesizer-based Industrial-music archetype. Front 242's music featured repeating rhythmic/pitch patterns performed on Roland System 100 synthesizers and throbbing drum-machine beats along with bits and pieces of political and religious speeches mixed with dialogue recorded from television (including sources as diverse as news reports and Three Stooges movies). They further developed the factory rhythm by creating rhythmic subdivisions and small rhythmic cells to alter patterns and introduce a new depth to the interaction between instruments. While their music was centered on the dance floor, Front 242 questioned all forms of authority in their lyrics and the samples they chose to use. They attempted to carry out Burroughs' information war exactly as he had suggested, by using bits and pieces of popular culture as the messenger. The competing vocal timbres of their songs feature the melodic tenor voice of Jean-Luc DeMeyer that are punctuated by the rhythmic chants of percussionist Richard 23 who serves the function of a call-and-response Greek chorus. Along with other bands like The Neon Judgment and a reinvigorated Cabaret Voltaire, Front 242 would advance the EBM sub-style of Industrial music.

Skinny Puppy and Nettwerk Records

In 1981 percussionist Kevin Crompton joined the Canadian band Images in Vogue that was influenced by the music of Japan, Yellow Magic Orchestra, Kraftwerk, and Ultravox.³⁷ To expand the sound of their music the band members pooled their money together and purchased a Roland TR-808 drum machine and a Sequential Circuits Pro-1 synthesizer. To promote their

³⁷ The other founding members of IIV included Don Gordon, Gary Smith, Joe Vizvary, and Gary J. In January 1982 Dale Martindale would replace Gary J as lead singer.

music Images in Vogue partnered with another band called Moev, and produced an event called *Elektra: The Fashion Dance* at a local nightclub, Viking Hall. The idea was to allow audience members to become part of the show by dancing on stage and displaying new-wave fashions. The event brought both Images in Vogue and Moev to local prominence and generated a small synth-pop music scene in Vancouver.

Images in Vogue soon went into Mushroom Studios to record music for their first official album *Educated Man* [independent release, 1981]. There, they were assisted by a new, young recording engineer named Dave Ogilvie. These early recordings walked a careful balance between avant-garde experimentations and synth-pop style in much the same way as the early Human League albums. The song “Victimize” centers on a set of rhythms programmed by Kevin Crompton on the Roland 808, while various musical sounds created with the Sequential Circuits Prophet V synthesizer including a bass line, arpeggios, and sweeping backing pads float through the stereo field. The song “Worlds of Noise” from 1982 showed Images in Vogue expressing their experimental side using the 808, the Prophet V, and a Pro-1 synthesizer to create short, percussive bursts of sound and noise that suggest a Futurist landscape similar to The Human League’s “Empire State Human” from 1979. The album was such a success that Images in Vogue were soon asked to perform in the opening slot of Depeche Mode’s first North American tour. One can imagine Kevin Crompton examining Depeche Mode’s electronic gear and touring rig, and possibly watching the band play night after night, learning about the new synthesizer technology used on stage.

When the tour ended Images in Vogue found another gig opening for Roxy Music in early 1982, but tensions soon developed. Crompton was dissatisfied, believing that the sound of the group was becoming too pop, and he decided to experiment on his own using the electronic

equipment owned by the band. Images in Vogue keyboard player Joe Vizvary joined Kevin and showed him how to use the various synthesizers and effect gear, such as a digital delay unit and the Tascam 244 porta-studio four-track tape recorder. Crompton and Vizvary named one of their practice sessions “To a Baser Nature.” The electronic jam consists of four independent musical layers that repeat for the entire three minutes of the piece, and reveals how the two musicians were attempting to recreate the sound of first-generation Industrial bands and tracks like Throbbing Gristle’s “Final Muzak.” The first layer of “To a Baser Nature” contains a Roland 808 drum machine playing a simple quadruple meter. The second layer features a synthesizer playing a descending melody and a syncopated bass line. The third layer uses a number of vocal samples of men and women talking about pornography and how it appeals to humanity’s baser nature. The last layer consists of noise sounds played in alternating rhythmic patterns. All of these parts are drenched in digital delay to the point of obscuring the individual elements. Much like Front 242’s early track “See the Future,” Crompton used a synthesized textural foundation as the foundation for a track that experimented with the use of vocal samples, blending the tape music techniques of the first generation with newer sampling technology. All the movement and variation in “To a Baser Nature” is created through the alteration of delay times and feedback.

Kevin Ogilvie, who was the roommate of Images in Vogue member Gary Smith, was interested in the experiments and soon began working with Crompton and Vizvary. Crompton originally intended to continue playing with Images In Vogue but the band’s success was quickly pushing them more towards the synth-pop-style ballads of The Human League’s *Dare!* and further away from electronic noise experiments. When the band finally decided to relocate to Toronto, Crompton remained in Vancouver and found his side project with Kevin Ogilvie becoming his full-time gig while Vizvary had decided to stay in Images in Vogue.

Crompton and Ogilvie decided to adopt stage names for their new band to create a sense of mystery. Kevin Crompton called himself cEvin Key (a mixed-up amalgam of Kevin Crompton), and Kevin Ogilvie called himself Nivek Ogre (Kevin backwards and Ogilvie twisted into an image from a horror film—an obsession of his). A close friend of theirs in the Vancouver music scene named Bill Leeb joined many of their electronic jam sessions, and since Crompton and Ogilvie were using stage names, Leeb decided to call himself Wilhelm Schroder—a pseudo-German nod to Krautrock.³⁸ Crompton decided to call the project *Skinny Puppy* because he wanted the group to represent a “dog’s eye view of the world.” Orge’s lyrics and vocal delivery worked with Key’s remarkable unification of synth-pop tendencies and Industrial noise to develop one of the most explicitly political bands of the second generation of Industrial music.

Brap: The Sound of Skinny Puppy

Of all the second-generation bands Skinny Puppy was the one that was the most musically connected to the first-generation noise sounds. Their early musical experimentations were recorded at Key’s home studio and released in 1983 on a limited-edition cassette tape called *Back and Forth* [Private cassette, 1983]. The do-it-yourself recording process and the release of an album dubbed on home tape equipment continued the tradition of Organizational Autonomy established by the first-generation bands. It allowed Key to experiment away from the pressures and pop-song confines of Images in Vogue, while Ogre could indulge in his twisted sonic word poems and research new methods of vocal timbre manipulation. While Skinny Puppy’s influences included the synth-pop bands New Order and Depeche Mode, they found a direct connection to the noise timbres of Throbbing Gristle and the cut-up method of William Burroughs.

³⁸ Leeb did not remain in Skinny Puppy for long, and left in the latter part of 1983 to form his own Industrial band Front Line Assembly using his given name. The group became a major second generation band that sounded more EBM rather than the Industrial-Noise of Skinny Puppy.

Skinny Puppy was the Industrial-music digital-era descendant of both Pierre Schaeffer's *musique concrète* and Throbbing Gristle's noise sculptures. Skinny Puppy wanted to wage aural warfare through the manipulation, mutilation, and destruction of sound, but at the same time their music gives the listener the distinct impression that a pop song is hidden somewhere just under the surface noise. This can be an unsettling experience since the pop-music cues that Key employed from his days with Images in Vogue now rested next to (or within, or underneath) the second-generation Industrial-music cues.

Like Front 242, Skinny Puppy began to use chords and harmonic progressions, bass lines and melodies, and built the sound around a beat that could be danced to at a club. The top of Table 6.4 shows the second-generation musical cues that were the most significant in the music of Skinny Puppy, and the cues listed at the bottom of the table are additional cues explored by Skinny Puppy and other Industrial Noise bands.

Table 6.4
Musical Cues in the Music of Skinny Puppy (Industrial Noise)

- Noise sounds
- Use of synthesizer
- Spoken vocal samples (particularly from horror films)
- Processed male vocals
- Politically-minded lyrics
- Harsh electronic timbres
- Riffs/motives
- Deconstructed song forms
- Lack of transitional moments

Industrial Noise-specific cues:

- Cut-up lyrics
- Formal disconnection between the vocal structure and the musical track
- Rhythmic synthesizer elements mixed with noise

The liner notes of early Skinny Puppy albums list the instruments played by each band member. These lists give us a window into the methodology of the band, and the types of sounds

they valued. The lists include sounds as diverse as synthesizers, sequencers, tapes, digital sampling, treatments, acoustic and metallic percussions, drums, rhythm programming, bass guitar, voices, treatments, and objects. The instrumentation is much more diverse than the synth-based sound of Front 242, and the makeup of the various sound sources and manipulations used harkens back to first-generation bands like Throbbing Gristle and Cabaret Voltaire. But many of these musical ideas still connected all the way back to the music of Stockhausen and Schaeffer, although now via first-generation music. The particular sound types also relate to the first-generation archetypes such as synthesizers, tape machines, “treatments” or ambient sounds, and metallic percussion.

The Skinny Puppy vocal style was created by Ogre using numerous effects including distortion, delay, gates, and ring modulation. These effects manipulate and alter his voice to give it a harsh metallic tone not uncommon in Industrial music, and dates back to some of the earliest Cabaret Voltaire tracks like “Nag, Nag, Nag.” One of Ogre’s earliest experiments was a short two-minute-and-thirty-second track named “My Voice Sounds like Shit.” The title, while a bit of a joke, suggests the goal of the experiments—to develop an abrasive vocal sound that was annoying and noise-laden, but was also understandable. Of course by standards of mainstream pop music it was far from “clear,” but what Key and Ogre developed was different from the impenetrable voice of Cabaret Voltaire’s “Kneel to the Boss.” Ogre’s vocal techniques developed over the years to the point that the effects were a performance in their own right, and were used to add emphasis or emotional effect to the lyrics.

During many live performances in the 1980s Ogre would stand in front of an effect rack and manipulate howls and shouts into the microphone as if he was playing a synthesizer or a Theremin-like instrument. He frequently emphasized the cut-up nature of his lyrics by pausing

in the middle of what a single sentence to make it sound like two, or combining words from two different phrases into what then sounded like one. In the context of Skinny Puppy's music his vocals were made even more intense and machine-like when they were juxtaposed with vocal samples that speak in the clear tones of radio or television announcers. While the technique and sound was different from Front 242, there was still a certain level of connection that was based on the idea of various vocal lines and the use of samples as a voice in the music.

Skinny Puppy described their compositional method as *brap*. They defined the word as “(v) to get together, hook up electronic instruments, get high, and record.”³⁹ This insinuates a completely free and open improvisational environment recalling the artistic ideals of the Futurists discussed in chapter one—the action, the moment of creation as the most important part of an artwork. It is also similar to the ideas of Throbbing Gristle in that both bands used aspects of open composition to create the basic materials for their works, and then manipulated this sonic material at a later time to sculpt it into a particular musical form—as in TG's “Very Friendly.” It is clear that the members of Skinny Puppy valued the first phase of this compositional method and placed the weight of creation at that moment, but this is somewhat misleading. As I have already suggested, the final stage of the compositional/recording process was required to be much more structured since the new electronic/computer equipment they used necessitated it. While certain aspects of Skinny Puppy's music remain unstructured in nature the main sequences of the song are extremely fixed and worked out by Key and Ogre. In fact the push and pull between the structured components and the improvisational elements that build a sense of tension in their music. These negotiations between structure and indeterminacy/improvisation are heightened during their live performances that feature improvisational moments created with metallic percussion, samplers, synthesizers, and Ogre's cut-up vocals and electronic vocal

³⁹ Liner notes to Skinny Puppy *Brap: Back and Forth Vol. 3&4*, [Netzwerk, 302122, 1996].

alterations, which stray from the recorded versions of tracks that appear on their albums, and also vary from one performance to the next. Skinny Puppy's compositional strategies embody its political goals of fighting against the aesthetic co-optation demanded of mass marketing, deconstructing traditional social ideals, and undermining the dominant hegemonic order. By utilizing strategies of musical defamiliarization, the band hopes to make listeners physically aware of the need for social struggle, and these techniques were used to create their landmark 1988 album *VIVIsectVI*.

VIVIsectVI [Nettwerk, 1988]

VIVIsectVI (pronounced "vi-visect six") was the fourth full-length album produced by Skinny Puppy (the sixth recording if one includes the *Back and Forth* cassette and the first EP). By 1988 Key and Ogre had added two new members to the group, Dwayne Rudolph Goettel and Dave "Rave" Ogilvie. Goettel had joined in late 1985 after his band Psyche had opened for Skinny Puppy, and he would become one of the primary songwriters for the group, working closely with Key to create most of the synthesizer parts and sampled sounds. Rave had known the band since Key's days in Images in Vogue (engineering *Educated Man*) and began working as Skinny Puppy's producer on the *Remission* EP in 1984. For *VIVIsectVI* his contribution appears to have been so significant that he is listed in the credits as a full band member, although the photo of the group on the CD sleeve only shows Key, Ogre, and Goettel.

