

Chapter One

DEFINING INDUSTRIAL MUSIC: The Structural Determinants

1.0 Introduction: What is industrial music?

In the Introduction, I provided a temporary definition of industrial based on a composite of definitions previously supplied by fans, artists, journalists and academics. I emphasised in the Introduction that genres have many components or rules, and that all of these rules must be taken into consideration when developing an understanding of a genre. This chapter will focus on the formal and technical rules, those stylistic rules determining the *sound*—or sonic aesthetic—of the genre.

Industrial was at first stylistically diverse, joined loosely by intent and ideology (see Chapter Two), but gradually developed a more homogenised, recognisable sound. Fans now generally divide industrial into a series of different ‘styles’. By ‘style’, I mean a sub-group of music within a genre, categorised according to various musical-structural and lyrical parameters. In this chapter, I will first give an explanation of these styles, which can all be characterised by musical-structural aspects with the exception of ‘classic industrial’, which encompasses those stylistically diverse initial artists. I follow the account of the various industrial styles with an examination of the structural parameters of the music on a more general level. These parameters are approached in

this chapter from a compositional perspective, rather than from a receptional perspective, which is developed in Chapters Six and Seven.

1.1 Industrial Styles

Before embarking on an exploration of the general structural characteristics of industrial music, it is necessary to provide basic definitions of the various styles involved. It is often difficult to make clear-cut distinctions between these styles, as there are many overlaps, and, therefore, each style can only be loosely defined in relation to the wider notion of industrial as defined in the Introduction. I have separated industrial into the following seven styles commonly recognised by fans.

1.1.1 *Classic industrial*

Classic industrial covers the first ten years of recognised industrial artists (c.1975-1985),⁴⁹ usually those on the label Industrial Records, for example Throbbing Gristle or SPK, but also including early pioneers like Einstürzende Neubauten, Test Dept and Laibach. These artists often used home-made industrial and mechanical instruments, although the earliest synthesiser-based artists like Skinny Puppy or Leætherstrip are typically included also. *Classic industrial* denotes the diverse sounds of a specific era, rather than particular structural-musical traits.

49 That is, artists who began their career during this time, although some continue to this day.

1.1.2 Electronic Body Music or EBM (also known—or with variants known—as synthcore, elektro,⁵⁰ hard-beat, body, new beat, etc.)

While classic industrial is determined by era, *EBM* is easier to describe in musical structural terms. EBM encompasses the dance-orientated industrial most commonly known to popular audiences. This style could be described as a hybrid of industrial and electronica or industrial and synthpop.⁵¹ Characteristically, EBM is the most formally structured, commercially successful and most tonal⁵² of industrial styles. The dance orientation has meant rhythms are often four-to-the-floor,⁵³ the tempo is about 120-140 beats per minute (BPM), and phrases are short and repetitive. EBM is often separated by fans into ‘Old School’ (1980s or early 1990s artists, e.g. Front 242 or Nitzer Ebb) and ‘New School’ (typically faster and with more distortion [e.g. Flesh Field], though sometimes incorporating ‘future pop’, which has little or no distortion [e.g. VNV Nation]). EBM—due to its popularity and accessibility (the fact that it can be

50 ‘Elektro’ or ‘electro’ is often used as a very broad term to encompass EBM and those with synthpop artists who have a slightly ‘darker’ sound (more bass, distortion and non-musical sound effects or samples).

51 ‘Electronica’ is a term commonly used in North America incorporating most electronically-based underground music styles, including techno, ambient, drum and bass, darkcore, etc. The European equivalent might be ‘rave’ music. Synthpop—also known as New Romantic or New Wave—refers to the synthesiser-based music most popular in the 1980s, such as New Order, Depeche Mode, Duran Duran, etc. For further explanations of these see Poschardt (1999) or James (1997).

52 ‘Tonal’ in the sense of containing pitched notes.

53 By ‘four-to-the-floor’, I mean four beats per bar of equal accent in a 4/4 time signature.

danced to means it is more widely played)—is often disparaged by some fans of the more ‘extreme’ styles like Noise (see below).

1.1.3 Industrial metal (a.k.a. slaughterhouse, rivet-rock, torture tech)

Industrial metal refers to the (typically US American) style of industrial which incorporates the use of guitar and often acoustic drums, bringing the genre closer in sound to speed or thrash metal. It is most frequently associated with artists from the Re-Constriction label such as 16 Volt or Hate Dept, and some popular major-label artists like Ministry and Rammstein. Some industrial ‘purists’ would not categorise this style (or these artists) as industrial, due to the inclusion of guitar (see §1.2.6.4 below).

1.1.4 Industrial rap

Industrial rap most likely originated in the United States, and is a hybrid of industrial and hip-hop elements. Vocals are rapped, whispered and/or spoken, and other hip-hop elements like scratching and break-beats are more present than in other industrial styles (e.g. Consolidated or Non-Aggression Pact). There are very few industrial rap artists.

1.1.5 Cybergoth (a.k.a. elektro-goth, industrial goth, or dark wave)

Cybergoth is used to describe electronically-based goth music⁵⁴ with industrial sounds or samples added, and typically a notable amount of distortion. Very low-register bass, repetitive drum machine rhythms, and frequently a lyrical interest in horror, vampirism, occultism and sexual deviancy characterise this style, which tends to be melodic and crosses over significantly with EBM. Examples of artists are Mechanical Cabaret or Diary of Dreams.

1.1.6 Noise,⁵⁵ Neo-Folk and Black Industrial

Noise, neo-folk and black industrial are considered by some fans to be separate genres from industrial altogether, and are referred to also as ‘post-industrial’, ‘neo-classical’ and ‘apocalyptic folk’. Neo-folk combines acoustic, often orchestral, music, with electronic, or industrial sounds (for example, Sol Invictus, or Death in June). Noise commonly uses heavily distorted machine sounds as the primary—often the only—form of instrumentation. The rhythm can vary from completely free-form to extremely repetitive and rigid. The style frequently lacks or has very minimal, often indiscernible vocals. In most cases, Noise completely lacks harmony and melody. Noise is often considered amongst many fans to be the most experimental of industrial styles, closest

54 Goth is explained further in §2.4.

55 I capitalise the term Noise to distinguish it as a style. As Cloonan and Johnson (2002: 34) indicate, many re-appropriate the term ‘noise’ and wear it as a ‘badge of pride’.

to the avant-garde, and is the least commercially successful. Noise is generally separated further into classic Noise (e.g. Non), power Noise (a strict rhythmical version, e.g. Converter) and ambient Noise (e.g. Zoviet France). There are also geographically designated sub-styles of Noise, such as Japanoise (e.g. Merzbow). More recently, some of the Scandinavian Noise (particularly on the Cold Meat Industry label) has been called ‘death industrial’ or ‘black industrial’, and has enjoyed some cross-over success amongst extreme metal and neo-folk fans.

1.1.7 Other

In addition to the styles just summarised, there are other artists who may be labelled industrial by some fans, but who do not have most of the industrial characteristics as defined in the Introduction. These include the following several forms:

- Side-projects⁵⁶ like The Legendary Pink Dots, whose association with industrial is mainly through singer Edward Ka-Spel’s work with (Skinny Puppy’s) Cevin Key as The Tear Garden. Thus, the fans of The Legendary Pink Dots are typically industrial fans, despite the fact that much of their music borders on psychedelic rock;
- Bands like Psychic TV which contain ex-members of industrial bands—in this case Genesis P-Orridge—also get referred to as industrial, though the music does not contain many of the elements that define the industrial genre;
- Style-changing artists like Haujobb or X Marks the Pedwalk, who began their musical careers by creating EBM but are now creating ‘lighter’ electronica albums, will continue to be called industrial by their original fans, spreading the use of the term;

⁵⁶ A side-project is a band member’s ‘moonlighting’ in another band, or less commonly a collaboration between entire bands.

- Artists who are associated with labels that have released primarily industrial artists but then diversify are likely to find their releases called ‘industrial’. For instance, one fan listed The The as an industrial band, likely due to their affiliation with Trent Reznor’s Nothing label, rather than for musical-structural reasons;
- ‘Non-industrial’ artists who may have used typically industrial techniques—particularly those criticising the media through sampling—often get referred to as industrial, such as Negativland;
- German-language electronica acts through the association with German underground music may be called industrial by, in particular, North Americans; for instance, Eco;
- Artists who share a common fanbase with industrial artists may be referred to as industrial, for instance neo-folk artists like Death In June.

There is clearly a significant diversity of industrial styles. It would be unmanageable to cover all of these styles in a thesis with a scope already so wide. Therefore, industrial-by-association artists, neo-folk, black industrial and Noise will not be a focus of this thesis. I have chosen to concentrate on the other, more popular, industrial styles. I will, however, include *some* mention of Noise and neo-folk in places. With the exception of Classic industrial, these styles have had mainly musical-structural distinctions, which can now be discussed in greater detail.⁵⁷

1.2 The Musical Parameters of Industrial

In order to describe the characteristics of industrial on a general level, I have divided the various musical-structural parameters into separate categories here. They will be

⁵⁷ It should be noted that while most—if not all—industrial adheres to *some* of these parameters, very little adheres to *all* of them.

integrated and discussed in the context of specific songs in Chapters Six and Seven. I first explore the verbal aspects of industrial—the lyrics and verbal samples—in terms of thematic elements and techniques. I then look at how the lyrics are performed, in terms of their vocalisation. The compositional and temporal parameters are then dealt with, followed by the instrumentation, aspects such as tonal elements, timbre, and the use of non-musical sound.

1.2.1 Industrial's Verbal Aspects

This section will examine the verbal aspects, that is, the lyrics and verbal samples used by industrial. Initially I separate the lyrics from the samples, as samples are generally not considered to be lyrics by most artists (as is evidenced by their exclusion from lyrics sheets in album sleeves). I will first explore the recurrent themes in the content of the lyrics, and then the verbal samples. I will then explore the *techniques* that are characteristic of industrial's use of lyrics and verbal samples.

1.2.1.1 Industrial Lyrics

Although there are many diverse styles of industrial, there are some general common trends in the lyrics of industrial artists. Lyrics are often better analysed in the context of their vocalisation, as many authors have indicated (e.g. Brackett 1995). Nevertheless, it is of course also necessary in some cases to read the texts in isolation from their vocalisation in order to comprehend what is being said. Therefore, I first examine the lyrics as isolated texts, and do not at this stage enter into the kind of in-depth lyrical

analysis that has more recently been undertaken in popular music studies.⁵⁸ At this point it is my aim to look for common trends in the verbal content of industrial lyrics. A more detailed look at *how* the lyrics are performed in the context of a few examples will be undertaken in Chapters Six and Seven.

Before examining lyrical content, it is necessary to ask first whether or not fans actually listen to the lyrics; and, if they do listen to them, whether or not they understand them. The degree of emphasis placed on lyrical analysis in popular music studies would seem to indicate that lyrics are important to the understanding of the texts. However, with just one exception, all questionnaire participants indicated that they listened to industrial with lyrics in languages that they did not understand. Even when the lyrics are in languages spoken by fans, it is questionable whether fans *hear* the lyrics, as some vocals are so distorted as to be almost unintelligible (see §1.2.4 below). Most industrial artists do not print their lyrics on the album sleeves, and it is only occasionally that artists provide translations.

The fact that many industrial bands are from the Continent and therefore often sing in German means that half the time I can't understand what they're singing, and that suits me just fine. I fear that if I knew the lyrics, I'd only be disappointed. Plus, the distortion effects used on the voices tend to mean the lyrics, even when sung in English, are inscrutable ... Industrial music, to me, is about texture, and distorted lyrics or harshly expressed lyrics sung in German add to the texture in a musical way, rather than a poetic one. What is being said is important, sure, but it's hard to argue that point when much of it is said in German and can't really be understood without a translated lyric sheet [Steve].

58 Such as that of Bradby and Torode (2000), or Griffiths (2000), for instance.

Several fans, in fact, felt that the lyrics were not at all important to them:

Lyrics used to be more important to me years ago when I felt there was more of a socio-political message in the music ... While some bands still promote their politics and views, the majority has placed less importance on lyrics and they are trivial at best [Richard].

Most of the fans interviewed responded that they felt that *sometimes* lyrics mattered, depending on the style or the artist.

Lyrics are the crux of a song. In a genre as critical as this, a band with bad lyrics can be damn near condemned; flamed to hell and back by all the "über-industrial" list-mongers of the world. A band with good lyrics, however, can excel much more quickly, regardless of whether or not they have a very innovative or well-composed sound [Link].

[The relevance of the lyrics] depends entirely on the context. Many of the finest examples of the genre have excellent lyrics ... which are vital to the composition. However, for much of the power-noise and more dance-orientated stuff it is unnecessary [to have lyrics] and in some cases a hindrance [Edward].

Occasionally the discussion of lyrics will arise in fanzines, and artists claim that the lyrics are either important to the understanding of the songs, or for textual value.

The lyrics are, when I employ them, every bit as important as the music. I constantly write down lyrical ideas, even when I'm not working on music ... [but] If I can get a point across without using lyrics then I think I'm a better musician (Index, *Effigy* #10/98: 28).

I see them as impressionist or surrealist poems, written to plant seeds of thought or to paint abstract pictures out of words (Covenant, *Prospective* #2/00: 14).

Nevertheless, what matters is that all of the fans questioned—whether they claimed to listen to the lyrics or not—had a similar conception of what the lyrics were about:

Ecology, war, violence, society, sci-fi/futurism, sociology, philosophy, etc., but many just sing words that don't really mean anything [Lisa].

I think they express some sort of discontent with society, similar to '60s rock and '70s punk, but with a much heavier anti-capitalist message. But what really sets industrial lyrics apart is the aesthetic of technological dystopia they portray [Tony].

Oppression, conspiracy, the possibility of the apocalyptic future, technology and how we as humans respond to it, what is wrong with our society, government and religion [TG Mondalf].

Most industrial songs tend to be protest songs of some sort: pro-environment, anti-censorship, etc. Some are about sex and drugs, too, and too many claim to be anti-war but play fast and loose with war imagery just the same. The most successful industrial music, to my ears, is about urban decay and the alienation of the modern world-its technological advances coupled with its dehumanisation. Ideally, the music should turn a mirror on these issues, reflecting the dehumanisation with dehumanised-sounding music and lyrics that match [Steve].

I would say that industrial songs tend to be about alienation, societal chaos, global technocracy, mechanical fetishism, basically the cyberpunk ideas [Sam].

If the lyrics are in languages that fans do not understand, or are so distorted as to be indiscernible, then it follows that fans are basing these interpretations of the lyrics on either the music, the paramusical parameters (visuals, etc.), or the social context of industrial.

In an effort to see how evident these themes were in the lyrics, and how dependent on familiarity with other aspects of industrial the fans' readings might be, I developed a small lyrical analysis. I compared my own interpretation of industrial song lyrics with those of two other coders. Although three coders cannot provide us with statistically valid results, it was enough to enable me to make several inferences.