The album cover was designed by artist Steven R. Gilmore, who created graphics for various artists, signed to Nettwerk Records, and designed almost every Skinny Puppy cover. The black cover contains minimal text stating the band name and the album title, but the font helps to construct meaning out of a somewhat cryptic title. On the album cover the word is not spelled out as "vivisectvi," it is clearly "VI VI sect VI." This begins to make sense in the context

of the entire album. Skinny Puppy was well known for their political views against animal cruelty and many of their songs use the idea of animal testing as an exemplar for humanity's dark nature. In the song "Testure" Ogre growls, "emphasis on money new disease everyday end is seen and coming research turns its back to gain." The stream of words suggests that the use of animal testing for drug and product research is motivated by money and not by science. New diseases plague humanity all the time and Skinny Puppy suggests that they may be the result of our own actions of needless testing and experimentation. In the song we again find a second-generation Industrial band predicting an actual apocalyptic event occurring because of humanity's actions, end is seen and coming—the modern crisis as an actual event.

The action of vivisection is the act of surgery conducted on live animals in the name of research, but the title as it appears uses roman numerals to contain the numbers 666 in the title, suggesting that this practice is evil, the work of the devil. The x-ray image of bones that makes up the rest of the cover reaffirms this point. In the music video for "Testure" a simulated vivisection is conducted on a man by a group of humanoid animals—not something for the weak of heart.

The music on the album ranges from intense experimental noise in "State Aid" to the rather synth-pop elements of "Testure." The first track on the album, "Dogshit," exists somewhere between the two extremes, working as an Industrial Noise track that contains elements of popular song and synth-based cues. The track was released as a single in 1988 but the label renamed it "Censor" due to the profanity in the title. The four-minute track is divided into six different segments, as shown in example 6.10. The segmentation is based on the types of sounds used to produce each segment (noise vs. pitched), the rhythmic makeup (pulsed sounds vs. drum-machine rhythms), the presence of vocals, and popular-song formal concerns. There is

no regularity or equal division to the length the sections.

Example 6.10
Musical Form of “Dogshit” by Skinny Puppy (1988)

0:00	<i>Intro</i>	Track begins with a rhythmic “alarm” sound (could be a manipulated vocal sample) Rhythmic filtered white noise sounds enter at 0:08
1:05	<i>Segment 1</i>	{32 measures} Drum machine enters along with new rhythmic noise elements that are divorced from the opening rhythms Bass and vocals begin together at 1:15
2:24	<i>Break</i>	{4 measures} Most elements stop, leaving drum machine and noise
2:32	<i>Segment 2</i>	{16 measures} The guitar takes on the role Ogre filled in Segment 1 The guitar sound changes at 2:52 and Ogre returns with non-verbal cries
3:11	<i>Segment 3</i>	{12 measures} Music is similar to previous segments with new electronic samples and sounds added to heighten the energy and activity
3:40	<i>Return</i>	The sounds begin to return to the introduction noise as the track fades to 3:55

What Skinny Puppy develops is a piece of music that is based on musical moments, rooted in the first-generation interpretations of Stockhausen’s methods as practiced by Throbbing Gristle. But Skinny Puppy did not limit themselves to the experimental methods and sounds alone. While some sections of “Dogshit” are experimental, others sound like popular-music song forms and sounds, and it is the juxtaposition of the two that helps to shape the song.

The entire first minute of the track is composed from two sculpted noise sounds that move in waves closer or further away from the listener or left and right within the 360-degree audio field. The first sound heard has a vocal quality to it and is pitched to the note D. This sound was most likely created by looping and altering a sampled voice, something that is

particularly obvious when the pitch of the sound moves up or down. While it has the timbre of a vowel sound there is also a short, clipped consonant at the end that simulates a high-hat cymbal as it repeats. The second sound that enters is actually two sounds blended together, the first a rhythmic machine pulse and the second a filtered white-noise sound. The volumes of these two parts are raised and lowered so that at times the white noise obliterates the rhythmic pulse, and at other times the pulse becomes louder and creates the illusion of lending its rhythm to the cloud of white noise. As the track progresses the filter used on the white-noise sound gives it motion and depth by emphasizing different frequencies. The return segment at the very end of the song is created from the same group of sounds. This return to the same set of sounds at the end creates a cyclic form where the end of the track can be heard as a return to the opening.

In between the noise bookends are a series of three segments and a short nine-second break. The timbres, rhythms, and overall effect of these sections are very different from the intro and return. Segments 1-3 are made up of a drum machine playing variations on a backbeat; a synthesized bass line that uses the same sort of herky-jerky rhythm Front 242 used in “Headhunter”; Ogre’s shouted vocals; distorted electric guitar; manipulated vocal samples; and the rhythmic machine noise from the intro but now played in tandem with the drum machine. After repeated listening it is possible to hear segments 1-3 as replicating the verse-refrain structure of a popular song (that is if you are willing to count the refrain as Ogre simply shouting the words “You Asshole”). Segments 1 and 3 function as verse-refrain sections, the break can be heard as a breakdown or middle eight-section, and segment 2 is an extended guitar solo played over the verse-refrain harmonic/rhythmic pattern. The vocals of segments 1 and 3 are a major part of creating this understanding of the form.

Ogre created Skinny Puppy’s lyrics almost exclusively through the use of the cut-up

technique. It is usually possible to understand what words are being sung/spoken/shouted by Ogre—maybe not on the first hearing, but eventually (and it is often exciting to finally understand a word that may have been elusive in previous listenings). The problem with Skinny Puppy was not the perception of the lyrics, as it had been with the first-generation bands (after all Skinny Puppy included the lyrics on the album jacket); the problem was understanding what any of the various cut-up words and phrases meant. The lyrics are arranged in small bursts of words that sometimes function as a unit and other times defy comprehension. They can be everything and nothing, often violent in imagery, and seemingly malicious in their intent.

Example 6.11
Selection of Lyrics from Segment 1 of “Dogshit” by Skinny Puppy (1988)

Crystal Marble Powder Shot Glass Overflow
Dreams Amaze Me
Time Escapes Me
Mirror Shades What Should Be
Flight Not Taking
[Rest] A Bodies Burning
[Compose] Ears Of Rock
Guilty Grey Formaldehyde
Cripples Hound A Wheelchair
Guilty Grey
A Wheelchair Hounds
You Asshole

The lyrics of “Dogshit” are contained in two large segments of continuous delivery—the first within segment 1 that runs from 1:15 to 2:24, and the second in segment 3 that runs from 3:11 to 3:40. A selection of the lyrics from each segment is shown in examples 6.11 and 6.12. In both examples the words in brackets [-] are spoken in a slower rhythm and lower pitch than the other words. This sonically separates them out from the others in a twisted form of call and response. The words that begin segment one are rather free form and do not settle into any one pattern or rhythm, but once the phrase “Crystal Marble Power Shot Glass Overflow” is spoken at

one minute and forty-five seconds, Ogre's voice approximates a sing-song rhythm and melody. The string of disconnected words flows out like garbage poetry in the first instance of melody in the song, and may remind one of Benjamin's labeling of Dada poetry as "word salad."

Ogre does something else interesting at the end of the segment 1 lyrics. He begins to repeat words in a way that might suggest the typically repetitive lyrics of a song's refrain or chorus. The words "guilty grey" appears twice in the same order and in between the words "hound" and "wheelchair" are used in reverse order. The lyrical repetition and word order reversal are minimal by poetic or popular-song lyrical standards, but within the context of "Dogshit" these words stand out and draw attention to themselves. The four words also all have a meaning that can be related to the overall ideals of Skinny Puppy and their protest against animal cruelty. The segment ends with Ogre shouting, "You Asshole." But much like Cabaret Voltaire's experiments and political statements in *Voice of America*, we are still left feeling like it is difficult to understand what Ogre means.

Example 6.12
Lyrics from Segment 3 of "Dogshit" by Skinny Puppy (1988)

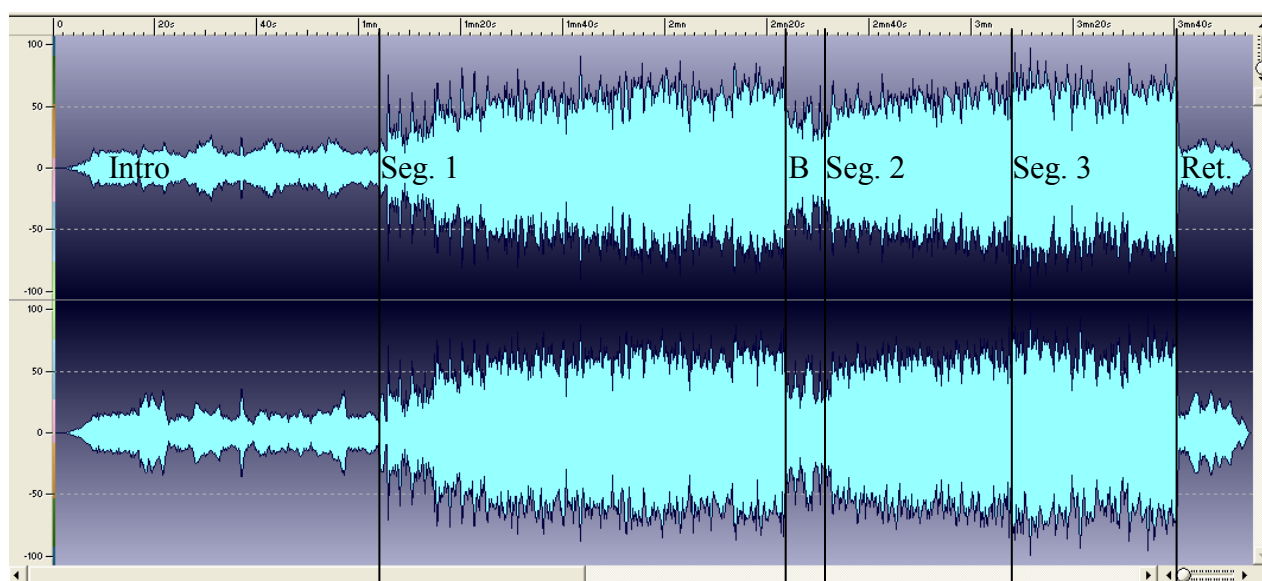
[Dead] Palsey Blue Stupid
[Thaw] Cuts The Jaw
[Hell] Piss Fuck Head
[Rest] Pure Acid Hell
Filthy Word Mutation
Laughing Hound Hereafter (hee, hee, ha, ha)
Stupid Clown You Asshole

The lyrics of segment 3 are much more structured and sound "song-like" throughout, a feeling that is reinforced by the constant use of call-and-response phrases. For each lyrical line there is one growled low-pitched word that is followed by three shouted words in response. Some of these phrases make sense within the animal-rights message, such as "Cuts the Jaw," while others sound as if they were picked solely for their sound and the shock tactic of the

nonsensical obscenity, such as “Piss Fuck Head.” Before the segment ends Ogre lays the method plain before the listener: “Filthy Word Mutation,” the hound laughs, and we are the stupid clowns.

An amplitude waveform graph of the song is shown in example 6.13 and reveals that while the volume is loud, it is not quite as intense and unrelenting as SPK’s “Slogun” discussed in chapter five. The graph does show how the various moments of the song each have a sonic/volume profile. It is also possible to see that segment three is the most compact and loudest of all the sections. This segment represents the final vocal scream by Ogre and the synthesizers before the track returns to the background noise sounds that frame the more song-like moments.

Example 6.13
Amplitude Waveform Graph of “Dogshit” by Skinny Puppy (1988)



Throughout “Dogshit” Skinny Puppy alters and manipulates the standardized codes of popular song in order to realign the system of signification and create a new perspective on the familiar aspects of popular music. This creates a piece of music in which several formal ideas

often overlap and develop individually, or at times clash with one another, or even obscure form entirely. This compositional technique effectively defamiliarizes commonly accepted cues for the listener, forcing a reevaluation of accepted conventions of song form. By using the elements of what Adorno called “pseudo-individualization,” they make us feel as if we are hearing a song, while it is simultaneously hammering away at our brains on all levels to break the listener down from the inside.

Skinny Puppy came face to face with the double-edged sword of their intense use of shock tactics when it was discovered that serial killer Jeffrey Dahmer had stalked some of his victims at their concerts. Nivek Ogre discussed this problem in an interview with *Reflex* magazine:

We’ve been labeled a lot in the past, for trying to promote violence and sexually psychotic behavior, or [for being] satanic. But the biggest misconception of all? That we celebrate all the blood and gore, but it’s not true. We don’t celebrate violence—we just use it as a way of transmitting information. If people hear that Jeffrey Dahmer stalked some of his victims at our show, it’s not because we enticed him to do so.⁴⁰

This sounds very much like the Futurist and Dada anti-art statements from chapter one. The artistic use of Shock Tactics remained strong during the second generation. Like the Futurists, their goal was the constant desire to push the envelope further each time. And like those before them, Skinny Puppy puts the brunt of the interpretive act on the audience. It is the audience that is responsible for the meaning that is produced by the art, not the artist. The extreme cut-up nature of Skinny Puppy’s lyrics does put much of the literal meaning on the listener, for better or worse.

In Vancouver, Canada, Skinny Puppy merged the Metallic Percussion klang and bombast of the first generation with Synthesizer-based sequencing and sampling technology to develop

⁴⁰ Reighley, Kurt. “Skinny Puppy: Capturing the Madness of the Ultimate Visionaries,” *Reflex* 24, 30.

nightmarish noisescapes. Skinny Puppy's brand of synth-based noise stayed closer to the general aesthetic of the first generation more than any other industrial group of the 1980s, and despite their use of updated technology, the sonic results were deeply rooted in the Experimental Noise archetype. Multi-instrumentalist cEvin Key created layered synthesizer arpeggios over drum-machine rhythms and squelches of white noise while vocalist Nivek Ogre used William Burroughs' cut-up technique to create lyrics that flowed out in nonsequiturs and could only be understood once the entirety of the song was analyzed for thematic unity. Sampled dialogue from horror movies helped to either clarify or obscure the meaning of those lyrics. Skinny Puppy also contributed the word *brap* to the vocabulary of the Industrial music subculture as a description of compositional method. In 1984 former Skinny Puppy member Bill Leeb left to start the group Frontline Assembly and created a similar sound that was also connected to the EBM of Front 242. Along with Skinny Puppy other groups such as Controlled Bleeding and Foetus would soon use the experimental noise elements of the first generation to unleash the Industrial Noise sub-style of Industrial music.

Ministry and Wax Trax! Records

Anyone who tells you they are the new thing – raised by wolves, boy in the bubble—is a piece-of-shit liar. . . . Everything's been done. The idea is to transform it into something that is your own. We're trying to create our own mutation of these things.

Alain Jourgensen (Ministry)⁴¹

The band Ministry was formed in 1981 in Chicago. During the 1980s Chicago became the center of the American Industrial music subculture and home to both Wax Trax! Records, the largest independent Industrial-music record label at that time, and Chicago Trax Recording Studio. Ministry's sole consistent member has always been Alain Jourgensen, whose family fled

⁴¹ David Fricke, "An Earful of Wax," *Rolling Stone*, April 18, 1991, 38. The text quoted is spoken by Alain Jourgensen.

Castro's regime in Cuba when he was only one year old. He grew up listening to the music of the British space-rock bands such as Pink Floyd and Hawkwind, but it was the sound of the Ramones in the mid-1970s, and Joy Division and the Cure in the late 1970s, that inspired him to start his own band. In 1978 he formed the band Special Affect in Chicago along with vocalist Frankie Nardiello, who would later go on to form the third-generation Industrial band My Life With the Thrill Kill Kult. Special Affect released only two singles and an EP before they broke up in 1981, but during that time Jourgensen became friends with Jim Nash and Dannie Flesher who owned a record store in Chicago called Wax Trax!.

Nash and Flesher saw how popular British Synth-pop was becoming with teenagers in Chicago and decided to start their own independent record label out of the store and recruit local talent to create an American version of the synth sound. Once Wax Trax! secured its distribution deal with PIAS in Belgium, the small Chicago label quickly had access to a global network of retailers. One of the first local bands to sign to the new label was the new project assembled by Alain Jourgensen, something he called Ministry. Between 1981 and 1986 Jourgensen would transform Ministry through a number of related musical styles from pure synth-pop, to gothic rock, to a heavy synth-based form of Industrial and eventually to the sound of Industrial Rock. In the early 1980s he released a number of synth-pop singles and 12-inch recordings with Wax Trax!, which gained a local following in Chicago. In 1981 Jourgensen released two tracks, "I'm Falling" backed with "Cold Life," which had a distinctly gothic-rock sound that was comparable to the sounds of Bauhaus and Joy Division—both popular underground bands at the time.

In 1983 he signed a deal with the major label Arista Records, which was predominantly known for its dance music roster, and released the first full-length Ministry album called *With Sympathy* [Arista, 1983]. This was the same year that Front 242 and Skinny Puppy put out their

very first albums, but unlike those other bands Ministry was very far away from the forceful Industrial band it would become just a few years later. *With Sympathy* was firmly rooted in the synth-pop style and Jourgensen even sang in a faux British accent. Jourgensen has frequently referred back to this album in the most politically incorrect fashion as “an abortion.” While Ministry maintained its ties to its independent roots with Wax Trax!, Jourgensen continued to look for a new major label to support the band, and for a new musical sound.

A few years later in 1986 Seymour Stein signed Ministry to Sire records to release the album *Twitch* [Sire, 1986]. This record was produced by Adrian Sherwood, who taught Jourgensen many of the studio techniques he had developed during his work with Depeche Mode. Jourgensen told me that while he was not happy with the final results of the album, the time he spent working on it with Sherwood, assistant engineer Gareth Jones (also from the Depeche Mode team), and musician Keith Lablanc, was like going to music college. *Twitch* was the middle ground for Jourgensen, who slowly began to change Ministry over to the Industrial style.

Hypo Luxa Hermes Pan: The Sound of Ministry

The Industrial-music version of Ministry that finally came together in 1988 consisted of only two full-time members, Alain Jourgensen and Paul Barker, but they also employed a rotating lineup of Industrial music all-stars.⁴² Their sound was based around pounding drums, distorted guitars, cold synthesizer tones, and sampled voices taken from violent popular films, such as *Platoon*, *Full Metal Jacket*, and *A Fistful of Dollars*. The top of Table 6.5 shows the second-generation musical cues that were the most significant in developing the sound of

⁴² Some musicians who have played with the group at any one time or another are: Richard 23, Chris Connelly, Mike Scaccia, William Rieflin, Kevin “Ogre” Ogilvie, Trent Reznor, Martin Atkins, William Tucker, and Gibby Haynes.

Ministry and the Industrial rock sub-style, and the cues listed at the bottom of the table are additional cues explored by Ministry after 1986.

Table 6.5
Musical Cues in the Music of Ministry (Industrial Rock)

- Noise sounds
- Use of synthesizer
- Spoken vocal samples
- Processed male vocals (the Ministry Box sound)
- Politically-minded lyrics
- Machine timbres
- Sixteenth-note rhythms
- Chromatic motion
- Guitar sounds emulating a machine

Industrial Rock-specific cues:

- Use of heavy metal sounds (riffs, chord progressions)
- Sampled and drum-machine sounds creating a large sonic space
- Unplayable musical ideas due to “BPM” and “NPM” (notes per minute)

If Front 242 assimilated synth-pop dance beats into Industrial music, and Skinny Puppy assimilated popular music song forms, then Ministry’s major contribution was the inclusion of rock and roll, specifically what is referred to as the New Wave of British Heavy Metal (NWOBHM). These heavy-metal bands built on the British hard rock and metal of the late 1960s and early 1970s such as Led Zeppelin and Black Sabbath, but they jettisoned much of the blues basis of that earlier sound. NWOBHM bands mixed in elements of progressive and psychedelic rock. They sped up the tempo of the music and adopted a much harder-edged sound and image. A typical Led Zeppelin album may feature a heavy rock track followed by a song that featured Jimmy Page playing the lute. With NWOBHM bands such as Judas Priest, Iron Maiden, and Motörhead, that was all gone, and one could expect one riff-based distorted guitar song after the other. These bands structured their songs on distortion, volume, speed, and intensity, with a good deal of theatrical showmanship.

While Jourgensen was clearly influenced by early metal bands like Black Sabbath, the particular guitar-based sound that he developed for Ministry starting in 1988 was rooted in the sound of Motörhead.⁴³ Fronted by former Hawkwind bassist Ian “Lemmy” Kilmister, Motörhead is often cited as one of the major influences on most heavy-metal, speed-metal, and thrash-metal bands. Lemmy himself disliked locking the band into any one style and has often discussed his music by calling it good old-fashioned rock and roll. He wanted his band to be the dirtiest and nastiest rock band in the world, often claiming that if his band moved in next door to your house your lawn would die. Jourgensen assimilated both the image and the musical sound of Motörhead—specifically from the album *Ace of Spades* [Bronze, 1980]. The guitar sounds Jourgensen looked to replicate were created by playing fast power chords where the root and the fifth are played one string apart and the third is left out. This was common of many heavy-metal bands starting with Black Sabbath. When the guitar is played with distortion at high volumes, the third only muddies the sound, and by leaving it out the guitarist could create a sharp ringing tone. These power chords are often played very fast in this style so that the root on the lower string is strummed repeatedly on the fast sixteenth notes and the fifth on the next string is played only for the accents on the quarter notes. A power-punch distorted guitar playing an eighth-note rhythm blasts forth over the country-music-styled drum beat, and Lemmy’s signature growled vocals.

When I had the chance to ask Jourgensen about his “revolutionary” use of guitars on the *Land of Rape and Honey* [Sire/Warner Brothers, 1988] album he told me that he did not view it as anything special. He told me that he had played guitar in bands like Special Affect, and that

⁴³ The Black Sabbath influence even led to a Ministry side project called *1000 Homo DJs* that recorded an EP featuring a cover of the Sabbath song, “Supernaut.” The name of the band came from a derogatory comment made to Jourgensen, claiming that the only people who liked his music were 1000 homosexual disc jockeys that played Ministry records in gay dance clubs after midnight.

the first Ministry songs (I assume he was referring to “I’m Falling) had also used guitars, so it just seemed like a natural progression for him. Of course what was so revolutionary about his use of guitars on the Ministry album was the fact that he and bassist Paul Barker played bass and guitar like they were in a metal band. Every other Industrial band that had previously used guitar had performed it in a nontraditional way (Cosey Fanni Tutti of TG) or simply strummed long power chords (Cabaret Voltaire). But to actually play a series of heavy-metal guitar riffs, to assimilate the song elements that came with that—these things would forever change the sound of Industrial music during the third generation (I will return to these specific issues and Jourgensen more in the final chapter).

The Land of Rape and Honey [Warner Brothers, 1988]

The Land of Rape and Honey is often considered a pivotal album within Industrial music because of its mixture of synthesizers, drum machines, and heavy-metal guitar. The tempo of most songs is fast and the rhythms are created from drums beats that are unplayable for a single human drummer. The album cover and promotional material for the album helped to support the brutal attitude of the music by picturing factories, riots, skulls, and artistically altered head-shots of the band members. The title song, “The Land of Rape and Honey,” resurfaces in three different versions over the next four years: a radio single, a live performance, and a music video. Each version offers different possibilities for interpreting the Nazi propaganda signs contained within. The original version that appears on the *Land of Rape and Honey* album is fairly typical of Ministry’s music, except that it contains vocal samples taken from Nazi audio recordings instead of the more common film quotations. The most striking sample is the repeated “Sieg Heil” shout that is the most important sonic element of the pre-verse and post-chorus. The aggressive nature of the song combined with the Nazi samples has caused some

listeners to believe that Ministry is asking them to participate in a Neo-Nazi rally. The way in which Ministry presents themselves within the shock tactic tradition of Industrial music and Nazi imagery suggests otherwise.

Ministry uses shock tactics to create a political message in “The Land of Rape and Honey.” The name of the song is an obvious play on words. Paul Barker says that he saw the slogan printed in an advertisement for the Canadian town of Tisdale in North Eastern Saskatchewan, whose main exports are rapeseed (the seeds of the rape plant which belongs in the mustard family) and honey.⁴⁴ The actual town slogan is “the land of rape and honey.”⁴⁵ But the title as used by Ministry is clearly connected to the biblical phrase “the land of milk and honey.”⁴⁶ This play on words, combined with the other lyrics, suggests to the listener the point of the song: in Ministry’s view, Americans were promised one thing (democracy, liberty and justice) and they are living something else (totalitarianism, control and censorship). In this context, the “Sieg Heil” sample, is used to make an analogy to Nazi Germany where the government was telling the German people that it was fighting on their behalf while it was simultaneously slaughtering innocent people by the thousands. Yet the German public, for the most part, continued to follow the rule of the National Socialist party, joining in the chant and blindly participating in their own bondage. It is this sort of subliminal participation that Ministry is attempting to uncover, believing that mapping this brief history lesson onto current social commentary will allow their fans to see the deception they perceive within the American

⁴⁴ Jourgensen confirmed that fact for me when I spoke to him about the album.