A series of categories were drawn up based on the themes of the lyrics outlined by the fans above. For comparison, I added several categories that fans had not mentioned, but which were included in a categorisation of heavy metal song lyrics by Freisen and Helfrich (1998), which seemed to encompass quite a broad scope of possible themes.⁵⁹ The categories were:

1. Social critiques, dealing with a direct critique of the institutions and ideologies of Western society.
2. Inter-personal themes dealing with relationships, love, sex, family.
3. Dystopia, technology, dehumanisation, the post-apocalypse, future visions.
4. Outsider themes dealing with feelings of alienation or of being oppressed.
5. Physical conflict, violence and war.
6. Supernatural or spiritual themes, including religion, the occult, etc.
7. Loss of control themes dealing with mental instability or the inability to control emotions.
8. Other/unknown

One hundred song lyrics chosen from the most frequently named industrial artists in the questionnaire were then categorised according to the one most apparent theme. Songs chosen were restricted to those that were written down on album sleeves, in English or translated into English. Selecting one hundred examples would provide a range of

⁵⁹ Freisen and Helfrich's (1998: 269-270) original themes were; gender categories, reflective/philosophical themes, oppressive themes, physical conflict (recognition/resignation/enjoyment), physical conflict (means to an end), mystical/supernatural, excitement, escape, loss of control, social consciousness/social justice.

types of industrial lyrics while remaining a manageable number without placing too much burden on my assistant coders.

My assistant coders were two fellow post-graduate students. One of these postgraduates was somewhat familiar with industrial and one was unfamiliar with industrial.⁶⁰ Their results could then be compared with my own ('very familiar') reading, shown in Table 1.1 below, which indicates the number of songs having each category as the one most apparent theme. The Average column shows the average number of songs categorised between the three coders. Details of the results are provided in Appendix Three.

Table 1.1. Thematic Categorisation of 100 Industrial Song Lyrics Read by Three Coders with Varying Degrees of Familiarity with Industrial

Category	Very Familiar	Somewhat Familiar	Unfamiliar	Average
1 Social Critique	33	21	18	24
7 Loss of Control	26	19	11	19
2 Inter-Personal	12	6	34	17
4 Alienation	21	13	15	16
3 Techno-Dystopia	9	10	8	9
6 Supernatural	6	10	9	7
8 Other	1	15	2	6
5 Conflict	2	6	3	4

60 Thanks to Lee Ann Fullington (somewhat familiar, US American, aged 24) and Marie-Ève Bouchard (unfamiliar, French Canadian, aged 27) for the assistance.

Although the table's average indicates a general agreement in the overall *number* of songs categorised according to the various themes of the overall sample (e.g. there were few songs about conflict, and many about social critique), the three coders disagreed on *which* songs we thought fell into these categories. We collectively agreed on the categorisation of only 22% of the songs, although there was agreement on a further 21% of the songs between the somewhat familiar reader and I, and 15% with the unfamiliar reader and I (Table 1.2).⁶¹

Table 1.2: Agreement on 100 Lyric Classifications with Three Coders

%Agreement	Coders
43	1, 2
37	1, 3
33	2, 3
22	1, 2 & 3

The disparity in the results could be attributed to the fact that I was familiar with the musical and paramusical elements that accompanied the songs, or it could be that the lyrics were ambiguous enough to allow for alternative interpretations. Or, particularly due to the overlap of the themes, the strength of the thematic content could have fell equally into two or more categories. One reader may have categorised the song according to a theme another reader placed as secondary.

⁶¹ The total reliability, then, was only 38% ($[43 + 37 + 33]\%/300$).

Despite such seemingly disparate categorisation, the lyric analysis indicated several important results:

- The lyrics of industrial songs are open to many interpretations, and what they ‘mean’ may depend largely on the individual listener, and the music to which they are set;
- Those songs released on major labels and those least likely to be considered ‘true industrial’ by some fans accounted for nearly all of the inter-personal themes (see Appendix Three);
- There were very few lyrics that the three coders determined had dystopia as a primary theme. It is possible, then, that if fans are interpreting the lyrics as dystopian-related (seen above), they may be basing this interpretation on the musical or paramusical elements of industrial.

The ambiguity of the lyrics is sometimes clarified by the use of verbal samples in the songs.

1.2.1.2 Industrial Verbal Samples

Although industrial is hardly unique in using verbal samples, it was one of the first popular styles to use them to any extensive degree. The use of sampling is ubiquitous, and has become a style indicator of industrial.

A database assembled for the large part by rec.music.industrial (a fan-based Usenet newsgroup) has for years been collecting sample sources from (primarily non-musical)

media and listing them meticulously.⁶² Removing the non-industrial artists from the list, and adding to this a few of my own discoveries, the samples can be separated into the types of media source they were taken from, which have been tabulated here as Table 1.3. The categorisation of the media genres was based on two sources; first, my experience in music/video retail,⁶³ filing as often the distributors indicated, and secondly, for those I could not identify, the categorisation used by allmovie.com, a popular film resource.

62 [Http://www.sloth.org/samples.html](http://www.sloth.org/samples.html) (10/09/00). The database includes some hip-hop, heavy metal and electronica artists, but is primarily industrial.

63 My experience in music/video retail involved running the music department of the Kitchener, Ontario Future Shop from 1996-1999, and working in Virgin Records, Liverpool, in 1999-2000.

Table 1.3. Categorisation of 1069 Industrial Samples

Source	Number Of Samples
Science Fiction Films [of which Dystopia]	368 [224]
Horror Films	272
Drama Films	101
Politics & Public Figures	100
Action Films	89
War Films	46
Comedy Films	32
Documentary	22
Television: News, Advertising or Game Shows	12
Animation	11
Games (PC, etc.)	8
Musicals	3
Radio Broadcasts and Station Calls	3
Pornographic Films	2

The list is slightly misleading, as there are many newscast samples whose source would not have been discovered, due to the nature of news broadcasting. Proportionally speaking, the number of newscast samples should probably lie somewhere between drama and horror.

If musicians are gathering samples from these genres, and fans are not only watching the films but diligently playing ‘spot the sample’, then it follows *that fans are likely to be making an active connection between the music and the narrative of those types of*

films.⁶⁴ Samples situate the songs as belonging to a specific time, place or mood. The use of samples from horror or dystopia for instance may help to set the songs in a visual context of darkness, the future, death, terror and tension that these films project, and provide clues as to how the lyrics, or the music, should be read.⁶⁵

Even if we assume that fans do not understand where a sample is from, the sample itself can be significant. While the fact that samples are of, say, Arnold Schwarzenegger or Margaret Thatcher may escape some—or even most—fans, the juxtaposition and what they are saying is also important.

You find you can get samples out of the cheesiest movies. *One Whino* is some B-movie that's very potent, and to take it by itself is a very strong piece of wording, within the context of a shitty movie (*Skinny Puppy Industrial Nation* #13: 83).

Industrial verbal samples speak primarily about technology, death, abjection, alienation, loss of control and a critique of the more general cultural, political and social climate of the West, for example:

I don't have a TV now but, that's ok. The shows in my mind are almost always better ... I'm still confused by modern technology ... (*The Maxx*).

You must conform! ... Yes sir ... I will not be pushed, filed, stamped, indexed, briefed, debriefed or numbered! (From the episode 'Once Upon a Time' of *The Prisoner*).

64 Of course, if it happened that fans stumbled upon these particular samples while watching what interested them, it is also indicative of what the fans are watching and listening to, and is therefore equally as important, particularly since they are still making the connection between film and music (see also Goodwin 1992: 59).

65 See for instance the 'keywords' or 'tones' listing of some of the films on allmovie.com.

It's OK, he saw it on the television (*The Shining*).

Do not attempt to think or depression may occur (Jello Biafra).

Follow the path ... do not deviate (*Alien: Resurrection*).

It's all just electrons ... It's all about who controls the information ... What we see, hear, how we work, what we think. It's all about the information (*Sneakers*).

They run the whole world, they own everything, the whole goddamn planet. They can do whatever they want! (*They Live*).

Many samples are adopted for textural purposes, and repetition of words and phrases become like additional instruments. Simon Reynolds has argued that such use of samples gives the impression of a disjointed, media-saturated life (1990: 162). This textural effect of the samples and lyrics is enhanced by a series of techniques.

1.2.1.3 Common Techniques in the Use of Industrial Lyrics and Samples

Lyrics and samples often draw on the cut-up, though cut-ups are less common now than in classic industrial songs, which sometimes attempted to apply the techniques of William S. Burroughs to music (see Vale 1982: 65. *cf.* Ford 1999: 9.24). Burroughs was an important influence on the early industrial musicians. As well as being a friend of Throbbing Gristle's Genesis P-Orridge, later musicians have also acknowledged his influence, Ministry even recording the song 'Quick Fix' with him.⁶⁶ Drawing on the

66 Ministry also sampled Burroughs on 'Just One Fix' (1992). Others to sample Burroughs include Meat Beat Manifesto's 'Storm the Studio' (1991), Delerium's 'Shockwave' (1994) and Insight 23's 'Digital Blood' (1995). In addition, the German film *Decoder* (1984), which stars Einstürzende Neubauten's Mufti as well as P-Orridge, includes a dream sequence in which

early Dada ‘word salad’ poetry and combining this cut-up technique with a Luddite fear of technology and a deep paranoid scepticism of governmental control, Burroughs used the cut-up method as both a scientific experiment and as a ‘guerrilla tactic’ (see Porush 1985).

David Porush has dubbed the cut-up style ‘cybernetic fiction’ stating that it ‘clearly appeals to cybernetic notions of resisting the totalitarian order and its concomitant control through deliberate randomization, the introduction of noise or entropy’ (1985: 104). Such a view of language is indeed recurrent in many of the dystopian texts of the twentieth century (e.g. 1984, *A Clockwork Orange*: see Sisk 1997 or Knapp 1989).

Laibach take up this idea of the cut-up in the liner notes to their album *Kapital* (1992),

One word cannot hurt. In the Kinderreich mankind adds words together to make a sentence. As they learn the sentence, they learn order. Undo the sentence and you undo order. The sentence is a cell, the word a padlock on meaning. Warning! Every sentence is for life without parole.

Notably—and undoubtedly influential on early industrial artists—in Burroughs’ work, the ‘machine always sounds the rhythm of death ... [the machine] is the diabolic metaphor of control’ (Hassan 1963: 55-56).

Related to the cut-up is the apparent randomisation of lyrics through stream-of-consciousness writing. Some artists—Skinny Puppy for instance—have been known to improvise lyrics live in the studio, or write lyrics based on drug-induced stream-of-

Burroughs appears. Industrial Records even released some of Burroughs’ cut-ups, as *Nothing Here Now But The Recordings* (1981).

consciousness ramblings. This ostensibly haphazard and confusing presentation of lyrics can create a disorientating effect, and draws attention to the onomatopoetic value of many lyrics.

Another important technique used by industrial is juxtaposition. As Peter Novotny points out, the juxtaposition of samples—he uses Front 242’s ‘Welcome to Paradise’ [1992]—are commonly for parody and symbolic inversion: ‘Jerry Falwell’s “oh God I’m a sinner” subverted and turned against itself, reflected against backdrops of laughter’ (1997: 117). By juxtaposing words or phrases against others, the meanings may be altered, and we might be made to re-evaluate the original phrase. The technique is also common in cyberpunk narratives.⁶⁷ In the cyberpunk film *Johnny Mnemonic*, the rebel forces explain:

This is where we fight back. We strip the little pretty pictures from their five-hundred channel universe, recontextualise it, then we spit the shit back out.

Often combined with juxtaposition, repetition is also a vital part of industrial lyrics and samples. Some industrial lyrics, particularly the choruses, are highly repetitive and slogan-like. Although this trend peaked in the late 1980s with tracks like Nitzer Ebb’s ‘Join In The Chant’ (1990), this is a technique that is still used today. Such repetition, while reinforcing a mechanical aesthetic, also adds to the texture of the music. Repetition of samples or lyrics at the start of songs can provide a setting for what is to follow, and ensure that the sample remains in our mind throughout the song. For

⁶⁷ See §2.1 for an explanation of cyberpunk.

example, Snog's 'Corporate Slave' (1997), repeats at the start, 'There is no America. There is no democracy' and follows with lyrics of working class drudgery.

Recapitulation, or the recurrence of a sample several seconds or minutes after the original occurrence, is also fairly common, as often the most vital samples recur throughout a song. For example, Flesh Field's 'Animal' (1999), has a recapitulation of *The Elephant Man*'s 'I am not an animal!' The sample initially comes in before the first verse (at 00:48), just before the second verse (at 02:25, when all music stops and the sample is all that is heard), then before the second chorus (03:14, mixed low in the music). Finally, at the very end of the track as the music is fading out, the entire sample is played, 'I am not an animal! I am a human being' (05:18).

Another interesting element of industrial lyrics is the tendency to the creation of neologisms. Index in particular use the technique, for example the song 'Blush Response' (1997) invents the words blutopia, megatropola, and hyperplex:

Part of that is me wanting people to think more, so I combine words to make new words, or create alternate phrases to give new meaning and ideas with the same old language. It's just part of creating a surreal sonic landscape. I would almost be defeating my own sense of purpose if I only used regular words all the time (Index *Side-Line* #34: 34).

Neologisms aside from having specific meanings, can be used for onomatopoeia, although in context they do seem to carry some relevance other than texture. For example, blutopia is obviously a pun on utopia, but with a blue filter (hence, dystopia).

1.2.2 Industrial Vocals

As we saw in the previous section, lyrics are often ambiguous, or not heard. It is therefore worth exploring the vocalisation in detail. *What* is being said is of course only one half of the equation; some have argued it is even less.⁶⁸ The prosody of the voice—the non-verbal melody and rhythm—as well as the timbre, pitch, loudness, gender, etc. can all have a specific effect. Simon Frith has found that the tone of voice is more important than the lyrical content for communication: it is the voice to which we immediately respond (1998: 192). Frith argues that expression with the voice is ‘taken to be more direct than expression on a guitar or drum set,’ that the voice is more revealing because timbres have bodily implications:

we certainly do hear voices as physically produced: we assign them qualities of throatiness or nasality, and, more specifically, we listen by performing, by reproducing (even if only silently, tentatively) those muscular movements for ourselves, “sympathising” with the singer by pushing the words up against the top of our mouths when she does (Frith 1998: 192. *cf.* Moore 1993: 183).

Industrial vocals usually have a highly restricted ambitus (often within only half an octave). Vocals typically operate in a stepped monotone, close to a speaking voice (rarely are vocals raised to a shout, and a significant proportion whisper), rising in volume and pitch in the chorus (or, chorus-like parts). There is usually little or no

68 For instance, see Frith (1998: 192).

embellishment.⁶⁹ Generally the voice remains at a kind of speaking level, with the emotion conveyed through the speed, timbre and effects.

Industrial vocals typically have a central stereo location, although the relationship of the vocals to the mix is varied, and often depends on whether it is a verse (mixed lower, that is to say, appearing further back in the mix) or a chorus (mixed higher, or more frontally).

Industrial songs characteristically have one singer (sometimes two), though sometimes a singer will have more than one 'voice' or persona. Although most vocalists are male, there are a growing number of female vocalists. If there are two singers in an industrial song, the second singer usually reinforces key words or phrases, typically in the chorus. Automatic Double Tracking (ADT) and chorus effects are extremely common to thicken the sound. There are often several vocal tracks laid down, the first track (i.e. most frontal) without distortion, the second usually with saturation and delay or another type of time effect, and often a third or fourth with still more processing, in order to create a thick vocal sound.⁷⁰

69 One exception is an extended rolling of German 'r's, as in most Rammstein songs.

70 For a clear example of industrial's use of ADT, listen to Skinny Puppy's 'Worlock' (1989) or Snog's 'Is There No-One That Can Save Us From Today?' (1999) which use a natural voice with slight delay under a vocoded voice.