⁴⁵ See <http://www.quantumlynx.com/tisdale/Welcome.html>. (accessed January, 2004).

⁴⁶ Making somewhat morbid/vulgar alterations to quotations/titles/words has become a standard way of creating album titles for the band Ministry, i.e.; “The Mind is a Terrible Thing to Taste,” “The Dark Side of the Spoon,” (a reference to both *Pink Floyd* and heroin abuse), “The Tapes of Wrath,” and their 2000 live tour entitled “SphincTour” (you may need to think about that for a second).

government (however, Ministry never actually offers a course of action for the newly “enlightened”).

“The Land of Rape and Honey” was consistently performed during Ministry’s 1988 and 1989 world tours where the song served as an encore to most of the shows. This was almost always preceded on stage by a speech from Jello Biafra, shown in example 6.14, that was a mockery of the United States’ pledge of allegiance.⁴⁷ The basic point he is proposing is that the American government is really just controlling its public under a friendlier, “Yankee swastika” (his term) where very few people are receiving the honey while the masses are effectively being raped. Alain Jourgensen returns to the stage after the speech wearing a storm-trooper helmet that has a Nazi Death Head on it, and the band begins to play. Jourgensen and Biafra then make mocking gestures to the audience including the sieg heil salute, except that Biafra sucks his thumb like a baby when his hand is down, as seen in Example 6.15. Just as the song “The Land of Rape and Honey” sampled Nazi audio tapes, the live performance samples Nazi film by showing images of Nazi troops marching, Adolf Hitler, and concentration camps on large video monitors behind the band. This performance from the 1989 Ministry tour was captured on film and then released in 1990 as both a live CD and an hour-long video entitled *In Case You Didn’t Feel Like Showing Up (Live)*.

⁴⁷ Biafra is from the hardcore band *The Dead Kennedys* and is also a member of the Ministry side project called *Lard*.

Example 6.14
Jello Biafra Speech at a Ministry Concert



Example 6.15
Biafra and Jourgensen during “The Land of Rape and Honey”



Ministry’s intent was to use analogy to demonstrate that the American government is a controlling force disguising their true fascist selves. The purpose of Biafra’s speech is to make this point clear before the propaganda images are shown. The live version of the song is much more intense than the album version, heightening the emotional content by adding a visual component that consists of strobe lights, red sirens, a giant chain-link fence, projected videos,

and band members marching with American flags (see example 6.16). Ministry is careful to explain the ideology behind their performance before they begin it. Their actions on stage then support their ideology and focus the performance into a sharp critique of the social/political situation in the United States. Although many audience members follow Biafra in his first few salutes (once again see example 6.14), they soon realize the critical aspect of the performance and stop participating.

Example 6.16
Ministry, “The Land of Rape and Honey”



When the live version of the song was released as a video single in order to promote the *In Case You Didn't Feel Like Showing Up (Live)* album, a substantial change was made—the Biafra speech was removed. This created a situation where the visual and sonic signifiers combined without a clear statement of intent beforehand. This was a risky position for Ministry since a television viewer might reread the signs in their original context of Nazi propaganda and not within Ministry's analogy commentary. It seems odd that Jourgensen, who was so careful to explain the song when he could, would now leave out a critical part of the performance. It may be possible that Warner Brothers (or MTV) saw Biafra's speech as inflammatory and requested

that it be removed, or it may have simply been a timing/length issue for a video that was to be shown on TV. Some of the meaning contained in the original audio-only version of the song becomes blurred when it is combined with the visuals and receives no introduction. Jourgensen had, however, attempted to explain the song, to create a clearer understanding, in other places such as media interviews.

As the frontman of the group, Jourgensen has never been one to shy away from interviews. When asked about the *Land of Rape and Honey* album in a 1991 interview with *Rolling Stone* magazine, Jourgensen replied, “All we’re ever saying is ‘think for yourself, question authority.’ It’s very, very simple. Everyone wants things pre-cut, homogenized, spoon-fed, and I won’t give it to them. ‘The Land of Rape and Honey’ is a completely anti-fascist song. That’s what we’re fighting against.”⁴⁸ Jourgensen goes on to admit that a number of people still don’t understand and think that the show is pro-fascist. Even with all of the band’s precautions, including Jourgensen’s use of his “star power” which allows him to release information through major media outlets, it is still impossible for Ministry to generate a specific response from all audience members.

In Chicago, the band Ministry combined synthesized sounds and samples with the distorted guitars of British heavy metal (e.g., Black Sabbath and Motörhead) and American rock (ZZ Top and Metallica) to bring about a sub-style called Industrial Rock that was an outgrowth of the first-generation Punk-Garage archetype. Of all the second-generation bands it took Ministry the longest amount of time to develop their own particular sound. The first track on *The Land of Rape and Honey*, “Stigmata,” became the first true hit “song” for Industrial music with its flanging sixteenth-note drum-machine high-hats, sampled metallic percussion, and grinding guitar riffs. The music had traditional verse/chorus structures, even if things did break

⁴⁸ Fricke, 104.

down and fly off on tangents on a regular basis, and Alain Jourgensen actually sang (albeit through a good dose of distortion and effects that I call the Ministry Box). It was danceable enough to be played in clubs, hard enough to be played in bars, and full of enough teenage angst to find a large college radio audience. The sound made popular by Ministry became the basis for the Industrial Rock sub-style that was quickly adopted by other second-generation bands (particularly ones from the Midwest and Germany) including KMFDM and Die Krupps.

Splinter and Crack: The Third Generation of Industrial Music 1989-1996
Chapter Seven – Conclusion

All this post-modern stuff is coming to the hilt, to the end of the millennium. All this shit is just spiraling around and becoming more interesting.

Jack Dangers (Meat Beat Manifesto)¹

Come on, Come on, the motherfucker's on fire. / He cut through the bone, he cut through the wire. / Yeah–yeah–yeah–yeah. / Who will survive and what will be left of them. / Into another world number nine bring the death in. / I'm already dead. Yeah.

White Zombie, "Real Solution #9" [1995]

In 1989 Industrial music experienced an upheaval that altered the entire course of both the musical sound and the subcultural ideals. The disruption was not created by any first- or second-generation band but by a twenty-four-year-old musician who had been performing and recording in Cleveland, Ohio named Trent Reznor. His debut album *Pretty Hate Machine* [TVT Records, 1989] released under the band name Nine Inch Nails garnered immediate attention within the Industrial music subculture. But within a few months of its release the album began to make its way into mainstream music markets. It reached number seventy-five on the Billboard 200 album charts, and produced several hit singles including "Down In It," which reached into the top twenty on the modern rock and dance music charts.² The album also drew attention from rock journalists who acknowledged it as Industrial music, but commented on the sonic differences from earlier Industrial records, as evidenced by a CMJ review from 1990: "The Cleveland-based outfit strikes into truly uncharted territory: dance/ethereal/industrial/pop/rock,

¹ Bowen Sanders, "Meat Beat Manifesto," *Industrial Nation* 13 (Summer 1996), 14.

² This should be understood in comparison to the three albums discussed in chapter 6. The Skinny Puppy and Front 242 albums did not chart at all and Ministry's *Land of Rape and Honey* with its heavy metal elements only reached number 164 on the Billboard 200. None of the albums featured a charting single.

with more emotional (read: real) singing than a thousand Nitzer Ebbs could muster.”³ By the end of 1990 Nine Inch Nails was asked to perform as a part of the inaugural Lollapalooza tour (Summer 1991) created by Jane’s Addiction frontman Perry Farrell. On the tour Nine Inch Nails played its new pop-Industrial music for hundreds of thousands of listeners who had never even heard of groups like Throbbing Gristle before.

The mainstream success of *Pretty Hate Machine* in 1990 not only produced new fans, it also influenced a great number of bands who were suddenly looking to capture the pop-Industrial sound. A number of well-known and talented music producers including Flood, John Fryer, and Adrian Sherwood responded by assembling a musical “formula” from the various Industrial music cues and turned many of the aspiring bands into radio-friendly groups. Between 1990 and 1996 Industrial music splinted into dozens of sub-styles and off-shoots, each with ties to different varieties of popular music from hip-hop and jazz to metal and dance.

These new incarnations of the Industrial-music sound allowed the style to reach its widest audience ever, to the point that the word *industrial* became a marker for journalists to describe the use of noise and aggressive, buzzing, machine-like synthesizer timbres within a song. At the same time many second-generation Industrial bands began to retreat from the style. The musical and subcultural transformation was documented within a very public discourse that occurred between musicians, fans, and journalists, all questioning the state of Industrial music. When the group Marilyn Manson released the album *Antichrist Superstar* [Nothing/Interscope Records, 1996] in 1996 even the most die-hard fans and musical practitioners were willing to finally declare Industrial music dead, believing that the music had lost many of its connections to the

³ “CMJ Music Report,” *College Music Journal*, December 1990, <http://www.theninhotline.net/archives/articles/xrevw68.shtml> (accessed March 2, 2011).

avant-garde, assimilated too many popular music elements, and suffered a breakdown of the subcultural elements.

I have chosen to end the scope of this dissertation in the year 1996 in order to represent a twenty-one-year period in which Industrial music was created out of modernist ideals, assimilated other forms of popular music, and eventually was subsumed by the popular music industry. This final chapter serves as a conclusion to the dissertation by looking at the collapse of the Industrial music subculture through three short case studies: the release of *Pretty Hate Machine* in 1989, the rise of the Industrial-music producer formula in the mid-1990s, and the release of the album *Antichrist Superstar* in 1996. By examining these three specific moments during the third generation of Industrial music, I illustrate how these new incarnations of the music differed from previous generations, and in the process of doing so present a final overview of Industrial music.

Pop Industrial: Nine Inch Nails and *Pretty Hate Machine* (1989)

The music on the Nine Inch Nails album *Pretty Hate Machine* began as a collection of popular song demos flavored with Industrial-music elements and was later turned into an Industrial-music album by its creator and a group of clever producers who understood how to make something sound like an Industrial record. *Pretty Hate Machine* contained brilliant production work, songwriting, and innovative use of sampled sounds, but it was a collection of songs first and foremost. After a series of dissatisfying experiences performing in new-wave and alternative-rock groups, Trent Reznor decided to try his hand at creating his own music. Reznor spent his days working at a music instrument store, in the evening he worked at the Right Track recording studio, and in the very late hours of the night the owner of the studio, Bart Koster, agreed to let him record his own music. The songs Reznor came up with were constructed

slowly through a process of trial and error, created from a mixture of sampled sounds, drum-machine rhythms, and synthesizer riffs and bass lines. Early demos recorded in Cleveland feature Reznor, Ron Musarra, and Chris Vrenna experimenting with a variety of musical ideas, from the Roxy Music-inspired synth and saxophone of the song “The Purest Feeling” to the synth-pop dance of “I’m Not Listening.”⁴ Both songs contain typical love-song lyrics that introduce a slight tinge of anger resulting from a relationship turned sour. Reznor sings each with a clear vocal tone that communicates emotional depth over a background of preset synthesizers, rhythm guitar, and drum-machine sounds that are similar to the sounds of late 1980s synth-pop and new wave.

Two other songs on the early tapes, “Kinda I Want To” and “I Can Make Myself Forget,” use an expanded and original sonic palate that include several second-generation Industrial music cues, such as sampled metallic percussion, distorted guitar, samples taken from a variety of popular songs, and sequenced sixteenth-note synthesizer patterns. The demos from early 1988 show Reznor and Musarra mixing the sounds of Industrial music with sounds from further afield. Bits of Nitzer Ebb, Skinny Puppy and Ministry are combined with preset synthesizer timbres, jingly guitar, saxophone solos, and pop-music melodies and harmonic progressions. For example, the chord progression of the song “I Can Make Myself Forget” moves through a series of chords, Gm–F–Am–B flat–C in the verse and G m–B flat–Dm–F in the chorus, all at a rather slow 103 BPM. This kind of progression, especially one with a change between the verse and the chorus, was almost unheard of in Industrial music, but at the same time the pitch structure of the song is based around a Dorian mode on G, something common to second-generation Industrial music.

⁴ These demos have never been released and were privately played for me by original Nine Inch Nails drummer Ron Musarra. Very few people outside of the musicians who created the music have ever heard these early recordings.

Reznor shopped the tapes around to several record labels and finally decided to pursue a deal with Nettwerk Records, an independent record label that was home to Skinny Puppy and owned by Anthony Valic (of the second-generation Industrial band Moev). The label asked him to go out on the road as an opening act for a number of Skinny Puppy concerts during the *VIVIsectVI* tour. The idea was to allow Nine Inch Nails to build an audience while they waited to officially record an album. Reznor put together a small band including drummer Musarra. He recorded the sampled loops and backing tracks of his songs from the demo tapes on to a reel-to-reel tape machine. The tape recorder was placed center stage during the performances and no attempt was made to hide the fabricated nature of the “live” performances, as the performers on stage played along to the tape recorded sounds. But Reznor was disappointed by how small his songs sounded next to the music of Skinny Puppy, and he eventually dropped off of the tour to reevaluate his musical future. Eventually a new deal surfaced with the New York-based T.V.T. Records that had no experience with Industrial music artists; in fact they had very little experience with any artists. The label’s name stood for Tee Vee Toons and they primarily produced compilation albums of old television-show theme songs.

Due to a number of scheduling conflicts, management deals, and disappointing first mixes, the album was eventually recorded and mixed in a process that involved Reznor working with four different producers—all of whom were famous for their work in Industrial, synth-pop, and alternative rock. Producer John Fryer had worked on recordings for the Industrial/Goth label 4AD and the band Love and Rockets. Flood had previously worked with Cabaret Voltaire, Erasure, Book of Love, Renegade Soundwave, and Nitzer Ebb to create precise synth-laden albums that had strong melodic hooks. Producer Keith LeBlanc had started his career as a member of the hip-hop-centric Sugar Hill Records house band and was the main member of the

Industrial sample-based group Tackhead (LeBlanc developed the sound of Tackhead while working with early hip-hop producers). But in what might have been the most important contribution, TVT also hired Adrian Sherwood, who had worked with an array of Industrial bands including Tackhead, Skinny Puppy, Cabaret Voltaire, and KMFDM, and had helped Alain Jourgensen to radically alter the sound of Ministry on the *Twitch* album. The four producers assisted Reznor in turning the songs he wrote in Cleveland into something with more sonic punch, transforming the popular-music songs into Industrial soundscapes.

Reznor began by flying to London to work with John Fryer on the first round of mixes at Blackwing studio. During the creative rewrite and mixing sessions, many of the songs from the early demos changed significantly. In one example, the song “I Can Make Myself Forget” was changed to become “That’s What I Get.” While the basic chord progression maintained its shape, the timbres of the song were altered dramatically. There is a new percussion instrument playing a constant quarter-note rhythm in the chorus that sounds like a metal trash can lid being smashed. A snare drum with a “tight” sound is added and pushed into the front of the mix. Both new additions make the song much more percussive in nature and help to mediate the pop-sounding synthesizer parts. The bass is changed to a much more electronic sound that plays a funky syncopated eighth-note rhythm throughout the song. In the background are a number of treble synthesizer sounds that fizzle and pop behind the music like machines in a factory. The saxophone solo of the original demo is replaced by a new vocal bridge and a short synthesizer solo. There are also a number of important changes made to the sound of Reznor’s voice. It is no longer clean and clear. The London demos treat his voice with delay and a mild amount of distortion, but more importantly Reznor sings with much more gravel in his voice, resembling the darker turn taken by the updated lyrics.

While the original lyrics suggest that the singer is trying to forget a soured love affair, the new lyrics portray his broken heart as a form of punishment for placing his trust in someone. After each lyrical line in the verses of the original Cleveland tapes, there is a softer voice responding, “You’re still the only one,” rising from the tonic to the fifth, suggesting that the singer’s feelings for his lover still remain. But in the London demos these responses are gone, giving Reznor’s voice a more unified presence in the song and suggesting that he has no one but himself to blame.⁵ The lyrics of the new vocal bridge also support this when Reznor sings, “Why does it come as a surprise, to think that I was so naïve.” The new lyrics and vocal arrangement establish a very direct point of view, as if Reznor were singing to the audience members, and presents a much bleaker, angrier view of the romantic relationship.

Reznor worked with Chris Vrenna to establish the final order of the songs on the album and placed ambient interludes between them to produce the sensation that the record was a single experience, something to be listened to from start to finish in one sitting. All of the songs were updated to include Industrial-music cues including machine sounds, vocal samples, noise elements, and constant sixteenth-note percussion and synthesizer patterns, but not everything about the album sounded Industrial. The song “Down in It” contained a vocal rap in the verse. “Something I Can Never Have” was a piano and vocal ballad that featured various steam-machine sounds that hissed and pumped their way across the background in tandem with soft synthesized string chords. The last song on the album “Ringfinger” could have easily appeared on a Depeche Mode album that same year if it wasn’t for the final section of sampled noises that closed out the album, as if to remind the listener that Reznor and the producers intended it to be Industrial music.

⁵ The London demos have been released on various bootleg CDs in the last fifteen years and are currently available on many fan websites and Youtube.com.

Some of the songs on *Pretty Hate Machine* were reworked more substantially than others. Consider the final version of “That’s What I Get” (formerly “I Can Make Myself Forget”) that was produced and mixed by John Fryer. While the basic melody and harmony remain essentially intact, the timbral elements of the song are entirely different from the Cleveland demos. The verse features a soft synthesizer string sound playing the original chord progression, but the dominant bass line of the Cleveland demo is reduced to a single pulsing eighth-note octave on G. This creates a building tension as Reznor whispers the vocal melody while various machine sounds and samples grind and whirr behind him and move back and forth in the stereo field. The chorus sections build throughout the song. Each time the section returns it contains additional layers of sound, including a grainy synthesizer timbre that resembles the bass sound of Front 242’s “Headhunter,” metallic percussion crashes, and long synthesized string tones. Synthesizer arpeggios come in and out at various times. While the early versions of the song were closer to synth-pop and new wave, Reznor was able to modify the music into a sharp Industrial music for the masses. Thanks to the work of the various producers and Reznor’s willingness to rework the material, the final finished *Pretty Hate Machine* sounded like Industrial music, but it also exposed and highlighted the pop-music song forms, emotional vocals, and chord progressions, and these popular-song elements were not manipulated, altered, or disguised as they had been in the music of Skinny Puppy, Ministry, and Front 242.

In a December 1989 interview with Albany, New York-based fanzine *Buzz*, Reznor discussed the first Nine Inch Nails album. During the time before the album became a national hit, Reznor was forthcoming about his influences and the manner in which he created the album. When asked about influences that helped shape the sound of the album he mentions Skinny Puppy and Alain Jourgensen. Reznor talks about his use of music technology in a way that is

similar to the second-generation Industrial musicians: “If you just used [keyboards] the way the manufacturer intended, you would end up sounding like Michael Jackson’s last album . . . but you can take it, ring it, and just misuse and abuse equipment, messing with the computer is fun, Ministry does it, Skinny Puppy does it a lot.”⁶ *Pretty Hate Machine* contains a lot of sonic manipulation, but the sounds are used differently than in early Industrial recordings. The distorted samples never function as the central sound of the Nine Inch Nails album. “That’s What I Get” is a song first and foremost and then the samples, synthesizers, and noise elements are placed in layers of orchestration. By comparison, Skinny Puppy’s “Dogshit” is based on the noise components and occasionally the listener can hear popular-music ideas rise up through the din only to be suppressed once again. The same is true of Cabaret Voltaire and Throbbing Gristle, who both used the music of The Velvet Underground as a template for experimentation in “Here She Comes Now” and “Zyklon B Zombie” respectively. In the music of Nine Inch Nails, the popular-music features are audible, on the surface of the music, while in the tracks from the first- and second-generation bands the song elements were more subterranean and often difficult to hear.

Shortly after the release of *Pretty Hate Machine* we begin to see a shift in Reznor’s language that positions the album as a personal expression and not as a part of any information war or as access to information. At the end of the *Buzz* interview in 1989 Reznor admits, “I think that what I set out to do is make a pop industrial album.”⁷ This same proposition continued throughout many interviews in the early part of 1990 when Reznor refined his narrative about how the album was created. But in an April 1990 interview with *Keyboard* magazine he commented that *Pretty Hate Machine* was “emotion-based rather than technique-based.” His

⁶ Kimberly Carrino, “Nine Inch Nails: Getting Down in it with Trent Reznor,” *Buzz* 6, no. 49 (December 1989), 10-13.

⁷ Carrino, 13.

conversation with the magazine describes the gear used to create the album, such as the E-mu Emulator, but there is little mention of these sonic manipulation techniques being tied back to Ministry or Skinny Puppy.

Pretty Hate Machine wasn't entirely devoid of political messaging. The lyrics of the first song, "Head Like a Hole," address issues of capitalism's dominance over every aspect of life in the twentieth century. Reznor sings, "God money, I'll do anything for you, God money, just tell me what you want me to." On the surface this song relays the subcultural goals of Industrial music, but Reznor has altered the approach in a subtle, but substantial, manner. He has reverted to the use of punk-music angst and made the song about youth-culture rebellion. The song is "about" fighting against issues of class and capitalism. The song is not a weapon in itself, a concept that the first- and second-generation Industrial musicians believed in very strongly. "Head Like a Hole" made audiences want to sing along, "Head like a hole, black as your soul," but it did not make them feel like they had been "kicked in the teeth" as the sounds of Skinny Puppy, Throbbing Gristle, and SPK had intended to do. The samples used by Nine Inch Nails were not culled from Marxist terrorists groups as Cabaret Voltaire had done, or Nazi rally chants like Ministry sampled, or even the late-night television samples used by Front 242 to critique modern organized religion.

But Reznor and the producers did make it sound like it was Industrial music, and for most people it was certainly much more enjoyable to listen to than SPK. But was this record Industrial music? Without the underlying political message the music exists as all form and no function. *Pretty Hate Machine* effectively separated the Industrial-music cues from the subcultural ideals (organizational autonomy, access to information, shock tactics, and extra-musical elements). For Reznor, synthesizers, noise sounds, and sampler sound manipulation

were rooted in Industrial music, and he did not make connections back to the forms of early twentieth-century modernism that were so critical to the first-generation bands. During interviews he might mention Ministry but he would never mention Burroughs, Stockhausen, or Russolo. Unfortunately, this meant that the modernist history that had been constructed by Throbbing Gristle and others, and had been carefully maintained by the second-generation musicians, was being lost.

It also represented a complete change in reception of the noise elements of Industrial music. As Jacques Attali suggested, no sound is intrinsically noise; it only becomes such when someone deems it to be an unwanted sound, interfering with the reception of proper or accepted sounds. The noise elements of the first-generation bands had been slightly diluted by the assimilation of new musical sounds during the second generation. But during the third generation, when the noise elements were pushed into the background behind the vocals in the sonic mix, then they stopped functioning as political noise and started to become part of the accepted lineage of noisy rock music sounds along with Bill Haley and the Comets' "jungle rhythms," Jimi Hendrix's feedback guitar, the Sex Pistols' punk "piss-off," and hip-hop's "nonsense" raps. The new, accessible Industrial sound perfected by Nine Inch Nails and its production team created a problem for other Industrial musicians. They either followed Reznor into the creation of radio-friendly Industrial music or tried to take the entire style back underground.

Turning Away 1990-1995: How John Fryer Ruined Industrial Music

During the late 1980s many Industrial bands had a moderate level of commercial success, but in the wake of *Pretty Hate Machine*, many second-generation musicians were facing a dilemma. Industrial had been built on modernist philosophies and an adversarial approach to the

mainstream of popular music (guerilla warfare), but the success of Nine Inch Nails proved that it was possible to make an album that sounded Industrial and could also be a bestseller. What resulted was a splintering of the style based on a number of responses: 1. bands that pursued a commercially acceptable sound; 2. bands that maintained the modernist aesthetic; 3. bands who tried to do both; and 4. bands that rejected the Industrial philosophy altogether and attempted to reposition their “industrial” sounding music.

The British second-generation band Nitzer Ebb, whose first two albums were a blend of the Industrial Noise and EBM sub-styles, provide an excellent example of the conceptual shifts that took place between 1990 and 1995. When they released their first full-length album in 1987, the band frequently referenced Dada ideals and even claimed that their band name was created via cut-up technique, although I don’t think it was a mistake that the words they picked sound very German and look similar in print to a band name like Die Krupps.⁸ Nitzer Ebb also developed a particularly stark visual vocabulary that made use of various Marxist/Socialist/Communist visual cues (cogs, hammers, sickles, and stars) as on the cover of the album *That Total Age* [Mute, 1987]. Nitzer Ebb reinforced the political character of the visual imagery with songs like “Join in the Chant,” which consisted of the words *gold, judge, guns, and fire* repeated over and over with an occasional refrain that shouted, “Muscle and hate!”