1.2.2.1 Vocal Effects

There is nearly always some type of quite audible distortion on the industrial vocal. This includes saturation (overdrive), morphing (vocoder, harmoniser, ring modulation, etc.), and time-domain effects (reverb, phasing, delay, chorus, echo, etc.). Some artists clearly use vocals as another instrument: ‘Since we use vocoding on all voices, they all kind of sound like instruments’ (Implant *Side-Line* #30: 33). Many industrial vocals have a ‘disembodied quality’ by appearing to connote a voice without a body (see Chapter Seven).

Saturation on the voice is the most frequently used effect, so common that fans joke, ‘you know you’re industrial when you use a fuzzbox to sing in the shower’.⁷¹ Even when artists do not use manufactured distortion devices, they commonly apply a kind of self-imposed distortion on the voice:

We already recorded *XTC Implant* without vocoders. At that time though, I was still singing in a different way by compressing my larynx. In [the] studio we added clear vocals, to make it sound more fat (Volker Lutz in *Side-Line* #34: 19).

Performing live, the amount of studio-based vocal processing can pose a problem, and singers are more apt to have to shout while straining the voice to create a similarly saturated effect.⁷² One artist reported ‘destroying’ his voice through strain before

⁷¹ <http://www.sonic-boom.net> (10/10/00).

⁷² Although effects can be added in real-time with vocal processing devices, these products are sometimes out of the price range of artists.

going on stage in order to create that hoarse, tender sound of a saturated vocal. Industrial vocals are therefore significantly different from those of mainstream music artists. There are also other significant differences, which I will now explain.

1.2.3 Composition & Temporal Parameters of Industrial Songs

Depending on the style, industrial songs are typically within familiar popular musical length at about four to six minutes. There are instances of very long pieces (whole albums of one song, even), but it is unusual for most industrial songs to be longer than about seven minutes. As well, pieces are rarely shorter than four minutes.

The tempo of industrial songs varies greatly depending on style. Although the average tempo is about 120-140 (BPM), there are songs at slow levels of fifty or sixty BPM, and there are songs at over 200 BPM. Surface rates typically run quite fast, with hi-hats often upwards of 500 semi-quavers per minute.

The periodicity of industrial is quite different from that of rock. Typical rock/pop fall into quaternary periods (eight, twelve, sixteen, etc), and typically use discursive repetition; that is, the repetition of large units (phrases, or sections) (Björnberg 2000: 355). This conventional periodic level of song construction is frequently altered in industrial, and distinction between sections can be difficult, as the examples in Chapter Six illustrate. There is often an addition (or subtraction) of a bar, so that a phrase may fall in nine or seven-bar lengths, or have an interruption of odd length. The metre of

industrial songs is nearly always in common time,⁷³ and with EBM often has four on-beat kick drums, or has a backbeat, although it is not unusual for the metre to change in a song. Many industrial songs also contain rhythmic suspensions in the song structure, by which I mean most of the tracks (channels, or layers of sound) are paused, and a single element remains for a short length of time (one or two bars), whereupon the other tracks, often with added emphasis, return.⁷⁴

The periodicity often plays a role in the stylistic delineation of industrial. EBM songs, for instance, are likely to follow a more familiar introduction-verse-chorus-verse-chorus-interlude-verse-chorus-outro format, while other styles may not have any chorus, and follow an intro-verse-bridge-verse-verse-interlude-verse-outro format. Noise usually works in a very different way, moving from an intro to variations of one or several verse-like structures to the outro.

The mix of an industrial song may also vary depending on the style, but is often quite different from a conventional pop/rock mix. There is quite frequently no

73 There are examples of industrial songs with other time signatures, such as 'March of the Pigs' by Nine Inch Nails (which begins in 7/8) (*The Downward Spiral*, 1994), 'Hate is Mine' by Wumpscut (in 3/4) (*Wreath of Barbs*, 2001), or 'Hexonoxonx' by Skinny Puppy (in 9/8) (*Rabies*, 1989) although such examples are rare.

74 I am using the term 'suspension' as defined in the Collins New Guild dictionary (W. Collins, (ed.) 1969: 487): 'act of suspending or state of being suspended; delay or deferment; temporary withdrawal from office, function, of privilege'. Rhythmic suspensions are not related to harmonic suspensions, however they share the common traits of having one element suspended into another section, creating a tension that is then resolved.

melody/accompaniment format to industrial music. The melody (or vocal line) is often subordinate to or equal to the percussion in the mix (although it is typically higher pitched and therefore can at times appear more frontally in the mix), and there are almost no instrument solos. The effect of the mix is often enhanced through layering. As in techno music, a song might start with a single element, with more elements being added as the song progresses until there is a polyphonically dense wall of sound.

1.2.4 Industrial Instrumentation

Instrumentation in industrial can be divided roughly into two main forms. The first I will refer to as electric/acoustic industrial and is primarily associated with the classic industrial artists. Electric/acoustic industrial involves the use of non-musical machinery and implements, as well as tape and more traditional musical instruments.⁷⁵ The second I will refer to as synthesised industrial and involves the sampled or synthesised reproduction of these sounds. The majority of today's industrial artists would fall under this heading.⁷⁶

75 The term 'electric/acoustic' is unfortunately not ideal, as these artists frequently use synthesisers and samplers as well. However, there does need to be distinction between these and the strictly synthesiser-based artists, for reasons that will become apparent shortly.

76 Unfortunately this is also not an ideal term, as many of the sound effects used are sampled, not technically synthesised.

1.2.4.1 Electric/Acoustic Industrial

Einstürzende Neubauten are one of the most well-known exponents of an electric-acoustic instrumentation. They have used instruments such as air ducts, glass, passing trains, ventilation shafts, a water tower, a shopping cart, jet turbines, pneumatic pistons and various mechanical tools, among many other unconventional sound-making devices. Quite clear then is the notion that these instruments have been taken from the everyday objects and sounds that surround us and are freely or cheaply available, and indeed the band's initial choice of instrumentation was allegedly due to monetary restrictions (see Cangioli 1993: 9).

Well, most people talk about instruments and mean musical instruments. We call them instruments ... we make them instruments of what we are doing. Well, if we go on tour, if we're going to start recording, we usually have a period where we are just finding materials. On early tours, especially on the way to the States, we were forced to find the instruments at every gig, because you couldn't transport it because of the sheer weight of the instruments (Bargeld in Brandle and Kahle 1993).

Similarly, other early industrial artists created music by using instruments that were recycled, stolen or discarded. At the time, these instruments were sometimes held by artists and fans to represent anti-consumerist technology, requiring no expenditure of capital, opening the possibility of music-making up to all (see Vale 1982: 111). These artists used whatever material was available to them in order to create the music, exploring found sound and therefore maintaining what was widely perceived by fans as a highly experimental and anti-consumerist style. Nevertheless, while Einstürzende Neubauten and early KMFDM for example may have used such instruments for economic reasons, Z'ev and Throbbing Gristle, from middle class and more academic

backgrounds, were choosing these instruments for artistic reasons rather than out of economic necessity.

This instrumentation thus adhered to the anti-music ideologies of the early artists—it was felt that the use of traditional musical instruments (at least, played in traditional ways—see below) would be anathema to the intent of the artists. Frequently coming from non-musical backgrounds, many early artists did not want to bring ‘musicianship’ into the music. This ideal still holds with fans today:

I feel the industrial genre is one of the most creative and progressive music genres because of the lack of traditional musical boundaries held. Sounds/samples/bites that are never heard in most forms of music are used, the actual use/manipulation of sound and technology for this purpose in and of itself propels industrial far ahead of the pack in creativity and overall musical progression [Richard].

1.2.4.2 Synthesised Industrial

The electric/acoustic instrumentation changed with the arrival of affordable sampling technology, where sounds could still be found ‘on the street’, but could be sampled and reproduced at will, in predictable and reproducible ways. Today’s industrial equipment list is far more consumer-orientated. Project-X’s equipment list in 2000 for instance boasted three mixers, two samplers, fourteen synthesizers, two drum machines, ten effects devices, three recording devices, and various computer hardware and software components.⁷⁷

⁷⁷ See [Http://www.energy-rekords.se/project-x/](http://www.energy-rekords.se/project-x/) (10/10/00).

Industrial musicians today typically use similar electronic equipment to generate their studio sound. While this equipment inevitably has a higher cost, much less is needed than is present in Project-X's set-up. Nevertheless, the perception that such equipment might be necessary inevitably frightens away some musicians, particularly those just starting out and especially those of lesser incomes.

From the list above, it is clear that the more fallible, 'human' acoustic industrial has graduated to the less fallible synthetic industrial, and it is partly for this reason that some fans insist that 'true industrial' ended in the early 1980s when industrial artists stopped finding their equipment on the street and started finding it in stores. The similarities between the two styles, however, still lie in the sonic aesthetic and the concept of appropriating sounds for the musician's own use. Mark Dery for instance argues industrial artists 'are engaged in the inherently political activity of expropriating technology from the scientists and CEOs, policymakers and opinion-shapers who have traditionally determined the applications, availability, and evolution of the devices that, more and more, shape our lives' (1996: 15). Front Line Assembly's Rhys Fulber stated along these lines,

We're interested in using technology for our own ends rather than being dogmatic military mutants, following orders ... In the same way that the characters in *Road Warrior* weld together whatever usable parts they can find amidst all the garbage, we're stitching together sounds taken from every imaginable media source. We see ourselves as broadcasting information (cited in Dery 1996: 82).⁷⁸

⁷⁸ Dery likens this to William Gibson's cyberpunk concept, 'the street finds its own use for things' (1996: 15).

The technology used by industrial artists today is not itself appropriated; it is typically a decidedly musical technology. Rather, it is the *sounds* that are appropriated, taken away from their original contexts and used for musical purpose.

There is little doubt that the ability to re-create a similar sonic aesthetic to the early industrial artists without having to cart the heavy equipment around has inevitably changed the instrumentation of industrial. Experimentation can take place in the home studio and the right sound can be found without the pressure of financial burden for those that can learn to use the equipment (see Chapter Five). While perhaps obscuring an original intent which tied the sounds to a working-class aesthetic, the sonic aesthetic created by their particular use of synthesisers and samplers remains tied to the industrial ideology, as we will see in Chapters Six and Seven.

The synthesiser also fits in some ways with an anti-music ideology. Paul Théberge has pointed out, that ‘unlike other musicians, synthesizer players are rarely spoken of in terms of their playing technique at all’ (1997: 187). One possible implication of this is that synthesisers are not seen by some as a ‘legitimate instrument’.⁷⁹

Like synthesisers, sampling, as we saw above, is also a large part of industrial music’s sound and the process has definitely been aided by digital sampling technology.

79 Godlovitch even goes so far as to call electronic artists ‘sounders’ or ‘event framers’ rather than musicians, in part due to the fact that ‘respective technical virtues differ. Manual skills such as steadiness and exactitude play no role’ (1998: 101).

Although samplers were available during early industrial's production, they were not readily affordable. This meant that early artists such as Throbbing Gristle were forced to create their own sampling devices. Genesis P-Orridge claimed, 'we bought a computer and converted it to do sampling way back in '76, long before sampling technology was invented' (Dwyer 1999: 26). He is not entirely correct in that sampling *had* been used, because *musique concrète* artists, among others, had been using tape to reproduce 'sampled sounds' for decades. Nevertheless, P-Orridge is correct in that *digital* sampling technology had not yet been created,⁸⁰ and since it was a cumbersome task, few had ventured into using sampling in popular music.⁸¹

Perhaps the most important sonic element of the electronically-generated equipment has been the ability to accurately reproduce a machine aesthetic. Elements can be played extremely regularly and rapidly for any length of time without falter, and the percussion—perhaps the most important industrial element—can be adjusted by changing the envelope to become even more abrupt and harsh.

80 Digital sampling synthesisers came out in the mid 1980s: the Fairlight, the Synclavier, the Emulator, some of which had the capability of acting like multitrack digital recorders but were too excessively priced (Jones 1992: 44). Samplers until the mid 1980s were typically a minimum of \$8000. It was not until the Ensoniq Mirage came out at US\$1695 that samplers became affordable to home musicians (Théberge 1997: 65).

81 There are of course, notable exceptions. The Beatles, for example, had played with tape manipulations as early as 1966, and the use of non-musical sounds had been used for many years prior to that time (see Johnson 2000: 22, or Beadle 1993).

1.2.4.3 Percussion and Other Instrumentation

Percussion and non-pitched sounds used as percussion are often placed in the front of the mix in industrial songs. Typical industrial percussion consists of a kick drum, snare, and hi-hat, although, as they are generally electronically generated, several types and pitches of drums will often be used. Double-tracking of percussion is quite common, and there are many instances of drums being double-tracked with various levels of distortion and delay for a bigger, louder and more percussive sound. The sound of the percussion therefore can vary greatly. The percussion is nearly always processed somehow, and often sound effects are used in place of the drums, for example, metal clanks for snares, as seen in Einstürzende Neubauten's 'Haus der Lüge' in Chapter Six.

Although a few musicians use instruments such as trumpets or guitars, the majority of melodic or harmonic parts are played on a synthesiser. There are cases where melodies may be tapped out using various metallic sounds or other effects, although these are not as common as thinly-orchestrated melodic synthesiser riffs. Bass parts are also nearly always played with a synthesiser, although bass guitars are sometimes used.

Guitars are not uncommon in industrial, but are often played in a fairly unconventional manner. Instructions for guitarists in *Essential Industrial Guitar*⁸² (Bryan 1997)

82 The artists in the collection—Korn, White Zombie, Ministry, Helmet and Pantera—are not considered industrial by most industrial fans. However, I present what I have found is evident in most industrial guitar playing.

typically include ‘with heavy distortion’, ‘tuned down’, ‘with fuzz distortion and Eventide Harmonizer’, and other effects. Industrial guitars are often played with strings muted, or with power chords played very rapidly with lots of down-strokes, resembling the techniques of speed metal.

Although the earliest industrial musicians used guitar distortion and feedback as part of their sound, during the mid to late 1980s industrial had quite strict genre rules against the use of the guitar.⁸³ From about 1987 onwards, artists—typically in the United States—began re-incorporating guitars into their music. Many fans at first rejected this reintroduction of guitars. This rejection is still apparent today: *Industrial Nation*’s summer 1996 issue featured a letter from a fan complaining of the ‘negative stigma’ attached to artists that use guitars (p. 5), and Swedish mail order company Hotstuff’s 2000 mail order catalogue describes band Blutengel as ‘Pure EBM (no guitars)’.⁸⁴

The antagonism towards guitars is likely related to the early anti-music philosophy of many artists (see above). The guitar is a conventional rock instrument, perhaps to some represents US American culture,⁸⁵ and perhaps has connotations that would then associate industrial with heavy metal. Since heavy metal represents often to industrial

83 Although, for a time, guitars were accepted if they did not sound like guitars.

84 Hotstuff, *Sommarkatalog* 2000. Älmhult, Sweden. See <http://www.hotstuff.se> (20/07/2000).

85 ‘I am not influenced by the guitar, a symbol of American culture. Jeans, rock, and guitar are all things that never really influence me’ (FM Einheit, [Http://www.choler.com](http://www.choler.com) [28/3/99]).

fans a more closed-minded, misogynist, racist, and homophobic style,⁸⁶ it is often of great importance to industrial fans to differentiate themselves from this genre. Besides these possible reasons for the exclusion of guitars, guitars are from a production perspective harder to use to create the sonic aesthetic necessary for industrial:

I actually began on guitar, and eventually settled on virtual-analog synthesizer. The reason for choosing synthesizers was that while I was playing guitar, I was constantly searching for more and more effects pedals, that would do more and more complicated things. I tried to use huge numbers of effects over the course of a single song, and eventually I realized, I was trying to be a human sequencer/synthesizer, and was wasting my effort on the guitar, when I could do the same things more effectively with synthesizers [Bogart].

I'm an anti-guitar wiz. I don't like playing guitar. It's a challenge for me, because I have to find the way to play guitar without playing guitar (Einstürzende Neubauten in Cangioli 1993: 10).

1.2.5 Tonal Parameters of Industrial Songs

Although not all industrial contains any harmony or melody in the traditional sense, all industrial music is polyphonic. There may not always be a fundamental, but non-pitched sounds can have a relative frequency, and can be used melodically.⁸⁷ Most industrial styles typically contain their fair share of pitched sounds, usually in the form of short repetitive melodic motifs played on a synthesiser. These melodic motifs often

⁸⁶ See §2.4, cf. Walser (1993: 153).

⁸⁷ Such as that used by, for instance, African drums, or timbales in Latin American music.

resemble those of video games and draw significantly on post-Kraftwerk synth-pop or disco.⁸⁸

Industrial's tonal parameters are often divided between the lower bass register and upper treble register, with little happening in the middle range. The middle range is the least important for commanding attention (see Sonnenschein 2001:91-92). It could be significant, then, that industrial makes use most of the bass register, particularly quite low analogue bass sounds (often drones played two or three octaves below middle C: see Chapter Seven). Industrial bass lines follow quite simple patterns, rarely changing within a very restricted ambitus. Pedal points, either as a drone or short ostinato, are quite common.

EBM, being the most melodic style, offers us the greatest understanding of industrial tonality. Most frequently a typical EBM song will have three or four synth lines. On the lowest level of the mix will be the bass-line, which is typically a simple repetition of short (two, three or four note) patterns, which largely reinforces the bass drum. There will then be an analogue-sounding synth creating a wash of sound or drone that may change tone every bar or two bars, which will be in the lower bass register. There may also be a thin 'space-wind', feedback, or celestial choir in the upper register, similarly

88 The influence of video game music is often overlooked, but quite important to the evolution of popular electronic music, seen most clearly, for instance, in the synthpop act Welle:Erdball's 'Nyntando-Schock (Letzte Stufe)' (*EBM Club Classics* V.2. 1999).

changing every few bars. There may then be a melody line, a thinly orchestrated repetition of one-or two bar length motifs.

Melodies rely significantly on the ecclesiastical modes, especially the phrygian and aeolian modes common to electronica music (see Tagg 1997), or heavy metal (see Berger 1999, or Walser 1993: 46 *ff.*). Particularly the more recent industrial makes prominent use of the aeolian minor third and minor sixth intervals (see Chapter Seven). Pentatonic melodies, quartal harmony and tritones are used quite frequently also.⁸⁹

1.2.6 Industrial's Timbre, Effects, & Dynamics

As harmony and melody play less significant roles in industrial than in most genres (this is not to suggest that they are insignificant), this has meant that more of an emphasis has been placed on rhythm, timbre and texture. Textural elements help to provide interest in pieces where repetition is significant. One of the most important textural aspects of industrial is its timbre, developed largely through electronic effects, and through the variety of sounds involved.

⁸⁹ For examples of minor pentatonic melodies see Hocico's 'Cuando la Maldad Despierta' (*Odio Bajo el Alma*, 1997) or And One's 'Devil Airlines' (1991). Examples of tritones in prominent positions can be heard in Funker Vogt's 'Wartime' (*We Came to Kill*, n.d.) or Leatherstrip's 'Jante's Revenge' (*NMBI* 1998).

I have already discussed saturation on the vocals, and saturation is quite commonly applied to other instruments also, particularly percussion. The Industrial 101 web site's instructions for writing an industrial song indicate the importance of distortion:

```
Put the loop on the tracker matrix. Distort it using Jeskola  
Distortion from the effects list. Remember, distortion is what  
gets you fame... Attach a bunch of other machines ... Make loops  
for those and put them on the tracker matrix. DISTORT!  
Download some samples and load them onto the wavetable...  
DISTORT THE SAMPLES TOO (Http://www.sonic-boom.com  
[20/09/01]).
```

The envelope of sounds is usually quite short, with a strong attack and quick decay, and percussion is quite often put through compressors, giving sounds an increased percussive quality. Many industrial fans consider using synthesiser presets to be inferior musicianship, and artists are expected to play with various effects until an original sound has been achieved. Indeed, in interviews with musicians, harmonic or melodic elements rarely come into discussion, but artists may talk at length about what effects are used (and there will often be more than one effect on any one sound). Perhaps the most important timbral element of industrial is the use of non-musical sound effects, and, therefore, I will cover this aspect in greater detail.

1.2.6.1 A Taxonomy of Non-Musical Sound Effects

To determine the common types of non-musical sound characteristic to industrial, I first had to develop a taxonomy of these sounds. The taxonomy was created from a combination of classifications found on sound effects web sites and that suggested by

R. Murray Shafer (1977).⁹⁰ This taxonomy was not meant to be complete, but was developed only to the relevant levels of each category. There were some areas where there was no occurrence of such sounds in industrial music—such as sports sounds, for instance—and these areas were, therefore, not developed.

Table 1.4 Taxonomy of Non-Musical Sounds Relevant to Industrial

Natural Sounds				
<i>Meteorological</i>	<i>Geographic</i>	<i>Animal and Insect</i>	<i>Human Sounds</i> ⁹¹	
Storms	Water Sounds	Animals	Voice	Body
Rain	Earthquakes	Insects	Pain Sounds (e.g. screams, groans)	Heartbeats
Snow	Volcanoes		Sexual Sounds	Breathing
Wind	Forests		Happy Sounds (e.g. laughter, giggling)	Hand Sounds
Fire	Caves, Underground		Speaking Sounds	Fighting
			Attention-Getting (e.g. yelling)	Footsteps
			Sad Sounds (e.g. crying)	Other
			Religious/Chant	
			Imitation/Mockery	
			Children	
			Other	
Space, Laboratory and Science Sounds				

⁹⁰ For instance, [Http://www.ultimatesoundarchive.com](http://www.ultimatesoundarchive.com) (10/10/00), [Http://www.soundfx-dbase.com](http://www.soundfx-dbase.com) (5/1/00), [Http://www.ins.com/sc96/events/sym.html](http://www.ins.com/sc96/events/sym.html) (9/5/99), [Http://www.tintagel.com](http://www.tintagel.com) (5/1/00), [Http://www.stonewashed.com](http://www.stonewashed.com) 5/1/2000. (10/10/00).

⁹¹ These human sounds categories are only provisional for convenience, and were drawn from the categories provided by the sound effects websites listed in the footnote above.

Space		Laboratory and Science	
Aliens		Medical Equipment (CAT scans, etc.)	
Rockets, Ships		Bubbling Laboratories	
Alien Weaponry		Geiger Counters	
Probes/Mysterious		Sonar Equipment	
Transportation Sounds			
Road	Rail	Air	Maritime
Motorcycle	Train Steam	Airplane	Fog Horn
Cars/Trucks	Train Electric	Helicopter	Ship
Sirens	Train Signal		
Horns			
Media Sounds			
Television & Film	Radio	Music	
Newscasts	Station ID Calls	Non-Western Music	
Theme Songs	Crackle	Opera & Classical	
Advertisements	Obviously Radio	Popular Western Music	
Film/TV Samples			
Machinery		Domestic and Office	
Generic Machinery Sounds (Ratchets, Gears)		House General	
Drills		Doorbells	
Mechanical Saws		Computer	
Other Electric Hand Tools		Office General	
		Telecommunications	
		Doors & Windows	
		Clocks and Alarms	
		Cameras	
		Book and Paper	
		Cash registers, Money and coins	
Nondescript Electric		Industrial/Factory Sounds	
Hums		Hydraulic/steam Hammers	
Buzzes		Panel Beaters & Riveting	
Electric Crackles		Factory Floor Sounds	
		Jackhammers, Heavy drills	
Violence		Electric arc welding	
Bombs and Explosions		Clanging metal pipes	
Gunshots		Crushing sounds	

Machinegun fire	Dragging iron
Miscellaneous Movement/Action sounds	
Breaking, smashing	
Clicking	
Creaking, squeaking	
Crinkling	
Clanking	
Grinding	
Match/lighter	
Party sounds	
Popping	
Pumping	
Bells	
Scissors	
Sliding and dragging	
Scratching	
Knife or Sword	
Thumping or thudding	
Whish and swish	
Crashing	
Ripping	
Spinning	
Vibrations or flutters	
Wobbling	
Whipping or snapping	
Rubberband/slingshot, Springing and bouncing	

There were several problematic areas with the taxonomy. Space/laboratory/science overlapped with media, (since technically there are no sounds in space, so these sounds all come from film or media interpretations of space). Science or laboratory sounds are often indistinguishable from office/domestic, and mechanical sounds. Therefore, space/laboratory/science were non-verbal sounds resembling those in the media's depictions of space or science (e.g. laser guns, warbling bleepy noises, etc).

The violence category had to be kept to non-fictitious sounds of guns and bombs. Sword-fights would elicit a clank or clink (too generic to file under violence, and therefore filed as miscellaneous), and laser-gun type sounds of fictitious weaponry were filed in space/science/laboratory.

Industrial sounds, miscellaneous sounds and mechanical sounds frequently overlapped somewhat. Any generic or nondescript sounds, therefore, whose identity could not be determined (for instance, a thump) were filed under miscellaneous. Industrial sounds were limited to the kind of repetitive action associated with heavy machinery and factories: panel-beating, riveting, air-compressed nail guns, steam hammers, etc, and mechanical sounds were limited to hand-held tools: drills, mitre saws, etc.

Once the taxonomy had been developed, two thousand industrial songs were catalogued according to the occurrence of these sounds. The songs were selected because they had all been categorised as industrial by fans in fan magazines. By selecting such a large amount of songs, it was possible to determine patterns in the main recurrent industrial sound effects.

Table 1.5. Results of the Categorisation of Non-Musical Sounds in 2000

Industrial Songs

Type of Sound	Number of Songs
Miscellaneous	1101
Industrial/Factory	967
Nondescript electric	895
Mechanical	748
Media	578

Space, Laboratory, Science	406
Human Sounds	141
Violence	105
Meteorological and Geographic	77
House, Commercial	34
Transportation	16

Of the two thousand songs examined, 1920 contained mechanical, industrial or miscellaneous non-musical sounds. This result would seem therefore to indicate that these sounds are one of the defining elements of industrial music. These non-musical sounds are essential to the timbre of the genre.

1.3 Conclusion

This chapter has introduced a more detailed examination of the formal and technical parameters of industrial. We can now refine the definition of the type of industrial music I will be looking at by summarising key points:

- Industrial lyrics are most often about social critique or loss of control;
- Industrial uses many samples, most commonly from dystopian science fiction, horror, or the news;
- There are several common ways lyrics or samples are constructed. Often short or repeated phrases are used for onomatopoeic value;
- Vocals are commonly male, and heavily processed with effects, most typically saturation;
- The structure of industrial songs commonly differs from rock, but the length of songs, as well as tempo, is quite similar;
- Industrial commonly uses non-musical instruments, synthesisers and samplers, and places percussion frontally in the mix;
- There is a large amount of sound processing and effects;

- Although other modes and minor keys are used, phrygian and aeolian appear to be the most common, other tonal elements uncommon to Western Anglo popular music are present;
- Non-musical samples or sounds of machines, factory and other technological sounds are very common.

We now know basically what the structural determinants of the most popular of industrial styles are, but as was discussed in the Introduction, there are many other elements to genre. Though we have seen the musical determinants, we have yet to determine what the music is communicating—and how—the subject of Chapters Six and Seven. We also have not yet begun to look at who listens to the music and why, or how the music is used (the subject of Chapter Three). The concept of anti-music has also now been raised a few times, which arouses a series of questions, such as why there is a need to distinguish the music from mainstream music (the subject of Chapters Three, Four and Five). In order to answer these questions, however, it is first necessary to provide some background information about the development of the music.

Chapter Two

POSITIONING INDUSTRIAL MUSIC: A Brief History

2.0 Introduction: Where does industrial come from?

Industrial music, while only emerging about three decades ago, draws on a well-established tradition within the Western art movements of the twentieth century. For reasons that will shortly become clear, industrial must be approached from within the socio-cultural context of this tradition. An understanding of this historical background is crucial to the understanding of the methods and metaphors used by industrial, and to the understanding of what contributed to the emergence of the genre at that particular time.

Previous histories of industrial (Coreno 1994, Duguid 1996, Lewis 1998) have all situated the genre as developing from the twentieth century avant-garde.⁹² Duguid even goes so far as to term industrial ‘amateur *musique concrète*’. While there is some mention of popular music’s influence, all three authors primarily focus on the methods

92 Fans have also put together histories, but these neither offer further insight into the music, nor cover ground not accounted for by these three authors (see Chasse 1991, Grynszpan n.d).

of the avant-garde, yet all three view industrial as bridging a gap between the popular and the avant-garde, not quite belonging to either category.

The authors are undoubtedly correct to ally industrial with the tactics and methods of the Futurists and their progeny, and to stress the non-musical tradition out of which many of the first industrial musicians came:

Industrial music was fundamentally a music of ideas. For all its musical power and innovation, the early industrial groups were much happier talking about non-musical issues than about musical ones, a direct result of the fact that few if any of them had any real musical background or knowledge (Duguid 1996).⁹³

Industrial unquestionably does draw on the avant-garde's long and diverse history; however, it is not only the *methods* indicated by Duguid, Lewis and Coreno that are significant. It is also the *medium* and the *subject matter*. What all three authors fail to mention is the role that the machine plays as a symbol of the underlying utopian and dystopian dreams, throughout many—if not all—of the movements they include in their histories.⁹⁴ This machine symbolism, as we saw in the Introduction and in Chapter One, is central to industrial music, and the understanding of the history of this symbolism is vital to the understanding of industrial.

93 Of course there were exceptions—Z'ev for instance was a trained ethnomusicologist.

94 'Machine' in the thesis will refer to specifically non-electronic, non-digital technology (low technology). 'Technology' will encompass both low and high (digital, electronic) technology. Here I follow Gasset's thinking that 'technology proper... begins around 1600, when man in his theoretical thinking about the world comes to regard it as a machine' (1939: 293).

Although the avant-garde may have paved the way for the techniques employed by the earliest industrial musicians, there is no literature that explains how industrial has developed into a popular music genre, or how it relates to other popular genres. An examination of the more recent crossovers with other popular styles and genres will therefore be necessary.

Industrial's influences span beyond the musical, however. It has already been shown in the Introduction that some authors have attempted to draw parallels between industrial music and the literature of cyberpunk and dystopia (see below). There have in fact been several such cases in popular journals and books (e.g. Dery 1989, Göransson 1992). Some fans even use the term 'cyberpunk' as synonymous with certain styles of industrial, and it will be necessary to explore this connection in particular.