In 1991 Nitzer Ebb was interviewed by *Keyboard* magazine after the release of a new album, *Showtime* [Mute/Geffen, 1990], that had been produced by Flood. During the interview band member Doug McCarthy places the group firmly within the history of Industrial music by mentioning Throbbing Gristle, DAF, and Die Krupps, and then describes the origins of Nitzer Ebb as being rooted in tape-music experiments and repeating single-guitar lines. As discussed in

⁸ The same thing had been done by other third-generation bands like Die Warzau.

chapter six, it was common for second-generation bands to connect their musical sound and technique back to first-generation bands and the modernist historical elements such as tape editing and experimentation. But when band member Bon Harris is asked to talk about the new album he says, “We were trying to grasp more traditional song structures on *Showtime*. . . . On our earlier stuff, we couldn’t really bring out too many moods. It was far too fast and in-your-face. . . . Most bands start off with a fairly general song-oriented approach and then start exploring the avant-garde. We did it the other way around. We’re going into more normal things, but it’s okay because the music hasn’t lost its edginess.”⁹ Harris makes a curious turn in these statements that repositions Nitzer Ebb as a popular music group and also criticizes modernist music and the avant-garde for its narrow expressive range. The aspect of emotional expression had not been an issue for first- and second-generation Industrial bands who communicated their sense of the modern crisis through noise. By returning to “more traditional song structures,” Harris suggests that Nitzer Ebb is able to communicate with audiences in a way that allows them to evoke more emotion and create diverse moods. This is similar to the argument used by Trent Reznor when describing the success of *Pretty Hate Machine*. This is ironic because Nitzer Ebb was used as an example of the ultimate non-emotional music in the 1990 CMJ review of Nine Inch Nails (see page 359).

There are two very important things that are revealed in this moment from 1991. First, Industrial music had pushed itself into the realm of overt popular music before when Throbbing Gristle released the single “United.” The release was calculated to shock TG audiences who were expecting a single filled with feedback and screaming and instead were given a record with obvious pop sounds and chord progressions, which Chris Carter said were designed to sound like

⁹ Alan di Perna, “Nitzer Ebb: Analog Synths & Ambient Samples Put a Polish On The Industrial Grind,” *Keyboard*, February 1991, 57.

ABBA. But Throbbing Gristle believed that this was a sham. Nitzer Ebb appeared to be sincere, a belief that was further supported by their next album featuring performances of acoustic instruments and sung melodies.

The second thing to consider about the interview is the obvious fact that Nitzer Ebb was effectively endorsing the power of popular music over the avant-garde. This was a complete turn away from the entire history of Industrial music that was built on the crossover between modernist composition and popular-music songwriting. These statements compel us to return once more to Adorno's ideas on the standardization of popular music. Nitzer Ebb's comments employ the same argument made by Adorno, except in the reverse, by pitting the value of popular song against that of modernist composition. Adorno had suggested that popular music was incompatible with the ideals and listening practices of serious modern music because it was too "emotional," and the members of Nitzer Ebb appear to be calling for a return to the emotional sounds and effects of what they call "traditional popular music." While the sound of Industrial music had changed substantially between 1975 and 1989, it had still retained the single-mindedness of its goal to act as sonic and political noise. But the new pop Industrial sound was becoming too diverse and the modernist noise no longer shocked audiences—or if Nitzer Ebb is to be believed, it no longer connected to audiences in a way that allowed for the communication of complex ideas. Because many third-generation bands were looking to gain a broader audience, they continued to alter the sound of Industrial music and took their ideas from the success of *Pretty Hate Machine*. The shift from a modernist conception of sound and musical creation to a popular-music vision of emotional songwriting caused two other major changes in the third generation of Industrial music: a new application of the second-generation philosophy of assimilation and creation and a rupture within the subculture.

The first-generation musicians actively sought out the past in order to construct a specific history for Industrial music, and the second-generation musicians continued to relate that history to contemporary society and music. The methods of assimilation developed by second-generation musicians built on Burroughs' ideas of using the world around them, ingesting it, and recontextualizing it, and the music accomplished this by assimilating contemporary popular music and mixing it with Industrial-music archetypes. During the third generation, musicians continued to broaden their reach and adopted a rather postmodern stance by assimilating elements of alternative music, hip-hop, classic rock, funk . . . and the list goes on and on. Later in the *Keyboard* magazine interview with Nitzer Ebb, band member Doug McCarthy discusses the idea of assimilation in Industrial music: "What Bon and I did for the album [*Showtime*] was make a list of genres–styles that we wanted to steal. The list literally ran through everything: '50s rock and roll, rock, rap, jazz. And we structure the songs around our idea or interpretation of what each of those genres is like."¹⁰ The fundamental shift in this statement is not the use of an expanded set of musical styles to assimilate, but the fact that the action is no longer framed as assimilation. McCarthy says that they were stealing from other musical styles and then structuring their songs around their own interpretations of those styles.

This method of composition is very different from the way in which previous Industrial musicians worked–borrowing material to fold into the existing framework–but the new method became the standard for the third generation. Most third-generation bands combined disparate popular-music styles and based their sound around the elements that they used. The group Meat Beat Manifesto's album *99%* [Mute, 1990] was given its title from the percentage of the record that was created from sampled sounds. They used samples from popular music including the Beatles, Frank Zappa, DAF, and The Doors—all on one Meat Beat Manifesto song. The same

¹⁰ di Perna, 59.

kind of sample-mania was mixed with rap and heavy-metal guitar riffs on the Pop Will Eat Itself release *The Cure for Sanity* [RCA, 1991]. The group MC 900 Foot Jesus mixed hip-hop beats and rap with jazz saxophone solos and metallic percussion to create the album *Welcome to My Dream* [Nettwerk, 1991]. My Life with the Thrill Kill Kult made use of horn sections, female backup singers, funk sounds, and lounge music and mixed it with Industrial timbres to create something entirely different that was connected to lyrical themes of Satanism and sexual indulgence on albums like *Sexplosion* [Wax Trax!, 1992]. 16 Volt followed Ministry's lead into a more guitar-based sound but verged closer to trash and LA punk on *Wisdom* [Re-Constriction, 1992].

The opening up of Industrial music to an unlimited variety of new musical sounds was something that musicians and fans in the subculture were well aware of. The musician known only as Richard, from the current Industrial N' Beats band Neikka RPM, explained how musicians viewed the expansion of musical borrowings as being connected to the opening up of lyrical themes:

The industrial bands of the 1990s seemed far more personal than their predecessors who themed their music on the broader views of "Institution" or society-at-large and social ills. The 90s also saw a diverse branching off effect ripple through the scene. Suddenly Industrial bands ventured into many cross-genre experiments and were able to maintain the "Industrial" tag, and this experimenting was acceptable to the scene. It was not just the instruments and sound elements used (such as metal guitar riffs and live drum samples) but also the song-themes as well.¹¹

Richard explicitly connects the broadening out of the assimilation ideals of the second generation to the influx of new material into the style, and points out that all of these new creations were able to maintain the label *Industrial*. He also connects the musical changes to the new lyrical material, something that I believe was established at the start of the third generation in the work

¹¹ Richard, e-mail interview by author, February 2011.

of Nine Inch Nails. This was a major change from the tight focus of the first-generation bands, which had a very open conception of what the Industrial musical sound could be, but in reality they only accepted a small number of musical experiments into the subculture (much like Luigi Russolo whose Art of Noise could have featured any sounds, but centered on the noisy mechanical and machine sounds).

The third generation's penchant for gathering more and more musical styles resulted in a loss of Industrial music's identity. The first-generation musicians had developed a well-defined identity by borrowing modernist ideals and avant-garde music sounds and constructing a specific history for itself. The second generation started to expand that identity through their philosophy of assimilation, but by the third generation things had expanded so much that Industrial music began to lose its center. It was suddenly so diverse that the pieces were sold as junk parts to other musical styles that began to use Industrial-sounding elements to signify ideas such as dangerous, alternative, or evil. Table 7.1 shows the musical cues used in the third generation of Industrial music from 1989 to 1996.

Table 7.1
Musical Cues of the Third-Generation Bands

- Use of sampling: spoken words and musical samples
- Use of guitars in more traditional rock styles and chord progressions
- Expanded use of traditional rock-chord progressions
- Expanded use of wide melodic contour and rhythmic phrasing
- Clear (non-distorted) vocal sounds
- Dance beats
- Classic song forms (verse, chorus, bridge)
- Expanded use of other musical styles (country, hip-hop, jazz, funk, metal, techno, etc.)

The list is quite short, and what it actually represents are the "signature sounds" used by most third-generation bands in order to signify themselves as Industrial. The prominence of the last cue listed, the expanded use of a wide variety of musical styles, makes a longer list of

discrete musical cues much less appropriate to this generation than the first two. There are hundreds of musical cues being used across a large number of songs. Each song used its own method of organization based on other forms of popular music, and as a result the compilation of a ten-page list makes that list meaningless. It is also important to realize how a number of these cues are radically different from the previous two generations, such as clear (non-distorted) vocal sounds and the full acceptance of verse/chorus song form.

During the period from 1990 to 1996 there were a number of producers who worked with Industrial bands and put together a formula for the creation of Industrial music using these very musical cues. This was made possible because Nine Inch Nails had separated the use of Industrial-music sounds from the modernist ideals of Industrial music and because Industrial musicians and fans now accepted the use of almost any musical idea as the structuring foundation of a song, album, or entire group. It is also important to note for the point of comparison that very few first-generation bands ever worked with a producer. Their interest in organizational autonomy kept them self-contained and the last thing they wanted was for someone to tell them how to sound “better” or more like the popular songs of the time (typically the function of a producer in a recording session). The second-generation bands occasionally worked with producers, but when they did the producer often became an unofficial (and sometimes official) member of the band, helping to sculpt the sounds of the group over a number of albums, like Dave “Rave” Ogilvie’s work with Skinny Puppy.

But the producers, who worked with many third-generation bands, or older bands looking to update their sound, were not seen as members of the band. They did not have a long-term vested interest in the career trajectory of the groups, and they used their exceptional talent to shape and mold a large number of groups creating the “Industrial” music sound—which at that

point was really the Nine Inch Nails sound as far as record labels, radio stations, and mainstream success were concerned. In fact the producers who were the most successful at doing this *were* the producers who had worked with Trent Reznor to create *Pretty Hate Machine*: John Fryer, Adrian Sherwood, and Flood. As shown in table 7.2 each of these men worked with a number of bands in the period between 1990 and 1996 to create the third-generation radio-friendly sound.

Make no mistake—the records produced by these three men are extraordinary. The albums are filled with excellent songs that have catchy melodic hooks, heavy guitar parts, understandable vocals, and emotional lyrics. Each song is filled with production tricks pulled from Industrial music and feature clicking, pulsing, cranking machine sounds in the background. Flood worked with several bands that would never be considered Industrial, U2 and the Smashing Pumpkins, and helped them to add Industrial elements into their recordings (such as U2’s *Zooropa*). Sherwood mainly continued to work with second-generation bands to help them “update” their sound, and he created various twelve-inch remixes for bands like Skinny Puppy. But John Fryer, who was the primary producer for *Pretty Hate Machine*, was certainly the best at turning alternative rock bands into polished copies of Nine Inch Nails, as is proved by the radio and sales success of songs like “What Do I Have to Do?” by Stabbing Westward and “Guilty” by Gravity Kills.

Table 7.2
Producer Projects during the Third Generation, 1990-1996

John Fryer	Adrian Sherwood	Flood
Moev	Pop Will Eat Itself	Nitzer Ebb
This Mortal Coil	Tackhead	Pop Will Eat Itself
Die Krupps	Nine Inch Nails	Renegade Soundwave
Stabbing Westward	KMFDM	Nine Inch Nails
Sister Machine Gun	Skinny Puppy	Depeche Mode
Gravity Kills		[U2 / Smashing Pumpkins]

The Stabbing Westward song “What Do I Have to Do?” may be the most perfect pop-Industrial song outside of *Pretty Hate Machine*, and part of that is because it is based very closely on the sounds and structure of Nine Inch Nails’ “Terrible Lie.” Both songs use the same vocal template with soft, almost whispered vocals in the verse and passionate shouting vocals in the chorus. Stabbing Westward heightens the emotional intensity of the chorus by adding loud distorted guitars playing power chords. “What Do I Have to Do?” creates a constant sensation of build and collapse throughout the song in a similar fashion to “Terrible Lie,” but the highs and lows are even more pronounced. The sonic palettes of the two songs are also incredibly similar. At the three-minute mark of “What Do I Have to Do?” there is a traditional break/bridge that features a synthesized sound in place of a guitar solo. This sound is an almost exact replica of the synthesizer used in the bridge/break of “Terrible Lie” that occurs three minutes and thirty seconds into that song. The two synthesizer sounds share the same rhythmic pulse, melodic shape, and timbre, and both appear at a prominent instrumental break in the song structure that draws attention to the sound.