There is not nearly enough space here to do credit to the history of all of these influential movements. Therefore, while I will touch on some of the important figures and movements mentioned by the three authors, rather than repeat their work, my focus for this chapter will be to provide an examination of those themes that industrial shares with the tradition it draws upon, in order to understand how the machine came to be used as a symbol for the modern condition in a distinctly dystopian way.⁹⁵ It is

95 For further information on utopian/dystopian art, see Fletcher (1983) and Davis (1965). For more on the art movements discussed in this chapter see Arwas (1993), Buddensieg (1984), Clough (1961), Pijnappel (1995), Sayre (1989), and particularly Goldberg (1979) John Walker (1994) and Richter (1965, 1967). Hughes (1991) provides an excellent survey of the machine as a symbol in visual arts. For more on the music, see for instance Apollonio

not within the scope of the thesis to provide too lengthy a description of dystopia, as it is not my intent to write a thesis about dystopia specifically.⁹⁶ Nevertheless, it is necessary for the reader to have a background understanding of the fundamental themes of dystopia in order to understand industrial music, and I must therefore embark on a bit of an excursion from industrial for part of this chapter. As well, since the line between dystopian science fiction and horror is often indistinguishable, some discussion of horror will also be necessary.⁹⁷

As industrial itself has a relatively short history, but draws on a lengthy one, the initial focus for the chapter will be on the historical background, focussing specifically on several themes. I begin the chapter with a look at these themes, and then trace their historical development through the beginnings and evolution of industrial, finally

(1973), Bergman and Horn (1985), Bangs (1995), Barr (1998), Bussy (1993), Cope (1985) or Griffiths (1978).

96 For such examinations, see Ash (1975), Booker (1994), Hillegas (1967) and Kumar (1987). I will be limiting my discussion to twentieth century Western dystopias, specifically, dystopia as a genre of film and literature as defined further by Hillegas, below.

97 By 'horror' I mean specifically the genre developing from the Gothic novel, typically containing monstrous threats, a fantastic element, and an encounter between the known and unknown (see Jancovich 2002). The distinction between horror and science fiction is that horror violates the body, and science fiction is commonly a violation of the mind (Csiscery-Ronay 1988: 188), and that 'While horror concerns the conflict between the individual and society, science fiction concerns the conflict between the social institutions or between different social groups' (Sobchack in Jancovich 1996: 12). Jancovich (1996) has shown that even these distinctions are broken down frequently. Examples of cross-overs include for instance *Aliens* (1986) or *Hardware* (1990).

situating industrial within popular culture today, in particular in what has been broadly termed ‘cyberpunk’ culture.

2.1 The Themes of Cyberpunk and Dystopia

Cyberpunk as a term is generally credited to Bruce Bethke’s 1983 story of the same name, but became recognised through its use a year later by journalist Gardner Dozois to characterise the predominantly dystopian science fiction sub-genre incorporating writers such as William Gibson, Bruce Sterling and John Shirley.⁹⁸

Cyberpunk is often referred to as more than solely a literary movement—it is, rather, a concept reflected in many different disciplines sharing a similarity of approaches and attitudes (see Sterling 1991: 345). Most industrial music fans identify a correlation between industrial music and cyberpunk literature:

Yes ... many rivetheads enjoy [cyberpunk] lit, and practically all [cyberpunk] readers listen to industrial (for proof, post to alt.cyberpunk "What are you listening to?" and see what pops up) [Heather].

As far as the connection to cyberpunk goes, it’s pretty damned obvious how it started. Industrial’s been dealing with the “man assimilated into the machine” thesis pretty much since its inception. SRL, Industrial Records, Portion Control, and god only knows how many other musicians and performance artists incorporated [the theme] heavily into their creations.

98 For more on cyberpunk, see in particular Cavallaro (2000), Leary (1991, 1994), Featherstone and Burrows (1995), McCaffery (1990, 1991), Sirius et al. (1996).

Cyberpunk... [themes are] the perfect subject-matter for
[industrial].⁹⁹

Due to the inseparability between the themes of cyberpunk and dystopia, cyberpunk will be regarded in this thesis as one style of the dystopian genre, specifically that of the 1980s and 1990s incorporating the authors mentioned above. Summarised by Mark Hillegas, dystopias, as a genre of science fiction, often follow a fairly standard pattern:

the cataclysmic war which precedes the new state, the rule of an omniscient director, the guardian elite, the standardization of men and women, including artificial faces and numbers for names, the substitution of the manufactured (plastic flowers and trees) for the natural, and the familiar revolt against the machine (1967: 150).

Underlying many dystopias are several recurrent threads:

mankind has barely survived a third world war; everyone wears *standardized* clothing; a new elite of *technologists* has arisen; *individual freedom* is gone; drugs and TV offer a daily bromide to *control* restlessness; *language* becomes *simplified* and debased (Warrick 1980: 134, my emphases).

Two types of patterns are generally present ... one class *suppresses* and *mechanizes* another for its own benefit; or one man *rebels* against a virtually *uniform mechanical society* (Heldreth 1983: 214, my emphases).

These quotations hint at the several themes fundamental to dystopia. Although these themes are not necessarily in *every* dystopia, at least one will always be present. The primary themes of dystopia can be summarised as; the socio-economic system of the

99 Post from serial.port.killer to rec.music.industrial subject: 'The Decline of Industry Newsgroups' May 6, 1997.

West will lead to an **apocalypse**. The apocalypse will lead to, or be caused by, a **totalitarian elite controlling** the masses through **technology**, which brings about a need for a **resistance**, usually led by an **outsider-hero**. This is better explained through further examination of each theme.

2.1.1 Critique of the System

Inherent in nearly all dystopias is a critique of the socio-economic system prevailing within that narrative, whether socialist or capitalist. Contrary to utopian visions of the future, dystopias are typically drawn from what the authors consider to be the logical outcomes of the present-day.

Cyberpunk's "credible" near-futures are recognizably extrapolated from those present trends that reflect the current corporate monopoly on power and wealth: the magnification of the two-tier society, the technocolonization of the body, the escalation of the pace of ecological collapse, and the erosion of civil society, public space, popular democracy, and the labor movement (Ross 1991: 152).

[Fritz] Lang's robot the false Maria was not a literal prediction of some technological future, but a metaphor for the social and political anxieties of the twenties. Freedom versus oppression, capitalism versus labour, and the tyranny of the industrial machines in the age of the model T Ford production line.¹⁰⁰

Dystopia's criticism is commonly of present-day systems of power taken to their logical conclusions: not only governments, but corporations are also seen as the corrupt elite, particularly in post-WWII dystopian narratives. The omnipotent

100 *The Android Prophecy* BBC Channel 4, 22nd September 2001.

Company of *Alien* (1979), the Tessier-Ashpools of the *Neuromancer* trilogy (Gibson), the Tyrell Corporation of *Blade Runner* (1982), Cyberdyne of *Terminator* (1984), or Omni Consumer Products of *Robocop* (1987) would suggest a growing fear of power in the hands of profiteers (see Fuchs 1995: 284). But Western culture in general is often culpable. Religion is spurned (see Smith 1998), and gender roles are often subverted (see Cavallaro 2000: 122, Benshoff 2002, Clover 1993). Mass media, particularly advertising and television, are viewed with disdain as propagandistic and mind numbing—from *Brave New World* (Huxley 1932), *1984* (Orwell 1949), to more contemporary *Robocop*, *They Live* and *Johnny Mnemonic*, it is the media technology which controls the masses.

Like dystopia, horror is often against traditional authoritarian figures and dominant values.¹⁰¹ Such films ‘often present unpopular—even radical—views addressing the social, political, racial, or sexual inequities, hypocrisy in religion or government’ (Vale and Juno 1986: 5). In particular, the ‘construction of the city as metaphoric rapist of the country is an increasingly common one in horror’ (Clover 1993: 129), but even in the earlier horror narratives of the 1930s to 1960s, such critique was inherent;

Giant, radioactive, skyscraper-eating monsters were not the problem. Goo-faced mutants were not the problem. The real evil, it seemed to me, even at age ten, was politics—the cause of all those Final Conflicts. In movie after movie, politics and politicians were the real monsters, the ones culpable for anatomically flushing the whole planet, thereby enabling all those big bugs and post-apocalypse wastelands (Schow 1999: 10).

101 See Jancovich (2002) or Clover (1993: 124) for a summary of work in this area.

It is well documented that horror tends to have periods of resurgence during times of social unrest (Ryan and Kellner in Walser 1993: 170). Hutchings links horror with ‘vociferous dissatisfaction with and alienation from many of society’s traditions and institutions and the often paternal authority embodied by these’ (1993: 159). Walser finds horror ‘functions to restore the sense of security undermined by the dysfunctions of capitalism and the crises of political confidence that corrupt leadership in an underdeveloped democratic context provokes’ (1993: 161).¹⁰²

In many horror and dystopian narratives, it is the present socio-economic system which brings about the terror; the nuclear waste tipped by profit-minded professionals which brings the flesh-eating mutants, the unrelenting drive for ‘progress’ that leads to the apocalypse.

2.1.2 The Apocalypse

Many dystopias are situated either in a post-apocalyptic world or one where an apocalypse is imminent.¹⁰³ In horror narratives there is frequently also an impending apocalypse—caused by the state or a corrupt corporation, or by ‘outsiders’; demons, aliens or robots—that must be fought, primarily by other outsiders.

102 See also Boss (1986) or Wood and Lippe (1979: 10).

103 That is to say, a world of impending doom or catastrophe, not necessarily an apocalypse in the Biblical sense.

More often in dystopia, the apocalypse is a metaphoric one, rather than a cataclysmic disaster, developing slowly and usually representing the end of the ‘American dream’, of the (pretence of the) West’s way of life as democratic and free. In such cases, freedom has capitulated to a totalitarian elite power controlling the masses through the use of technology, particularly media and surveillance technologies. There are, however, frequently pockets of resistance.

2.1.3 *The Resistance and the Outsider Hero*

Dystopia nearly inevitably has a hero, positioned initially ‘within the system (if not in a condition of idolatry, as others may be), who then comes to the realization that he must fight against the state’ (Baker 1998: 17).¹⁰⁴ Such subversive rebellion often underlies dystopian narratives. In fact, ‘John Shirley maintains ... that cyberpunk writers like himself are indeed “preparing the ground for a revolution”’ (Nixon in Cavallaro 2000: 193).

104 For instance, ‘We gravitated toward the categories in which we were most interested—the epic man against society, which is *Fahrenheit 451* and Orwell’s *1984*. We chose that theme as our format’ (George Clayton Johnson, co-author with William F. Nolan of *Logan’s Run* (1967) cited in Heldreth 1983: 218). It has been argued that even when the protagonist is not wholly good, they are still viewed as better than the society which created him/her: ‘Science fiction films presenting mechanistic environments almost inevitably portray them as evil and destructive of human values. Any hero, even a rapist or killer like Vic [*A Boy and His Dog*] or Alex [*A Clockwork Orange*], is presented as better than a character who is an integer in a society where choice is dictated and patterns of existence are safely organized around massive computers or an unchanging social order’ (Heldreth 1983: 230).

Particularly notable in horror is the similar rebellion of the heroic outsider against the socio-economic structure, as horror writer James Herbert said; 'The point of all of my books ... is that it is always the one individual against the system'.¹⁰⁵ Significantly, the hero of horror and dystopia is rarely the macho Hollywood all-American stereotype; the hero is nearly always an outsider.¹⁰⁶

Jancovich (1996) has argued that the aliens and monsters in 1950s science fiction/horror films are also in a similar position of outsider status, that in fact,

In these texts, the outsider is not presented negatively, but is rather presented as an alternative to existing norms ... there is a recurring preoccupation with alienation, isolation and estrangement. In these texts, it is the norms of American life which becomes [sic] strange and alien, while the outsiders are presented as victims who are as much threatened by these norms as they are threatening to them. In this way, these texts examine the dilemmas of those who are unable or unwilling to "fit in" and so challenges the notions of "normality" (1996: 3).

105 James Herbert cited in Grixti (1989: 37). For an extensive look at outsider heroes in terms of the subversion of gender roles in horror, see Clover (1993).

106 Such heroes and outsider figures are not exclusive to horror and science fiction; Westerns and film noir for instance make similar use of outsider-heroes. In fact, film noir has many similarities with dystopia; 'a generally more critical and subversive view of American ... ideology than the norm' ... 'lack of sentimentality' ... 'suggestive subtexts' and a 'willingness to probe the darker areas of sexuality' (M. Walker 1994: 8).

In some ways, then, the resistance represents a utopian sentiment within the dystopian one, a sub-world created within the oppressive system, which allows for a sense of community and liberation, and represents a hope for change.¹⁰⁷

2.1.4 Technology

Dystopias nearly always revolve around technology: either the technology is used by a ruling elite to maintain power, or technology itself has become the oppressor, in a metaphoric version of the former (Stableford 1983: 118). It would be irrational to construct a dystopia without technology as a major theme, since technology is a significant element of human culture, and any narrative dealing with the future must represent this aspect of our lives. Sometimes technology is a theme through its absence—when the apocalypse results in humans having to revert to a form of ‘primitivism’, often without the technological innovations of present day, such as the societies in Wyndham’s *The Chrysalids*, Hobart’s *Riddley Walker*, or Pierre Boulle’s *La Planète des singes* (what I have termed ‘barbarian dystopias’). Others—such as Philip K. Dick’s *Do Androids Dream of Electric Sheep?*—retain the technology but lose animal life and humankind is forced to adapt to a strictly technological, manufactured world (what I have termed ‘clinical dystopias’).

107 And dystopia itself could be read as a utopian in a sense, since ‘dystopia is fundamentally a genre concerned with improving human existence and directing attention toward the twentieth century’s problems’ (Sisk 1997: 10).

In horror, it is often technology that has led to the 'creature' (as in atomic energy growing mutants or space ships inadvertently carrying monsters or viruses). More importantly, the technological imagery of horror and dystopia has been used primarily negatively, often as a symbol of the dehumanisation of modern life (see below). The technological devices used by the elite in dystopias (the surveillance telescreens of *1984* for instance, or the genetic data-typing of *Gattaca*) are built primarily for the purpose of social control, and as such technology becomes a symbol of the loss of individual sovereignty.¹⁰⁸

What I will undertake to argue throughout the thesis is that this anti-technological stance is not one of a literal neo-Luddite tradition.¹⁰⁹ Rather, technology is often a metaphor, used to engage the reader in an understanding of the dehumanisation caused most significantly through rationalisation,¹¹⁰ and maintained by specific power

108 Typically, a kind of 'friendly fascism' is maintained through media manipulation—undoubtedly one of the reasons for the prevalence of advertising in recent dystopias—for instance, in *Blade Runner*, the underclass of 'specials' confined to Earth are taunted with billboards for products well out of reach. For more on the corporate manipulation of information and systems of control through technology, see Chomsky (1989), Robins and Webster (1999: 140-142).

109 For instance, as Jancovich writes of 1950s sci-fi/horror, 'threats ... are associated with the processes of social development and modernisation. In this period, it is the process of rationalisation which is the threat' (Jancovich 1996: 2).

110 'Rationalisation is understood as the process through which scientific-technical rationality is applied to the management of social, economic and cultural life, a process in which rational procedures are used to examine and reorganise social, economic and cultural practices in an attempt to

structures. That, in fact, 'Science-Fiction works primarily through metaphor ... To read it literally is not to hear its profoundest and most disturbing revelations' (Nicholls 1976: 8).

The prevalence of scientific devices and experiments as causes of tales of terror and horror is part of a shift in the objects and effects of awful emotion ... Located in a thoroughly secular world, science signifies the oppressive domination of technological production, bureaucratic organisation and social regulation. What is lost and recovered in the confrontation with scientifically-inspired machines, mutants and inhuman, automated worlds is a virtually religious sense of human wholeness and agency (Bottning 1996: 156-7).

Technology in dystopia is also viewed as potentially liberating, and is often appropriated by the resistance movement to their own benefit (see Kellner 1995). It must be pointed out however that the technology used by the resistance is often the cast-off older technology rather than the latest high-tech products, as in *The Matrix* (1999), *Johnny Mnemonic* (1990) or *Terminator 2* (1990). In light of the neophilia of consumerism, it is significant that the resistance does not choose (or cannot choose) the latest technology. The appropriation of older, particularly low technology for its use in the resistance is a theme running throughout dystopia and industrial:

It is no coincidence that Pauline¹¹¹ concocted the term Disneyfication to describe the vacuousness his motorized roadkill is intended to guard against. His mechanical puppet shows, like those of his colleagues, reject the received

produce order and efficiency' (Jancovich 1996: 2). I include mechanisation as an element of rationalisation.

111 Mark Pauline, of Survival Research Laboratories has worked closely with industrial artists and is a self-confessed cyberpunk. His work was even 'borrowed' by cyberpunk film *Gunhed* (1989), itself rumoured to be an extension of a video by industrial artists Front Line Assembly.

notion that we should relax into our assigned role as passive consumers of high-tech commodities whose intricate workings are a mystery to us and whose design and function are entirely out of our hands. Reminding us that those who cannot control machines are, more and more, controlled by those who can, Pauline, MacMurtie, and Goldstone argue for the liberatory power of technoliteracy. They refuse what the cultural critic Donna Haraway calls "a demonology of technology"—the self-defeating strategy of indicating the tool along with the toolmaker—and recycle or appropriate outright the products of industrial and military culture (Dery 1996:147).

Dystopia therefore has an arguably ambiguous relationship to technology itself. It is often through the metaphor of technology that we are led to a realisation that it is not technology that is at fault, it is the way it has been employed that enslaves humankind.

Stories of disaster which come about because of new inventions usually stress that the real root cause of the disaster is the element in human nature which drives us to seek advantage over our fellow men. In stories of technological oppression the men who already have those advantages are given greater power to indulge them and greater power to secure them. In stories where machines take over the world they are merely reflecting (often innocently) this basic tendency of their makers (Stableford 1983: 118).

2.1.5 Rationalisation

In fact, many earlier twentieth century dystopias used technology to represent a particular relationship with the process of rationalisation and how it has affected humanity. Once the template had been set, later dystopias came to use technology as a symbol of power, or loss of power, often relating it back through its lineage directly to rationalisation and industrialisation.¹¹² To show that one of the underlying sentiments

¹¹² This is not to suggest that rationalisation is inherently wrong, but it is the irrationality with which the rational is handled, the process in the power of incompetent rulers which is central to the critique.

of industrial's specific critique deals with this loss of control brought about in part by rationalisation, I will draw loosely on the theories of George Ritzer who has put theories of rationalisation and alienation¹¹³ into a modern day perspective.¹¹⁴

Ritzer (1996, 1998) develops a neo-Weberian theory of rationalisation, rejecting, however, Weber's notion that rationalisation is dependent on a bureaucratic system. Rather, Ritzer sees late-capitalism as a highly efficient, regularised, automated system, exploitative of both the worker and of the consumer in what he terms a 'McDonaldized' society.¹¹⁵ Ritzer's argument is that rationalisation has, or soon will have, permeated nearly every aspect of our lives. Using Ritzer's McDonaldization

113 For an extensive discussion of alienation, see Elster (1983, particularly pp. 78, 178-80).

114 There is unfortunately no room here to discuss all of the authors who have debated 'modern' life as it relates to depersonalisation, rationalisation and mechanisation—there are far too many. However, see particularly Lukács (1980), Weber (1964) or Mannheim (1968).

115 Seeming to draw from Nietzsche and Lukács. For instance, 'If we now consider the capitalist bureaucrat in the narrower sense, the first thing we perceive about him is the mechanistic and automatized aspect, as his fundamental attribute. Even the higher level bureaucrat—not to speak of the petty employee (post office clerk, cashier, etc) is to a large extent mechanized' (Lukács 1980: 208).

thesis, I will draw on his idea that the primary themes of rationalisation¹¹⁶ have brought about a dehumanisation and alienation.¹¹⁷

Implicit in Ritzer's analysis is the critique of late capitalism, which drives rationalisation to obscene ends in a relentless quest for the maximisation of profit, often at the expense of all else. Rationalisation, therefore, while explored as a socialist theme by some (Zamyatin or Orwell, for instance—see below), is primarily critiqued (particularly after World War II) as an instrument of capitalism.

Rationalisation is a useful concept for this thesis, as it encompasses so many themes often represented in Western culture by mechanical technology: alienation, mechanisation, industrialisation, standardisation, calculability and predictability, simulation, and control by the system versus individualism (see below, and Ritzer 1998).

The key to these themes of dystopia is the use of technology as a central symbol of the dehumanisation—particularly the lack of individual control—due to a significant extent to the changes brought about by rationalisation. An understanding of the historical development of the technological metaphor will enable us to better understand how it

116 Although Ritzer uses the term McDonaldization as nearly synonymous with rationalisation, or a kind of hyper-rationalisation, I will use rationalisation throughout the thesis, as the term is more familiar.

117 It is not my intent to discuss the process of rationalisation as it relates to the production and consumption of music or other cultural products (for such discussions see Longhurst 1995 or Adorno 1973, 1990).

has come to be a central symbol in today's dystopia, and to be used as such by industrial music. This will initially represent somewhat of an excursion from the focus of the thesis, but it is necessary for the understanding of the communication of meaning in industrial (discussed in Chapters Six and Seven).

2.2 The Historical Development of Technology as a Dystopian Symbol

The contemporary dystopia can be traced back through a long history of socially critical novels,¹¹⁸ but it was 'not until the mid-to-late eighteenth century, when the early promise of the Industrial Revolution—that technological progress would inevitably improve social conditions—gave way to increasingly impersonalized mechanization and exploitation' that there was any significant amount of dystopian texts produced (Sisk 1997: 6-7).

Until the late nineteenth century, the majority of the arts dealing in any way with technology largely remained optimistic about its potential.¹¹⁹ Writes Hughes,

118 Perhaps the most significant dystopian work prior to the Industrial Revolution was Daniel Defoe's *The Consolidator* of 1705. The utopian trend was exemplified of course by Thomas More's *Utopia*, but also Francis Bacon's *New Atlantis* and Wilkin's *Mathematicall Magick* of the 17th century.

119 Stableford (1983: 197) attributes the overwhelming turn at this time towards dystopia as reflecting fears of weapons of mass destruction (particularly after the discovery of radioactivity in uranium in 1895), and Newman (1999: 20) suggests a link to a rise of Darwinism and a new age of agnosticism.

The late nineteenth century, the cradle of modernism, did not feel the uncertainties about the machine that we do... The machine meant the conquest of process, and only very exceptional sights, like a rocket launch, can give us anything resembling the emotion with which our ancestors in the 1880s contemplated heavy machinery: for them, the "romance" of technology seemed far more diffused and optimistic (1991: 11).

H.G. Wells was perhaps the most prominent partisan of techno-utopianism. Wells was such an enthusiast of a technologically advanced utopian socialist state, his works almost read like parodies of themselves, and as such easily became inverted by the critiques that would follow (see Collins 1973: 47).¹²⁰

The late nineteenth century saw an increase in urbanisation and many technological advances develop rapidly—the first ‘computer’ (Babbage’s Difference Engine), the telephone, the camera, the light bulb, the rocket, and the magnetic recorder, for instance. With the boost these new commodities gave to consumerism, as well as advances made in industrial and media technologies and the changing social climate of urbanisation, industry accelerated and factories flourished. The need for more efficient factories gave rise to Taylor’s concept of Scientific Management. Taylor’s principal idea was to increase efficiency and productivity in all aspects of industry, but especially in that of the labourer, by rationalising every aspect of work. Wages rose, but the

120 This is not to say that there were no dystopian strains in Wells’ work. The future in *The Time Machine* for instance reads like a dystopia—above ground the Eloi (bourgeois) live in peace and happiness while the Morlocks (proletariat) underground toil away in mechanical despair—this would undoubtedly influence later dystopias, particularly Lang’s *Metropolis* (1926).

repetitive, mechanised and systematic tasks, which called for the division of labour and automaton-like unskilled workers, were felt to be dehumanising by many (see Lucic 1991:17).¹²¹

The burgeoning automation of society became increasingly reflected in the art of the late nineteenth century. Coupled with the massive changes brought about by the Industrial Revolution and the social theories that ensued, the whole concept of the arts and its role in society began to change. By the start of the twentieth century, the social function of art was being reinvented. Artists were questioning the very nature of art and issuing manifestos on near-weekly bases, demanding or declaring changes in the social order of the time, defining progress as contingent on the destruction of the past (see Hughes 1991: 10-20). Art was to see distinct changes in method, material and subject matter—which, perhaps in trying to capture the technological transformation, were to see an increasing mechanisation.

A strain of techno-utopianism certainly remained early on in the twentieth century. Many saw the coming technological revolution as something to be embraced, rather than feared, and technology was viewed with a utopian optimism that now eludes us.¹²² Hughes argues, ‘we have got so used to accepting the failure of Utopia that we

121 Taylor’s Scientific Management is largely the basis for Ford’s assembly-line production. For more information, see Doray (1988), or Lucic (1991).

122 As Bruce Johnson has commented to me, “it is useful to remember that the articulation of this reaction was largely the work of a particular and bounded sector of society, most notably that sector that had access to

find it hard to understand our cultural grandparents, many of whom believed, with the utmost passion, that its historical destiny was to succeed' (1991: 164).

Futurism undoubtedly led this faction of support:

We must prepare for the imminent, inevitable identification of man with motor, facilitating and perfecting a constant interchange of intuition, rhythm, instinct, and metallic discipline... (Marinetti, *Multiplied Man* in Flint 1968: 91).

Futurism expanded from what was initially a literary movement into art, drama and music, all of which would be treated with the same mechanising attributes used in their literature. Balilla Pratella's *Technical Manifesto of Futurist Music* for instance demanded that music

represent the spirit of crowds, of great industrial complexes, of trains, of ocean liners, of battle fleets, of automobiles and airplanes. It must add to the great central themes of the musical poem the domain of the machine and the victorious realm of electricity (cited in Duguid 1996).

Pratella at the time was using conventional instruments to mimic industrial sounds, but would influence Luigi Russolo to develop his own instruments in order to create the sound of 'the palpitation of valves, the coming and going of pistons, the howl of

intellectual forums (some artists, writers, social commentators), and whose positions of privilege were threatened by the rise of mass culture and its technologies. Apart from numerous artists who embraced the products of such technology, in the form of collage...we are only hearing from a minority, and in the meantime a huge majority of hitherto disenfranchised groups (such as women), were enjoying the material and social benefits that flowed from the technologisation of everyday life, both in the home and in the enlargement of their public space" (personal communication, November 8, 2002).

mechanical saws, the jolting of a tram on its rails...' (cited in Apollonio 1973: 85). The Futurists would introduce industrial materials into the arts as symbols of the strength tied up in the factory.¹²³

Other art movements (Vorticism, Constructivism, Suprematism, etc.) were to take up this techno-fetishism:

Geometric art styles were perceived as inevitably analogous to machine products because of the coincidence of visual and conceptual characteristic; e.g. forms reduced to simplicity and executed precisely, and the objective repetition of values through universally applicable shapes. Both geometry and machine technology were seen as contributing to the conquest of chaos by order, the ascendance of analysis and intellect over instincts and emotions, and the submission of the individual to universality and collectivity. The analogy between geometric forms and machine technology strengthened artists' assertions equating their abstraction with social progress (Fletcher 1983: 30).

Nevertheless, a growing dissent would increase with the coming of World War One, which saw the first large scale use of machine guns, aerial dogfights, gas attacks, armoured tanks, and massive artillery cannons (see Smith 1999). As the war dragged out, the reaction against technological 'advancement' would inevitably increase. In addition, by the 1920s the public reaction to the Taylorisation of labour had grown exponentially, with many newspapers comparing working conditions to prison camps and jails, the systems of factories to slavery (Doray 1988: 151).

123 Lissitzky for instance would call iron 'strong like the will of the proletariat' (Fletcher 1983: 60).

While the Futurists had been advocating fascistic notions of war and the machine, their progeny, the Dadas, were mostly conscientious objectors in Zürich to escape the war. The Dadas intentionally inverted the idealism of the machine aesthetic expounded by the Futurists. The poem 'The Admiral' by Hugo Ball, for example, was a metaphor of 'mankind swallowed up in the mechanistic process, the battle of the human voice against a menacing world that eventually destroys it... a world whose rhythm and noises are ineluctable' (Richter 1967: 72).

Dada sought to confound the Futurist's metronomical sense of rational order with chance, 'unreason', illogical nonsense, and a mimicry of automatism which allowed the subconscious (the irrational) to take over (see Stangos 1994: 114).

Automatism represented for the Dadas the essence of revolt. Not only did it contain an implicit rejection of the work ethic of the middle class, by suspending habitual modes of labor and production ... it renounced all forms of sociopolitical control (Richter 1967: 73).

There were three main trends in Dada art. The first was collage, introduced originally by the Cubists. The second was the ready-mades (*objets trouvés*), and the third was the mechanomorphs. Collage involved the appropriation of everyday objects, often from different sources, a kind of sampling of the mass media which would 'attack the bourgeoisie with distortions of its own communications imagery' (Rubin 1968: 42).

The mechanomorphs however were arguably the most overtly political works, particularly critiquing Ford and Taylor.¹²⁴

The Dadas were also experimenting with non-musical sound (see Adcock 1992), though a kind of mechanisation of music was already spreading throughout Western art music, not only in subject matter—as in Honegger's 'Pacific 231', but also in material—as in Anthiel's 'Ballet Mécanique' or 'Machine Age' pieces. Rationalisation had stretched into musical composition, in the 'mathematical' approaches of Schoenberg's theory of twelve tone Serialism,¹²⁵ the repetition of Satie's 'Vexations', and later the mathematical stochastic music of Xenakis. Mechanisation began to dominate all of the arts, from films, drama, performance and dance.¹²⁶

Rationalisation became the focus of perhaps the most important dystopian novel of the early twentieth century, a direct attack on Taylor's dehumanising management systems (see Lewis and Weber 1988, Collins 1973). Evgeny Zamyatin's 1924 novel *We* is set in a society in which people are numbers, and individualism is a crime punishable by death. Zamyatin combined the mechanical themes and imagery of Wells and the

124 See for instance Picabia's bare sparkplug, entitled 'Portrait of a Young American Girl in a State of Nudity (Daughter Born Without a Mother)'.

125 Although perhaps Schoenberg and his pupils would deny the mathematical aspects to serialism (see for instance Griffiths 1978: 86).

126 There were of course art movements that arguably did not share in the rejection or expression of a mechanical aesthetic to any significant degree—Fauvism for instance.

Russian Proletarian Poets with the language of Taylor to specifically mock rationalisation as alienating and dehumanising.¹²⁷

The mass of his fellow-citizens are described as machines with spheroid heads, marching, chewing, voting in mechanical unison, speaking, if at all, in metallic voices... The dictator has hands of iron or stone, speaks like clanging iron and seems metallically immobile (Collins 1973: 65).

Zamyatin helped to create the template for many twentieth century dystopian narratives that followed, particularly influential on Orwell's *1984*,¹²⁸ though criticisms which used a mechanical metaphor had already developed elsewhere in the West, such as in Georg Kaiser's *Gas* (1918), E.M. Forster's *The Machine Stops* (1909) and Karel Capek's *The Insect Play* and *R.U.R (Rossum's Universal Robots)* (1966).