While Reznor’s lyrics for “Terrible Lie” deal with betrayal and religion, creating something along the lines of a personal actualization of the elements of the modern crisis (as Depeche Mode had previously done on *Construction Time Again*), Stabbing Westward takes even that away. Using the kind of lyrics Reznor had recorded on the early Nine Inch Nails demos, Stabbing Westward singer Christopher Hall moans, “I wish there was a way for you to see inside me, I’ve never felt this way, about anyone, or anything, tell me, what do I have to do to make you happy?” This is about as emotional and personal as one could possibly image an Industrial song being. Richard of Neikka RPM suggested to me that third-generation bands were borrowing this level of emotional expression from outside of Industrial music, much as they

were borrowing musical and textural content: “To me this period of Industrial bands reflected the emotions that had been more akin to genres such as alternative, cross over gothic, and darkwave music.”¹²

One reason the Stabbing Westward song sounds particularly like Nine Inch Nails is that the band’s drummer Andy Kubiszewski had previously played in the Cleveland-based band Exotic Birds with Trent Reznor, and many of the songs on Stabbing Westward’s *Wither Blister Burn & Peel* were adapted from a series of demo recordings made in Cleveland in the late 1980s. With a similar set of source material the band worked with Fryer to create a similar pop Industrial music sound. Various other members of Stabbing Westward had also toured or recorded with a number of other Chicago-based Industrial bands that were signed to Wax Trax! Records. “What Do I Have to Do?” was even more of a commercial success than the models it was based on, and the song reached number seven on Billboard’s mainstream rock tracks chart in 1996.

In 1993 Kim Traub wrote an article as a part of her regular series “State of the Industry” in the *Industrial Nation* fanzine, in which she summarized what the music and the subculture had become. She writes, “The basic idea of Industrial is to reprocess the data of the everyday and mediocre into an expressive form. . . . From this base philosophy, multiple schools of thought and opinions have branched out into one huge schizophrenic mass.”¹³ It wasn’t just musicians who were aware of the change in the sound and the meaning of the music; it was the members of the subculture as well, who were active participants from the beginning: creating artwork, hosting evenings at dance clubs, writing fanzines, or even starting their own bands and micro-record labels. Traub goes on to suggest that the scene was still growing in 1993 and that the

¹² Richard, e-mail interview by author.

¹³ Kim Traub, “State of the Industry,” *Industrial Nation* 8, 42.

revolution was ongoing. She attempts to remind her readers of the history of the music from the sounds created by Throbbing Gristle, Einstürzende Neubauten, and Front 242; the connections with synth-pop via Kraftwerk, Depeche Mode and New Order; and the importance of cultural elements drawn from William S. Burroughs, Dada, and Minimalism. It is remarkable to see how significant these elements remained within the subculture in 1993 even when the meaning and connections for many bands was slipping away. The access-to-information element remained strong, and various writers of fanzines and even articles in larger publications attempted to inform new audience members that the music has an important history that is vital to understanding the meaning behind much of the music. Traub concludes her column by suggesting that Industrial music and its subculture will exist as long as humanity and machine continue to evolve and musicians experiment with sound. In the next issue of the fanzine she continues this same train of thought by saying that too many new bands are simply copying the major groups from the second generation and not experimenting with new sounds on their own. If this continues, she suggests, the music will soon die out.

The summer 1995 issue of *Industrial Nation* featured a guest article by Brian McNelis titled “What Industrial Revolution?” in place of Traub’s regular “State of the Industry” features. McNelis was the general manager of Cleopatra Records, a rather large Los Angeles-based independent record label that released a variety of Industrial and Goth records, brought back into print a number of older Industrial albums that were no longer available, and published the book *Industrial Revolution* by journalist Dave Thompson. McNelis was also the co-manager of the third-generation Industrial band Chemlab. What he had to say about the state of the Industrial music scene was severe but accurate. The article told the story of someone who had become hooked on Industrial music in the mid-1980s, who was a fan first and then worked in the music

industry, and who believed that Industrial music might be able to be mainstream and carry its revolutionary message with it. I quote it at length here:

I gotta tell ya, I'm a little frustrated. Ever since 1988 when Ministry's *Land of Rape and Honey* was released (featuring the agro anthem "Stigmata"), people began to predict the future was going to sound angry and digital. Then, in 1989, Nine Inch Nails' *Pretty Hate Machine* was released. It seemed like they were right. . . . Like it or not, Trent Reznor changed an entire scene. . . . NIN is no longer considered a "cool" band by the underground. Which brings me to this: what happened to the Industrial Revolution? There are a lot of new, young, exciting bands on a lot of new, young, exciting labels . . . But few people seem willing to step out and support them. . . . The Industrial Revolution hasn't happened and that's bad for the scene and the artists. Although many have predicted that industrial would become the next heavy metal, I haven't seen it. . . . Who buys NIN CD's anyway? How can there be such a big gap between those at the top and those at the bottom?¹⁴

McNelis laments what he sees as the missed opportunity for an Industrial revolution, for the music to make a bigger impact on society. He regrets the lack of the musical subculture's ability to push itself into the mainstream or at that point in 1996 to even keep the underground scene vibrant and alive. But in his short article he makes sure to retell the story of Industrial music, from the early sounds of Kraftwerk and Tangerine Dream through Depeche Mode, from Ministry and Skinny Puppy to the pop-Industrial of Nine Inch Nails. The music had become popular, but it had not brought the message with it, and the bands that went back underground to continue to abide by the subcultural ideals set out by the first generation found that they were making music for a limited community who stay below the radar with them. Nine Inch Nails and Stabbing Westward sold millions of records while other third generation bands like Die Warzau and Leæther Strip remained deep underground and struggled to survive. By 1996 the divide only became worse, and when the success of Marilyn Manson's new album eclipsed even *Pretty Hate Machine* it was clear that the subculture was about to disappear altogether.

¹⁴ Brian McNelis, "State of the Industry: What Industrial Revolution?" *Industrial Nation* 11 (Summer 1995), 82. All grammatical errors are from the original.

The Theater is Closed: Marilyn Manson and *Antichrist Superstar* (1996)

But I offer this distinction. I'm with the invaders, no use trying to hide that. And at the same time, I disagree with some of the things they are doing. Oh, we're not united anymore than you are . . . We are not that much better than new earth aches. There is no place else to go. The theater is closed. There is no place else to go. The theater is closed. Cut word lines. Cut music lines. Smash the control images. Smash the control machine.

William S. Burroughs
From "Quick Fix"¹⁵

The decline of Industrial music as both a subculture and a musical style witnessed a very public implosion during 1996. In a single issue of *Alternative Press* magazine in March 1996 there were two articles about Industrial music, one regarding Ministry (who also graced the cover of that issue) and a second about Skinny Puppy. In the table of contents the Skinny Puppy article is subtitled "Sleeping dog dies" while the Ministry feature is listed on the cover as "Ministry: the real downward spiral?" in reference to the 1994 Nine Inch Nails album *The Downward Spiral* [Interscope/Nothing, 1994]. Both of the second-generation giants had just released new albums that year and were undergoing significant personal upheavals. During one point in the Ministry interview Jourgensen attempts to cut his ties with the entire concept of Industrial music and comments on the musical domination of Nine Inch Nails: "I can't believe that the 'I' word is still used with me. . . . This record [*Filth Pig*] was done in a completely different way, and with other instruments—Mandolin, piano, pedal steel guitar. It was fun playing all that stuff without sampling. It's gonna be really hard for Trent to learn all these instruments next year for his next record."¹⁶ Jourgensen refuses to even say the word Industrial during the

¹⁵ Burroughs, "Quick Fix". This text was also featured on the Ministry website in 1992 as part of the promotional material for their *Psalm 69: The Way to Succeed and the Way to Suck Eggs* album. The album featured a song called "Just One Fix" which was dedicated to William Burroughs and contained samples of spoken-word text by Burroughs himself.

¹⁶ Quoted in Jason Pettigrew, "Watch Yourself and Watch What You Say," *Alternative Press* 10, no. 92 (March 1996), 46.

interview and his comments about the lack of sampling and the abundance of live performance on the Ministry album *Filth Pig* [Warner, 1996] are akin to Nitzer Ebb's comments regarding the making of *Showtime*. By reprimanding Trent Reznor for his lack of performance, Jourgensen is willing to release the various Industrial-music techniques and sounds to the pop-Industrial bands and move on to something else entirely.

In response to this, interviewer Jason Pettigrew explains to the reader that Jourgensen seemed to be running away from his history in Industrial music. Pettigrew writes that the Ministry music formula of the late 1980s was about "power riff here, fire drummer, get machine, go to Blockbuster, rent Road Warrior for sampled bites, set sequencer on sixteenth-note pattern." Pettigrew comments on the change to more personal lyrics and the use of the first-person voice on the new Ministry album. Jourgensen had forsaken the Industrial-music sound, and journalists like Pettigrew were easily able to lay the musical cues and structures bare to reveal their drained status. And it was all true; *Filth Pig* did sound different. It even included a cover of Bob Dylan's country-style hit from 1969, "Lay Lady Lay," a part of rock history that was typically ignored by the Industrial-music subculture. The changes resulted in a strange situation in which the album reached the highest Billboard charting position of any Ministry album (number nineteen on the US albums chart) but sold fewer copies than any album since *Twitch* [1986].

The interview in *Alternative Press* was not a single instance of Jourgensen speaking out about the state of Industrial music. He discussed many of the same topics in other interviews including the March 1996 issue of *Guitar Player* where he and Paul Barker talked about performing live on instruments and moving away from the synthesizer-heavy sound and fast tempo of their past albums. At one point when Jourgensen is asked about his past and the use of electronics, he makes what seems like a very strange comment about war and killing the enemy

with napalm bombs: “It doesn’t matter what they were killed with. They’re dead. They’re sizzling. They’re charred. They’re lying in front of you, and you can take their rings and wallets. You can loot now. I don’t know what that means.” Even though Jourgensen brushes this comment aside by saying he doesn’t know what it means, I think he did know what he meant. It seems clear that Jourgensen believed Industrial music had run its course, that the music industry, Nine Inch Nails, and the many new sound-alike bands had pillaged the music he and others had made. These new bands had not held true to the message, only the sound, and as far as Jourgensen was concerned it was time to move on. He would find something else to do, another way to make music with a message.

In the same issue of *Alternative Press* there is an article/interview about Skinny Puppy and their album *The Process* [American, 1996] that was thought to be the last Skinny Puppy album, and was until 2004. The record is decried by journalist Dave Thompson and the band members for its lack of focus, its failed attempts to assimilate hip-hop and techno, and its use of untreated vocals. Along with many other missteps the album appears to have left the members of Skinny Puppy at a loss for what to do both musically and politically, and with the recent death of member Dwayne R. Goettel from a heroin overdose the band was ready to call it quits. Key and Ogre felt that they could no longer continue as they had, but they were unable to come up with something new while retaining true to the Skinny Puppy mission. The two albums before *The Process* were some of the most noise-laden albums they had ever created, and these vicious records resulted in declining sales and the end of their contract with Capitol Records. While Jourgensen and Ministry were moving away from Industrial music in order to move forward, Skinny Puppy was trying to stay within the music style they loved, but they had lost control of the music. It did not help that their new record label American hated the album they turned in

and wanted something different, and more importantly commercial. The end of the *Alternative Press* article quotes Key:, “Skinny Puppy was written off...this is the label’s album more than any of ours.”¹⁷

The 1996 Marilyn Manson album *Antichrist Superstar* [Interscope/Nothing, 1996] was one of the final blasts of Industrial music in the 1990s, and it combined references to many of Industrial music’s most controversial shock tactics and political issues including Nazis, sex, drugs, control systems, religion, noise, and the idea of entertainment through pain. Produced by Dave “Rave” Ogilvie (Skinny Puppy) and Trent Reznor, the album sounds very Industrial, which was not usually the case for the band. Marilyn Manson had been a shock-rock band (in the vein of Alice Cooper) from Florida that Reznor had signed to his Nothing imprint of Interscope Records. The band’s first album was a mix of “creepy” sounding songs (lyrically and sonically) and alternative-rock guitar sounds. The band members all adopted names that featured a famous American female superstar followed by the name of a famous American serial killer, hence the lead singer and bandleader Marilyn (Marilyn Monroe) Manson (Charles Manson).¹⁸ But just like Stabbing Westward and Gravity Kills, the alternative rock of the band Marilyn Manson was sculpted into an Industrial music record by two producers.