The general downturn in attitude towards mechanisation and rationalisation increased with the rising unemployment seen during the Great Depression. Having their labour replaced by mechanisation, more so than ever before, we see imagery of humans being destroyed by machines. One popular example is the 1936 Charlie Chaplin film, *Modern Times*. A new wave of popular science fiction in the 1930s also revolved around near-

127 For instance, the title of the novel is taken from the poem 'We' by the Proletarian poet Mikhail Gerasimov. Proletkult poets focused on the machine as a symbol of the utopian future to come, as in Gastev's 'We Grow from Iron', or 'Factory'. See Geldern and Stotes (1995).

128 The novel is also similar to Huxley's *Brave New World* (whose characters worship Taylor's protégé, Ford). Although Orwell was directly influenced by *We*, Huxley allegedly had no knowledge of the novel (see Collins 1973: 41).

Luddite expressions of the Prometheus myth, typically depicting scientists as madmen, reflecting a clearly growing fear of technology and scientific advancement.¹²⁹

With the horrors and atrocities of the Second World War, ‘there was an upsurge in the production of dystopian texts... especially in America, where imaginative literature like science fiction had long been characterized by a strongly utopian slant’ (Booker 1994: 91).¹³⁰ With a few exceptions, such as that of Isaac Asimov, there were virtually no optimistic science fiction authors after 1950 (Warrick 1980: 55). Even Asimov, however, criticised by his contemporaries, has indicated the extent of his optimism, ‘I’ve said many times that I’m an optimist. I think we have a fifty-one percent chance of survival’.¹³¹

Science fiction cinema witnessed a second boom in the 1950s in the McCarthyite ‘Red Scare’ era.¹³² As in the 1930s boom, science was generally viewed with apprehension

129 Such as, in films, *Frankenstein* (1931), or *Island of Lost Souls* (1932), or *La Fin du Monde* (1931). The term ‘science fiction’ was first applied during this time, having developed from the pulp magazines of US American publisher Hugo Gernsback. Gernsback himself was largely optimistic about the technological age, although the authors in his magazines often had dystopian themes.

130 The Futurians, for instance, a group of radical communist science fiction writers in the USA (such as Judith Merril, Isaac Asimov and Frederik Pohl), were largely responsible for the utopian trend. See Heer (2002).

131 *The Android Prophecy* BBC Broadcast, Channel 4. 22nd September 2001.

132 For instance, Jancovich argues that ‘while many 1950s invasion narratives and outsider narratives opposed “rationality” and saw the “irrational” features of emotion, intuition and spontaneity as potential sites of opposition to rationalisation there was a growing concern that

and scepticism.¹³³ Space-orientated films usually had spacecraft bringing back aliens to earth, while other mechanised creatures—robots, androids and the like—were often viewed as malevolent.¹³⁴ Jancovich has shown how the aliens in these films were used to criticise conformity and rationalisation (1996: 65 *ff.*).

Those few authors who were writing with some remaining utopian predilection began placing their utopias in the *tabula rasa* offered by outer space, beginning a new trend in utopian thought, one that signals without doubt the end of hope for our own planet, even among the optimists.

By the late 1950s, technological advances allowed for many artists to begin incorporating more of the sounds of mechanisation into music, most notably in the work of Luigi Nono, Luc Ferrari, the *musique concrète* artists, as well as early electronic pioneers like Stockhausen and John Cage. As in literature and art, the machine in music was often being used as symbol in a critique—Nono's 'La fabbrica

rationality was increasingly organising and controlling the "irrational" (or the unconscious), particularly through techniques such as advertising' (Jancovich 1996: 4). For an extensive summary of 'End of the World' cinema, and how it relates to the times it was conceived in, see Newman (1999).

133 'The aliens are often directly associated with technology. They either threaten the earth with it, or are produced by it' (Jancovich 1996: 26).

134 There are many such examples—*When Worlds Collide* (1951), *Invaders from Mars* (1953), *It Came from Outer Space* (1953), *Riders to the Stars* (1954), *This Island Earth* (1955), and *Forbidden Planet* (1956) for instance.

illuminata' (1963) for instance used recordings from iron foundries to criticise capitalism.

One of the most important—and yet perhaps most often overlooked—influences on the development of electronic music is that of science fiction cinema, where mechanical and electronic sounds had been used to represent the future, the alien, and in particular became associated with many of the rationalisation narratives of Red Scare cinema. Predating many of the mechanised synthesiser sounds of Suicide and Kraftwerk were electric and electronic pioneers like Delia Derbyshire ('Doctor Who', 1963), Louis and Bebe Barron ('Forbidden Planet', 1956), Harry Lubin ('One Step Beyond', 1959), and Bernard Herrmann ('The Day the Earth Stood Still', 1951).¹³⁵

By the late 1960s and early 1970s, innovations which brought popular music closer to the avant-garde (such as the experimentation by the aforementioned artists, as well as Kraftwerk, the Beatles and others) paved the way for genres like industrial to lie ambiguously between 'art' and 'pop' for a time (see Frith and Horne 1987). Cosmic Music ('Krautrock') in particular was vital to the development of industrial music into a specifically popular musical genre, rather than as a faction of the avant-garde (see

135 And library music like Desmond Leslie's 'Inside the Space Ship' and 'Music of the Voids of Outer Space' (1957): see Jakubowski and Murray (n.d.). These science fiction artists were possibly influenced by the avant-garde: Ferde Grofé's 1950 composition 'Rocketship X-M' also used electronic oscillators, and the Barrons had studied under John Cage.

below).¹³⁶ Having come from directly out of art schools under Joseph Beuys and Stockhausen, bands like Can, Kraftwerk, Neu! or Faust using machine sounds and ‘motorik’ rhythms, became the first to really mechanise the sound of popular music.¹³⁷ In fact, some fans consider Kraftwerk to be the first industrial band. Certainly the Neue Deutsche Welle bands to spring up in Kraftwerk’s wake were instrumental in the formation of industrial dance music.¹³⁸

There were examples of positive or ambiguous approaches to mechanisation in the arts after the nineteen fifties—Warhol’s ‘Factory’ of silkscreening, for instance— although the majority of art using mechanical imagery, materials or methods has been dystopian-related since that time. Tinguely’s auto-destructive machinery (as in 1961’s ‘Study for an End of the World’), the sculptures of Robert Longo, and the paintings of H. R. Giger exemplify the fact that the machine—notably that of *industrial technology*—in method, material and subject matter, had become established as a symbol of dehumanisation by the time the first industrial musicians began.

136 As Christophe Pirenne (2002) has pointed out, the term ‘Krautrock’ has come to be synonymous with Cosmic Music, although it was much more vague originally. I will keep to Pirenne’s terminology here.

137 ‘Motorik’ was the term used to describe Neu! drummer Klaus Dinger’s drumming technique.

138 The Neue Deutsche Welle (commonly referred to as NDW by fans) included for instance DAF, Der Plan, Die Doraus und die Marinas, and Der Liederkranz.

2.3 Industrial Music: Beginnings and Development

It was from directly out of Fluxus and other performance-based artist groups that Coum Transmissions, often cited as the first industrial act, began. Coum were a unique performance art group, going to such extremes of violence and horror that even the radical Body Artists were put off by some of their work. From early on in their career, Coum involved music and sound, although they continued to call themselves an art group, in part to maintain their experimental arts grants from the Yorkshire Arts Association.¹³⁹ While most brushed them off as pornographic or obscene pranksters, Coum were quite serious, taking part in retrospectives of Fluxus art, exhibiting with the Viennese Actionists and paying tribute to Marcel Duchamp. The band said at the time,

We hope to use the rock medium to completely [sic] change the way it is normally perceived. Concerts that are as much Fine Arts events, with film, mime, sculptural images, performances, as a music booking (in Ford 1999: 4.8).

Coum grew to develop a fairly broad reputation as a musical band, and were even recommended as a support act to the Velvet Underground by BBC DJ John Peel (Ford 1999: 2.14). It was in 1975 that Coum the performance art group disbanded then re-emerged as Throbbing Gristle the musical band, though initially the band would continue in the vein as Coum. The sound played with extremes of volume and

139 See Ford (1999), for a more complete look at Coum and Throbbing Gristle. For a history of Performance Art including Coum, see Goldberg (1979).

frequency, antagonising audience members, much as the contemporary punk was doing. Throbbing Gristle, however, maintained that they were not part of the rock tradition;

it was far away from what was going on, it was very nihilistic, and sarcastic. We hadn't thought of becoming part of the music business. We were a comment on culture, and hypocrisy and double values, we were an art project (in Ford 1999: 7.25).

Nevertheless, as Frith and Horne pointed out,

Artists (Throbbing Gristle are the most significant example) suddenly found that they could apply their ideas in a pop club setting and get a much more *vital* reaction than they ever got in a gallery—even gobbing was a better response to an experimental show than polite applause (1987: 128).

Throbbing Gristle's Genesis P-Orridge at the time controversially stated that they wanted to take music 'out of the cornfields and into the factories'. While some interpreted this literally as an attempt to strip the contemporary popular music of any African-American origins, it is important to remember that P-Orridge was coming from out of a neo-Dada tradition. Just as Dada had professed to be *anti-art* (Richter 1965), so industrial wanted to be *anti-music*. What P-Orridge was really trying to do was to strip the music of *all* Western origins, to create something entirely new, a concept which would greatly influence the development of the genre.

In order to develop this 'anti-music', Throbbing Gristle, shunned by the record companies, would have to produce and release their own music. In line with their previous 'businesses' like the Ministry of Anti-Social Insecurity, they founded their

own record company, Industrial Records. Seeing themselves as opposing the Thatcherite system,¹⁴⁰ Industrial sought to offer an alternative outlet for music fans that would awaken the social conscience, describing the music in distinctly dystopian terms:

Imagine walking down blurred streets of havoc, post-civilisation, stray dogs eating refuse, wind creeping across tendrils. It's 1984 ... It's the death factory society, hypnotic, mechanical grinding, music of hopelessness, film music to cover the holocaust... The music of 1984 has arrived.¹⁴¹

The Industrial Records label, as well as producing Throbbing Gristle and WS Burroughs records, began a network of musical artists who became associated with the early industrial music movement, such as UK's Clock DVA and Cabaret Voltaire, Australia's SPK and Sweden's Leather Nun. It was these artists who became among the first to be incorporated under the genre term 'industrial music', and although they did not see it at the time, instigated a new genre in popular music.

Industrial music's fan community began to develop soon after Industrial Records had formed. There are fanzines from the late 1970s that reveal the specific dress styles and

140 'You have to remember the climate at the time T.G. emerged. The 70s! ... It was a totally sycophantic stagnant period ... everything was so comfortable and stifling. Everything was "under control" and for me that's when it's time to let the shit hit the fan' (in Riley 1998: 4).

141 Throbbing Gristle 1976 press release, in Ford (1999: 6.17). SPK is the name commonly used for a band which adopted and went by a number of names using the acronym, including Surgical Penis Klinik, System Planning Korporation and Sozialistisches Patienten Kollektiv.

ideologies that are still indicative of some fans today. In 1983 Re/Search Publications in San Francisco released *The Industrial Culture Handbook* (Vale and Juno 1983, perhaps signifying the beginnings of a coherent community, and introducing people to many of the important concepts central to the fan ideology by including recommended reading lists of subjects still popular amongst fans.¹⁴²

There were also other artists not affiliated directly with Industrial Records that were beginning to create music with a similar mechanical aesthetic. These artists were not coming from the middle-class art-school background common to the Industrial artists. Test Dept for instance began in 1981 in south-east London, as a direct reaction to Thatcher's policies. The band toured with the miners during the pit closure program, appropriating the tools of industry for their critique, performing in railway yards, warehouses and factories.

We didn't have any money when we started so we used whatever we could find as instruments. They were pulling down all the working class factories near where we lived at the time so we acquired anything that could make noise ... We wanted to make very direct, confrontational music that used ideas driven from deeply rooted social and political issues.¹⁴³

Industrial music was also burgeoning elsewhere in Europe. Einstürzende Neubauten from Berlin, likewise could not afford 'musical' instruments, so they too began making

142 Political theory, music theory, esoteric occult books, serial killer biographies, science fiction literature like Burroughs, Ballard, Dick and Pynchon, etc.

143 [Http://www.voltage-zine.com](http://www.voltage-zine.com) (19/06/99).

music with what was available, also appropriating found materials, sometimes as a political statement.¹⁴⁴ Germany's KMFDM, while beginning as a performance art group, would also include working-class materials and people in the group:

It was me playing bass guitar through four guitar amps, which eventually all blew up; and four Polish coal-miners banging with big tools on a metal dome construction, kind of like a greenhouse (*Side-Line* #23: 4).

By the early 1980s there were developments throughout North America as well, as the music spread through tape-trading networks like CLEM (Canadian List of Electronic Musicians). The popular synthpop group Images in Vogue, after touring with Duran Duran and Roxy Music, split into several influential factions. Don Gordon went on to found Numb, Kevin Crompton to found Skinny Puppy with Bill Leeb, who would split to form Front Line Assembly, and Ric Arboit to form Nettwerk Records, an important and influential Canadian label, which has since become a subsidiary of American. These artists had been brought together primarily through the art world, meeting in galleries and influenced by an art historian who brought *Einstürzende Neubauten* and *Test Dept* to Vancouver in the early 1980s for an exposition called *Transportation Mutations*.

144 'Maifestspiele', for instance, used sounds of tear-gas canisters and rioting recorded by the band during the 1987 May 1st rally against Reagan in Berlin (*Haus der Lüge*, 1989). Similar use of protest ambience was used for instance by Nocturnal Emissions' 'Uprising' on *Songs of Love and Revolution*, recorded during evictions in Brixton in 1984.

Probably independently, industrial was also growing in Japan in the late 1970s and early 1980s. From out of punk bands like Hijohkaiden came a series of Noise artists. Particularly influential was Merzbow, an art-school student who, taking his name from a Kurt Schwitters collage technique, sought to ‘destroy all conventional music’.¹⁴⁵

By the mid 1980s most popular Western industrial artists were familiar with each other, and most major artists in the West not only knew each other but were sharing ideas and members. Perhaps most popular was the Wax Trax! label from out of Chicago, who were responsible for North American releases of Ministry, Meat Beat Manifesto, Controlled Bleeding, Mussolini Headkick, Pig, Sister Machine Gun and KMFDM, among others. It was during this time that industrial gained a more commercial popularity with EBM artists Front 242 and Nitzer Ebb, and later Nine Inch Nails, who combined the harsh machine sounds with a throbbing dance beat, opening the music to a wider audience.¹⁴⁶

Since the success of Nine Inch Nails in the early 1990s, industrial’s fanbase has continued to grow, spreading further geographically (see § 3.1), and, as shown, there have been more distinct splits in the styles. Although perhaps in larger cities industrial

145 http://www.geocities.com/~zazara_doom/ (28/03/99).

146 Inevitably, I have had to miss out important artists due to space. There are no histories of industrial music in print, however for a summary of some of the important artists, see Thompson (1997).

enjoyed a coherent collective fan-base before 1990,¹⁴⁷ it was not until about that time that the fan community distinctly separated (to any significant degree) from other music communities that were previously known throughout the 1980s (in North America at least) only collectively as 'alternative'. Alternative, prior to becoming a commercial marketing concept with the popularisation of grunge-rock and a massive major-label interest in what had previously enjoyed only marginal success, at that time incorporated most underground post-punk genres (see for instance Cross 1995). With the popularisation of alternative came a large influx of people interested in those genres. Either because there were now enough people for these groups to separate, or because those previously part of them wanted to separate themselves further from the commercial industry, these genres then became somewhat more distinct:

For the Pacific Northwest [USA], Skinny Puppy is the key transitional band, I think. We used to go see them in high school, when they were referred to as a "punk" or "goth" band. This is 1985 to 1987, mainly. I never heard the term "industrial" applied to this type of music until 1992, though. There was a new club that opened up in town, boasting a "goth/industrial" theme. We went, and lo, one of the bands they played were (by then defunct) Skinny Puppy. There were a few clubs back when I started listening to this kind of music, but again they billed themselves as "punk/goth." The crowd is essentially the same, just the label has changed [Heather].

147 Although to the best of my knowledge there were no dedicated industrial clubs in many major North American cities before the early 1990s, there were at least industrial club events taking place in clubs in large cities like Toronto and San Francisco. Europeans I spoke to indicated a similar process occurred. My focus is on North America because of my own experiences there, but also because the distinct separation occurred much sooner there due to its wider popularity in North America as opposed to much of the rest of the world (with some exceptions).

Since about 1990 the industrial community has developed into a more distinct group of people, and while throughout the thesis I focus on industrial's similarities between geographic areas, there are a few differences between various countries that should be mentioned. In England, where there is not a significant amount of fans, industrial almost always shares club events with other genres, including techno or extreme metal, but primarily synthpop or goth. Elsewhere, such as in Scandinavia, there is often more distinction made between industrial and these other genres.

There are also divisions within the industrial music community, particularly in Germany, where industrial enjoys the greatest popularity:

I do remember when the industrial thing started around here. However, considering the fact that Stuttgart is a rather small city (if it even deserves that term), there never was an industrial subculture as such. Instead it has always remained within the gothic subculture it originated from. So music/dress culture and the connections you mention never found the critical mass of people to properly form an "entity" of itself, and in fact I believe that few people even view industrial music as anything other than being just a different facet of the synthpop-gothic-EBM-thing.

I had the opportunity to visit London's "Slimelight" last Saturday, and—frankly—I've never seen anything like it in Germany. Neither the exclusiveness of Industrial/Techno music [being played] nor the "uniform" look of latex/cyberwear was anything I have ever seen [here] in this form.

In Germany there is also a slightly different subculture. Generally the EBM-thing ... is viewed as "commercial", going as far as calling it "mainstream-goth" or "goth-dancefloor". The subculture which is in the process of developing/has been developing for a few years (again starting as part of the Gothic subculture) is a slightly different one; it is a subculture which attracts people who like to distance themselves from above mentioned "mainstream" music. ... [This] music/scene could be called the Neofolk/Ambient/Noise scene. The associations are that of a "cultural avant-garde", it is a definite, if rather small subscene of the whole "Gothic" section. Due to the fact that Neofolk has a huge part in this, and that some of the bands in this sector are viewed extremely critically because of certain associations with Nazi-symbolism or general neo-classicist/ "culturally conservative" ideas, it

is a scene which is (as far as I can tell mainly unjustly) associated with the extreme right political spectrum, and therefore forms a distinct subculture due to the fact that many people feel put off by said associations [Mark].¹⁴⁸

Despite the differences in geographic areas, there is a near-world-wide¹⁴⁹ fan base for industrial music now that shares many elements of fan culture. In areas where industrial is still a fairly new or small phenomenon, the genre typically remains a part of a much broader group of underground cultures. For example, in Mexico and Brazil industrial crosses over with extreme metal, while in Scandinavia there is more cross-over with synthpop. Most significantly, it nearly everywhere remains a part of, or is allied with goth culture.¹⁵⁰ It is worth engaging in a brief explanation of the differences between these genres. Unfortunately, there is little work on these areas of popular music, so I will only be able to distinguish them on a general level at this time.

148 Germany appears to be the only country to have this unique sub-group within the industrial community to any significant degree. As neo-folk does not adhere to the sonic definition of industrial, and Noise is only touched on here, this sub-group is outside the scope of this thesis. As far as I am aware, there have been no academic studies of neo-folk or Noise, and this is an area that ideally should be looked at in future studies.

149 That is to say, there is industrial music 'activity' in every populated continent.

150 There are similarities with other musical styles as well that are not discussed here, such as hip-hop and rock, however there is less cross-over with these genres.

2.4 Industrial Today: Situating Industrial Within Popular Culture

Industrial distinguishes itself from mainstream heavy metal culturally, socially, and stylistically, although industrial shares heavy metal's penchant for minor modal tonality (see Weinstein 1991, Straw 1990 and Walser 1993). Fans often perceive the most significant difference to be the presumed egoism and sexism underlying popular heavy metal: 'Heavy metal has a tendency to be more sexist; kind of "come on, let's drink another beer"' (industrial fan in Locher 1994: 10).

However, there are some artists that cross over with extreme metal (e.g. death metal, black metal, thrash, and speed metal). Similarities include the themes in the lyrics of 'alienation, corruption of those in power, horrors done by people to one another and the environment' (Weinstein 1991: 50). Both genres use heavy distortion, dense polyphony and modal tonality.¹⁵¹ One of the most striking differences between extreme metal and industrial seems to be that there is little humour or irony in extreme metal, while many industrial artists have used tongue-in-cheek humour to contrast the bleakness of some of the music. There are significant differences vocally, particularly industrial's tendency towards high levels of vocal processing, and of course in industrial's use of synthesised instrumentation.

151 See Berger (1999) for a look at death metal.

The use of synthesisers provides a differentiation, albeit perhaps simplistic, of industrial from punk, though industrial has many cross-overs with punk, particularly in ‘electro-punk’ artists like Fad Gadget,¹⁵² who combined industrial materials (metal, drills), synthesisers and guitars.¹⁵³ Likewise, no matter how much Industrial Records’ Genesis P-Orridge later claimed industrial had been a distinct movement from punk, he had played with and recorded albums with punks (notably Alternative TV), and there was a strong punk influence on early industrial.

Although the synthesiser may appear on the surface to be the antithesis of the punk aesthetic, the approach of self-taught musicianship and the independence offered by home-studio production values draw industrial closer to punk. Punk and industrial had a shared motivation to eliminate the elitism seen to be allied with traditional musical learning. Sampling and other ‘anti-music’ techniques such as the use of non-musical instruments were seen by some early industrial artists as antithetical to the system which had produced such inequities:

I had many arguments with punk bands, who would say “Learn three chords and form a band”, I thought, “Why on earth learn three chords?” Therein lies the problem of punk to me—they wanted to learn to play music. To learn to play music is to become a slave to a system once more ... (P-Orridge in Shapiro 2000: 64).

152 And others on the innovative UK label Mute.

153 In fact, many would categorise Fad Gadget as industrial—and certainly the band’s come-back audience in 2001–2002 was primarily industrial and goth fans. Fad Gadget’s Frank Tovey also worked with US American industrial artist Boyd Rice.

Nevertheless, punk's appeal to simplistic structure and conventional instrumentation is anathema to much contemporary industrial, which often puts invention and experimentation over finished product, and uses multiple tracks in recording to build up complex layers of sound. Jon Savage has argued that Throbbing Gristle were even more extreme than punk, that industrial was in part 'one very thorough reaction against what "punk" rock had become—good ol' rock'n'roll' (in Vale and Juno 1983: 5. cf. Ford 1999: 0.8).

Although industrial therefore shares some stylistic aspects with punk, there is more significantly a connection with the culture and attitudes. Both genres shared a middle-class art-school background, 'informed by avant-garde arguments about shock value, multi-media, montage and deconstruction' (Frith and Horne 1987: 128).¹⁵⁴ Both genres have drawn on similar extremist imagery to question mainstream ideology, at times maintaining a loose political agenda. Punk also had somewhat of a machine aesthetic, and it is not ironic that industrial later adopted the term *cyberpunk*:

Punks affected a toneless speech, black and white clothes, hair colored in the impossible colors of plastic; they abhorred tans, preferring the paleness that announces perpetual life indoors, nearer the machines ... and they danced with the expressionless and stiff movements of robots, evolving a new machine aesthetic out of their bodies. The technological fears and dreams of an earlier generation, expressed in metaphor, prophecy and fiction, were here incarnated in the style of a later one (Porush 1985: 2).

154 Although punk history has often been written about as a working-class movement, Frith and Horne (1987), among others, have pointed out its art-school origins. For discussions of punk, see Reynolds and Press (1995), or Laing (1985).

In the 1980s industrial became associated with what was then termed cyberpunk culture, based loosely around the literature described above. A cyberpunk was, according to Timothy Leary 'a person who takes control over cybernetics/electronic equipment and uses them not for armies, not for government, not for Lufthansa, but for their own interests or needs'.¹⁵⁵ Writes McCaffery, 'What distinguishes cyberpunk from other forms of science fiction is its admiration of and empathy for certain extremist figures of the underground art scene' (1991: 288). Cyberpunks were associated with technophilia, computer and hacker culture, magazines like *Mondo 2000*, smart drugs, and science fiction and horror narratives. William Gibson, the literary figurehead of the cyberpunk movement, even makes a nod to Einstürzende Neubauten in a chapter title from *Idoru* (1996), 'Collapse of New Buildings' (see also Collins 1999).

What cyberpunk represented musically was a cross between the punk elements described above and the cybernetic (high-tech, electronic) elements of other electronic music genres. Much of today's industrial music stylistically resembles these other electronic music genres, and indeed industrial is categorised by the CMJ music charts as electronica.¹⁵⁶ This connection with club music began early on with synthpop and

155 My translation from Göransson: 'Cyberpunkaren är en person som tar kontroll över cybernetisk/elektronisk utrustning och använder den inte för armén, inte för regeringen, inte för Lufthansa, utan för sina egna intressen eller behov' (1992: 60).

156 CMJ is the US American College Music Journal charts, the US journal that independent radio stations report playlists to, and the most significant of North American charts to gauge independent artists.

the Wax Trax! label, and the two genres have since been mutually influential.¹⁵⁷ Early electronic pop music—particularly that of artists like Gary Numan or Deutsche Amerikanische Freundschaft (DAF)—what has since been termed ‘cold wave’, a minimal and quite rigid style of synthpop, shares fans with industrial. Nevertheless, there are some distinct stylistic differences between industrial and other electronic music styles, including primarily that of the production techniques, particularly the levels of distortion, the vocals, and the emphasis on the percussion. Also notable in both the music and community is the distinction evident in the following quote:

Techno was more playful and experimental, and above all it didn't want to make existential statements about human life and the nature of the world. Or at least not as centrally as EBM and industrial music did (Poschardt 1999: 322).

The main difference often in what is deemed by fans to be acceptable as part of industrial is this perceived political potential.¹⁵⁸

This political agenda also differentiates industrial from goth music, although the industrial community today is closest to—and is seen by some—as a subdivision of

157 For instance, Depeche Mode's *Construction Time Again* (1983) was influenced by Einstürzende Neubauten, and many EBM artists have been influenced by early synthpop songs like 'Crushed by the Wheels of Industry' (Heaven 17 1983) and 'Locomotion' (OMD 1984). See Lee (1995) for a discussion of Wax Trax! and the club market.

158 Borthwick (1998) has argued against the myth of 'rave' culture being apolitical in nature. However, this politicisation seems primarily to be concerned with the protection of the right to hold raves. Whether or not rave music is apolitical is not my point: it is the fans' perception that industrial is often political that matters.

goth.¹⁵⁹ Both goth and industrial are held by their fans to be elevated above the confines of ‘mass culture’ through association with the twentieth century avant-garde. Musically, the genres are most similar in hybrid cybergoth bands like Diary of Dreams, as well as older goth artists like The Sisters of Mercy, who built songs around a drum machine, heavy bass lines and highly repetitive rhythms. Both industrial and goth have a strong interest in the extremes of the marginal and abject. On a superficial level, goth could be allied with horror and industrial with science fiction—though as in the literature and cinema there are many places where they cross over in terms of music. Cavallaro (2000), writing about cyberpunk and gothic fiction, has compared the two genres in literature, and most of his comparisons hold true for the music and communities as well. Cavallaro describes gothic as ‘a whole cultural discourse that emphasizes images of psychological and physical devastation and a pervasive sense of alienation, fragmentation and decay’ (2000: xiii). He links gothic and cyberpunk with a series of keyword similarities: decay, decomposition, disorder, helplessness, horror, irresolution, madness, paranoia, persecution, secrecy, unease and terror (2000: xiv). These links between cyberpunk and gothic literature could easily fit those of industrial and goth culture, as will become apparent later.

Despite their closeness in many aspects, some fans draw strict boundaries between the industrial and goth communities, as the following discussion on the rec.music.industrial (RMI) newsgroup indicates: ‘[Goths are] a bunch of primadonnas belittling each other

159 For more on goth see Hodkinson (2001) or Grunenberg (1997).

based on the way they dress or the bands they listen to, when they all look and act the same anyway'.¹⁶⁰ Although such criticisms of goths are often tongue-in-cheek, there is a sentiment amongst some industrial fans that goths are more image-conscious, more self-deprecating, and more hopelessly depressed. In fact, one questionnaire participant called industrial fans 'perkies', due to their comparatively up-beat nature. Douglas Rushkoff discusses the distinction in his novel *The Ecstasy Club* (1997: 127-128):

The Goth kids were into the aesthetics of death and depression. They would listen to hardcore, head-banging factory sounds, but only as a way of proving that they could stay waifish and delicate while dancing to the most aggressive machine-age noise. Goth was definitely a bad, darkside trip, but it was aestheticized into a delicacy. By going into the darkness and deciding to stay in it, there was nowhere further to go... The true Industrial folks were a much scarier bunch. Their movement had something to do with listening to as much violently mechanized sound as possible—their records sampled steel mills and assembly lines—as a way of learning to cope with the ambiance of our industrial age.

2.5 Conclusion

It should now be clear that industrial music draws on a wide variety of sources, and shares traits with a wide range of musical genres. Industrial is primarily from a Western background, emerging nearly simultaneously in various geographic areas and coming together into a coherent named genre afterwards. There were initially two different strains of industrial, with distinct technological and socio-economic factors affecting them, but which combined due to similarities of approach, ideology and sound. Most

160 Re: racism within industrial music. Post from DJ Maniak
maniak920@aol.communist (13/09/99).

importantly, both the art-school artists and those from the working class had an ideological agenda that they were expressing through the music, using in particular the sounds of the machine.

The machine, as I have shown, is a well-established, complex, and sometimes ambiguous symbol in the Western art movements of the twentieth century. Although initially a symbol of utopian optimism, in the post-World War One period the machine became primarily dystopian, used to critique rationalisation and authoritarian political power. Industrial, as we have seen, developed from and draws on this tradition, at times expressing the music explicitly in the language of dystopia. Despite the fact that the machine is often used as a negative symbol in the context of various artistic, literary, musical and cinematic narratives,¹⁶¹ I also identified that the dystopian resistance force uses technology. It will be necessary to discuss what type of technology industrial uses, and how industrial uses it, in order to understand what the music is communicating (see Chapters Five and Seven).

This chapter has raised many questions and there have been many areas touched on that will require further exploration. We saw again an ideological connection between early artists and the concept of anti-music, related to an early independence from major record companies, but how has this affected the distribution and mediation since the

161 Possibly, only within the context of such narratives—after all, as I show in Chapter Five, the cogwheel is a celebrated symbol of the power of the working class.

early stages? The fact that industrial became a genre label (and, later, a marketing term) indicates that it must in fact be significantly distinct in some ways from other genres, and it must fill some niche—musically, and/or socially—that is not filled by the other genres it crosses over with. To determine what niche industrial fills, we must now look at the audience of the music; why, how, and where they listen to it, and what it means to them.