A number of Reznor and Ogilvie’s production techniques are used on *Antichrist Superstar*. The music is frequently filtered and compressed, a trick used by Reznor on the 1994 Nine Inch Nails album *The Downward Spiral*. The drummer of the band Ginger Fish is frequently replaced with a drum machine or plays along with one. The drum and bass sounds are treated with effects that warp the sounds much as Ogilvie had done on numerous Skinny Puppy

¹⁷ Dave Thompson, “Skinny Puppy: Canine Affliction,” *Alternative Press* 10, no. 92 (March 1996), 42.

¹⁸ The other band members were named Twiggy Ramirez (from fashion model Twiggy and serial killer Richard Ramirez), Madonna Wayne Gacy (from pop singer Madonna and serial killer John Wayne Gacy), and Ginger Fish (from film actress Ginger Rogers and serial killer Albert Fish).

albums. The record even goes back to draw on many Industrial-music philosophical ideas such as Nietzsche's concepts of the death of God and the shape of modern society. The record is structured as a concept album with three cycles. Each one deals with a different stage in the rise of the Antichrist and the state of humanity during the apocalyptic times. The artwork is designed to shock and repulse. Altered photos of Manson and the other band members show them in grotesque poses, pictured as angels and devils, adorned with mechanical parts and pieces. The CD booklet allows for it to be folded in different ways to reveal several secret messages. The CD itself features artwork showing a black circle with a red lightning bolt that has an arrow at the bottom (this can also be seen on the background flags in example 7.1). It looks like the band logo for Throbbing Gristle and simultaneously draws on all of the same associations that TG had when they created their own shock lightning bolt. In other words, the album *Antichrist Superstar* combined all of the proper Industrial-music elements. It was as if Manson, Reznor, and Ogilvie had put all of the history of the music into a blender and poured it out into this record.

Boyd Rice of the first-generation band NON published an interview/article about Marilyn Manson in *Seconds* magazine after the album was released and the band was starting to tour. Rice was at a concert in Cleveland (Manson's original hometown) and he called the live performance "a Nuremberg Rally by way of Glam Rock."¹⁹ The band made the live concerts a massive production with theatrical props, costumes, lighting, and special effects. They were backed by a major label like Interscope and suddenly all of the Industrial-music ideas that were created by the first- and second-generation bands on low budgets were created in a way that looked like a Hollywood production.

¹⁹ Boyd Rice, "I Think the Children Have Come for Me," *Seconds*, reprinted online at www.ultimatemansionbible.co.uk (accessed March 2, 2011).

Marilyn Manson used the Nazi imagery that had been so often invoked in Industrial music. During performances of the title song “Antichrist Superstar,” Manson would sing from a pulpit, as if preaching to the audience. Once the audience began to chant along with him, and respond to his fervor, three giant banners would drop down revealing the album’s lightning bolt sign and silver confetti would rain down on the audience reflecting the light from the spotlights, as seen in example 7.1 from the live-concert documentary *Dead to the World: The Tour America Didn’t Want You to See* [Nothing/Interscope, 1998]. The logo was also placed on the pulpit Manson sang from.

Example 7.1
Marilyn Manson, “Antichrist Superstar” (live, from *Dead to the World* concert video)



This nightly performance used the same techniques and methods that had been used by Ministry during the *Land of Rape and Honey* tour, using images of the Nazi Reich to stand in for the horrors of modern society. The performance was designed to make the audience aware of how they worshiped at the feet of a superstar (Manson), who was consequently revealing himself to be the personification of evil—but only after they were supportive of his rants and ravings.

Like the album itself, it was the perfect mix of Throbbing Gristle, Ministry, and so much more from the history of Industrial music.

Boyd Rice wrote that maybe Manson was going to finally return music to where it should be, on the cutting edge: “there is the inkling that rock could still be a forum for something far more profound than mere record sales and a multitude of pimply-faced teens giving the sign of the horns.” But this was the problem. The audience for most of the Manson shows was mainly made up of teens, and the photo in example 7.1 shows that when Manson performed “Antichrist Superstar” the audience members did in fact “throw up the rock horns.” The audience did not stop to say, “Wow, what is going on here”; they followed Manson down into the depths of the Nazi-filled nightmare, believing that they were his personal army of evil. The fans of Manson called themselves the “Spooky Kids” after the early name for the band, and just like so much else from the Industrial subculture that was losing its meaning, their black dress, eyeliner, and small lunchbox purses were now divorced from the shock tactics of the earlier generation. The audience still wanted to be outside of the mainstream, but they wore the outfits to shock people at the mall; they bought the outfits at commercial stores like Hot Topic and Journey’s and did not make it themselves. It was teen angst for sale, and on the fans’ side it was not tied back to the subcultural goals in any way, shape, or form—even if in this case the album itself was. To return one more time to the words of Genesis P-Orridge, Manson fans did not feel like they had been “kicked in the teeth.”

The *Antichrist Superstar* album and tour had all of the signs of an Industrial project, and yet it came across to the audience as a show more than it came across as an offence. Through Manson’s willingness to embrace the fans and even the protesters as part of his portrayal of the charismatic Antichrist, it looked like he was embracing everyone, rather than fighting against

them. Was this the last great attempt of Industrial music to infiltrate the system and to reach the biggest audience possible, or was it just a show? Was the music and look of Manson a deliberate attempt to affect large numbers of people by using accessible popular-music elements while setting them up for radical subterfuge (as first-generation bands had intended), or had the assimilation of popular music led to an embrace of musical commercialization and simply turned the act of subterfuge into a marketing ploy? The Dada elements of Industrial have had their last say and leave this question unanswered, and this story ends with two brilliant producers, Trent Reznor and Dave Ogilvie, taking a band called Marilyn Manson and the Spooky Kids, and for a short time, turning them into one of the most hated personas in popular culture.

Epilogue

Although I have ended this study in 1996, the music did continue on, although not in quite the same fashion, or with the same energy and antagonism as it once had. By the end of 1997 even Trent Reznor, who had inherited and smashed the mantle of Industrial music, was ready to completely jettison the term and move on, and in an interview with the *CMJ New Music Monthly* he said, “I think the whole industrial distorted thing is dead. I’m bored with it. All I listen to now is hip-hop. Erykah Badu’s record is my favorite CD of the past year.”²⁰ This made sense for Reznor, who had never quite felt at home in Industrial music, and now that the subculture was fading away, Reznor knew he had a much larger connection to mainstream audiences. His new alliance to hip-hop was a smart marketing decision even if he never really followed up on his promise to make a hip-hop Nine Inch Nails album, although his tendency for sampled beats and loops continued to fall closer to hip-hop aesthetics than Industrial. In the period after 1995 hip-hop was the new music of mainstream America, replacing rock music in almost every way possible: on the radio, music charts, award shows, television, etc.

But Reznor wasn’t the only one suggesting that Industrial was dead; that message was also coming from musicians who were still trying to make Industrial music that connected back to the history of the music and modernist thought. In 1997 *Industrial Nation* asked Marc Heal of the band Cubanate about the word *Industrial*, and if it had any relation to his music. Heal responded, “I don’t like any band that can describe it’s [sic] music in a single term. What that usually means is that the band is copying someone else. The industrial scene is as bad at this as any other—Skinny Puppy wannabes, 242 posers and (worst of all) NIN soundalikes. The origins of the scene were to create music that confronted and provoked rather than simply sought the lowest common denominator and that’s why Cubanate are uncomfortable with any term to

²⁰ Matt Ashare, “King of Nothing,” *CMJ New Music Monthly*, no. 50 (October 1997), 55.

describe the music we make.”²¹ Heal suggests to the fans that in order to continue to be “Industrial,” he and other musicians like him needed to leave the term and the scene behind, to innovate using ideals that could not be summed up in single word.

Industrial music experienced a resurgence in the 2000s, mainly in response to the global issues that arose from the September 11, 2001 terrorist attacks on the United States. It was during the George W. Bush era of American anti-terrorism that all the first- and second-generation bands reformed with a sense of purpose and created some of the most intense Industrial music in years. Nine Inch Nails released what was their most Industrial album, *Year Zero* [2006], discussed at the start of chapter one. Ministry created a three-album song cycle about the problems of the American response to 9/11 and the greed of capitalism that included *Houses of the Molé* [Sanctuary, 2004], *Rio Grande Blood* [13th Planet, 2006], and *The Last Sucker* [13th Planet, 2007]. Skinny Puppy put aside their personal differences and reunited to record the politically charged *The Greater Wrong of the Right* [Synthetic Symphony, 2004], which featured tracks such as “Pro-test” and “Neuwerld.” Front 242 came back with an album called *Pulse* [Metropolis Records, 2003] that explicitly honored the musical history of Industrial from Terry Riley to Faust. Throbbing Gristle even reunited in 2004 to tour and recorded a new album *TG Now* [Industrial Records, 2004] that was released on a revived Industrial Records, something that would have seemed impossible just a few years earlier. The problem was that the subculture had moved on. Other than older fans, now in their mid-thirties to early fifties, not too many people were buying the records or going to the shows, but the music had finally returned to its mission, to fight the information war and change society.

²¹ IIS Boys, “Cuban-Views,” *Industrial Nation*, no. 14 (Winter-Spring, 1997), 82.

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APPENDIX A: DISCOGRAPHY

This list provides the artists, albums, and record companies associated with selected recordings cited in this dissertation, emphasizing those that provide the basis for original transcriptions. In some cases in which the original albums are no longer in print or are difficult for readers to obtain, it mentions reissues. Albums are organized alphabetically by artist.

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APPENDIX C: VIDEOGRAPHY

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APPENDIX D: INDUSTRIAL MUSIC STYLES

This list provides the reader with a guide to the various popular music styles associated with Industrial music that are mentioned in this dissertation. It is not meant to be a comprehensive list. A number of the key artists are also listed for each style.

Related Popular Music Styles

Ambient:	Brian Eno
American Punk:	The Dead Boys The Patti Smith Group The Ramones Television
British Punk Rock:	The Clash The Damned Generation X The Sex Pistols
Euro-Disco:	Donna Summer
Experimental Rock:	The Beatles Captain Beefheart Frank Zappa and the Mothers of Invention The Residents
Heavy Metal:	Judas Priest Motörhead
Krautrock:	Can Faust Kraftwerk Tangerine Dream
Progressive Rock:	Emerson, Lake and Palmer Genesis Yes
Proto punk:	Chrome The MC 5 The Velvet Underground
Psychedelic Rock:	Big Brother and the Holding Company The Grateful Dead Jefferson Airplane Jimi Hendrix

Space-Rock: Hawkwind
 Pink Floyd

First Generation Industrial

Cabaret Voltaire
Clock DVA
Deutsch-Amerikanische Freundschaft (DAF)
Die Krupps
Einstürzende Neubauten
Leather Nun
Monte Cazazza
Nurse With Wound
SPK
Test Department
Throbbing Gristle
Whitehouse
Z'EV

Synth-Pop

Depeche Mode
Gary Numan
Joy Division/New Order
Soft Cell
The Human League

Second Generation Industrial [featuring three major sub-styles]

General: Chris and Cosey
 Coil
 Frontline Assembly
 Laibach
 Moev
 Nitzer Ebb
 Psychic TV

Electronic Body Music (EBM):
 Cabaret Voltaire
 Clock DVA
 Front 242
 The Neon Judgement

Industrial Noise: Controlled Bleeding
 Einstürzende Neubauten
 Foetus
 Non
 Skinny Puppy
 The Hafler Trio

Industrial Rock: Die Krupps
KMFDM
Ministry

Third Generation Industrial [featuring selected sub-styles]

Noise: :wumpscut
Dive
Merzbow
Noisex

Ambient Industrial: Cabaret Voltaire
Coil
Controlled Bleeding
Nocturnal Emissions
The Hafler Trio

Neofolk: Angels of Light
Current 93

Electro-Industrial: Die Warsaw
Front Line Assembly
Haujobb
Leather Strip
Mentallo and the Fixer
My Life With the Thrill Kill Kult
Nitzer Ebb
Skinny Puppy
Velvet Acid Christ

Experimental Industrial: Pigface
The Damage Manual

Industrial Goth: Clan of Xymox
This Mortal Coil

Industrial Hip-Hop: MC 900 Foot Jesus
Meat Beat Manifesto
Pop Will Eat Itself
Tackhead

Industrial Rock: Big Black
Fuel
Gravity Kills
Laibach
Marilyn Manson
Moev

Industrial Rock: (cont.)

Nine Inch Nails
Revolting Cocks (RevCo)
Sister Machine Gun
Stabbing Westward

Industrial Metal:

16 Volt
Fear Factory
Godflesh
KMFDM
Ministry
Powerman 5000
Rammstein
White Zombie

Selected Post-1996 Industrial

Combichrist
Cubanate
Neikka RPM
VNV Nation