

Dead Channel Surfing: the commonalities between cyberpunk literature and industrial music

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Abstract

This paper explores the similarities between industrial music and 'cyberpunk' science fiction literature. Besides the obvious instances where there are direct references to each other, there are further connections between music and literature that are explored here. Situating the two forms within the tradition of twentieth-century Western dystopias, the focus of the paper is on the similarity of themes (relationship to technology, control by a totalitarian elite, apocalyptic worlds, resistance groups), techniques (in language or structure), moods (the tones and attitudes), and imagery (through language or music) used to illustrate and enhance these themes.

Introduction

Having previously enjoyed only marginal popularity and been relegated to a cult status within the realm of computer geeks and social misfits, the success of *The Matrix* (Wachowski brothers, 1999) propelled cyberpunk into the spotlight and into the mainstream. Cyberpunk finally became a hot Hollywood subject, as film-makers rushed to release the sequels, and similar movies like *Equilibrium* (K. Wimmer, 2002), or *Returner* (T. Yamazaki, 2002), spawning a new generation of trench coat-and-sunglass-wearing martial arts fanatics.

The term 'cyberpunk' is generally credited to Bruce Bethke's 1983 story of the same name, but it became recognised through its use a year later by journalist Gardner Dozois to characterise the predominantly dystopian (anti-utopian) science fiction sub-genre incorporating writers such as William Gibson, Bruce Sterling and John Shirley. Cyberpunks are associated with technophilia, computer and hacker culture, smart drugs, and dark futuristic narratives. Cyberpunk's main concept can be explained by dividing its name into the two related halves, as Csicsery-Ronay (1988) has shown: 'Cyber' referring to cybernetics, the study of information and control in man and machine, was created by US American mathematician Norbert Wiener fifty years ago, and is now generally associated with computers ('cyberspace' referring to the Internet, for instance). Combined with this technophilia is that of the punk; rebellious, nihilistic and street-smart, what Gibson refers to as the cognitive dissident.

Although cyberpunk began as a literary movement, it is often referred to as more than that – it is, rather, a concept reflected in many different disciplines sharing

a similarity of approaches and attitudes. Cyberpunk author Bruce Sterling acknowledges the outside influences in the aesthetic of the genre; 'the work of cyberpunk is paralleled throughout 1980s pop culture: in rock video, in the hacker underground; in the street-jarring tech of hip-hop and scratch music; in the synthesizer rock of London and Tokyo' (Sterling 1991, p. 345). In fact, there have been many instances of the use of the term 'cyberpunk' to refer to music, rather than literature or film narratives. There are several music genres that reference or have been associated in some way with cyberpunk, including that of hip-hop and punk, but it is 'industrial' music which seems to have a particularly close affinity to cyberpunk. *Omni* magazine's 'Shocking Exposé: Inside Cyberpunk' in 1994, and *Keyboard* magazine's May 1989 cover story 'Cyberpunk: Riding the Toxic Shockwave with the Toxic Underground' (Dery 1989), both focus on industrial music artists. Industrial music was created originally by using mechanical and electric machinery, and later advanced to synthesisers, samplers and electronic percussion as the technology developed. It is commonly built around 'non-musical'¹ and often distorted, repetitive, percussive sounds of industrial machinery, often reflecting feelings of alienation and dehumanisation as a form of social critique.

There are many places where industrial and cyberpunk cross over or refer to each other in quite obvious ways. As the editor of the original cyberpunk fanzine, *Mondo 2000*, R.U. Sirius recorded a 1994 album, *IOU Babe* for industrial artist Trent Reznor's (Nine Inch Nails) label, Nothing, under the moniker, MV Inc. *Mondo 2000* was often populated with interviews with industrial artists, and the magazine's *User's Guide to the New Edge* (Rucker, Mu and Sirius 1992) includes a chapter on industrial music. William Gibson, the literary figurehead of the cyberpunk movement, even makes a nod to industrial band Einstürzende Neubauten in a chapter title from *Idoru* (1996), 'Collapse of New Buildings' (the English translation of the band's name). Industrial artists likewise pay tribute to the literature, particularly to Gibson, such as the album *Count Zero* (by Noxious Emotions, which shares its name with a Gibson novel), the band Zeromancer (a reference to Gibson's *Neuromancer*), the songs 'Burning Chrome' (Terminal Power Company, taken from the name of a Gibson anthology) or 'Neurodancer' (Front 242). Industrial artists frequently sample from popular cyberpunk films such as *Blade Runner* (R. Scott, 1982) or *The Matrix*. Front Line Assembly used clips from cult cyberpunk film *Gunhed* (M. Harada, 1989) for their 1992 video for the song 'Mindphaser', and such films, meanwhile, have often used industrial artists on soundtracks – *Johnny Mnemonic* (R. Longo, 1995) includes industrial-metal bands KMFDM, Stabbing Westward and God Lives Underwater, and *The Matrix* soundtrack includes Ministry, Meat Beat Manifesto and Rammstein. Japanese cyberpunk film *Tetsuo: The Iron Man* (S. Tsukamoto, 1989) was completely scored by industrial artist Chu Ishikawa (of Japanese industrial band Der Eisenrost), and a Der Eisenrost band member, Shinichi Kawahara, acted in the film. Such examples are numerous, and most fans of the genres, in fact, identify a correlation between industrial music and cyberpunk literature, as the following post to the rec.music.industrial newsgroup illustrates:

Industrial's been dealing with the 'man assimilated into the machine' thesis pretty much since its inception . . . Cyberpunk . . . [themes are] the perfect subject-matter for [industrial]. (Post from serial.port.killer subject: 'The Decline of Industry Newsgroups', 6 May 1997)

Clearly, then, many cyberpunk authors listen to industrial, and many industrial artists must read cyberpunk literature, but is this connection merely a matter of

similar tastes, or do the literature and music (along with its fan culture) share much deeper connections? Aside from these quite obvious points of reference and cross-over, it is worth exploring these connections between the music and literature more closely, to determine what other elements they share. Situating cyberpunk and industrial within the tradition of twentieth-century Western dystopias, I focus on the similarity of histories, of thematic elements, ideological and philosophical viewpoints, as well as the music, imagery and verbal techniques or stylistic correlations used to illustrate and enhance the main themes of the works.

Historical background to cyberpunk and industrial

Larry McCaffery writes, 'What distinguishes cyberpunk from other forms of science fiction is its admiration of and empathy for certain extremist figures of the underground art scene' (McCaffery 1991, p. 288). There are certainly many references to art figureheads, and many people and movements who have been influential on the development of cyberpunk and industrial music, but I will focus on the most significant of these; Dada, William S. Burroughs and the punk movement.² An exploration of the shared historical background which the literature and music both draw on is crucial to an understanding of the philosophy, contempt for Western society, and ironic humour often present in cyberpunk and industrial.

In the work of the cyberpunks there are many references to Dada, as well as the incorporation of Dada techniques. Gibson, for example, includes Duchamp's sculpture *The Large Glass* in the gallery of the Tessier-Ashpool corporation (a faceless multi-national in the *Neuromancer* trilogy), and industrial musicians have named both their songs and their bands after Dada ideas, such as the Sheffield band, Cabaret Voltaire, New York's The Bachelors, Even (taken from the alternate name for *The Large Glass*), or Merzbow, who took his name from Kurt Schwitters' *Merz* collages. Throbbing Gristle's early incarnation – the performance art group Coum Transmissions – even once orchestrated an avant-garde performance of Duchamp's 1913 *Bicycle Wheel* sculpture entitled *Duchamp's Next Work*, performed at the Fourth International Festival of Electronic Music and Mixed Media at the Zwarte Zaal, in Belgium.³

The cyberpunks and industrial artists also share with Dada a similarity of subject matter and style. The Dadas were keen to expose the dangers of the growing technologisation of society. Dada sought to confound the Futurists' 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, p. 114). Picabia's mechanomorphs, for example, referenced the increasing industrialisation in the USA, and the fear of the encroachment of technology into the human realm. The Dadas intentionally inverted the idealism of the machine aesthetic expounded by the Futurists. The poem 'The Admiral' by Hugo Ball, for example, was as Richter describes, 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, p. 72).

Dada techniques, such as collage, have also been influential. For the Dadas, 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, p. 42). Perhaps the most significant connection is with the application of 'low-culture' (i.e. mass or popular)

media items juxtaposed with ironic titles or other material, in such a way that it was possible to comment on society by using its own objects, such as Picabia's 'Girl Born Without a Mother' (1916) – just a spark plug until one reads the title, whereupon it becomes a comment on industrialisation in Ford's America. Cyberpunk fiction similarly incorporates many references to popular culture. William Gibson said of one of his novels, '*Neuromancer* is filled with these bits and pieces; it's very much an homage to something. I didn't really think of it as a book, I wanted it to be a pop artefact' (Dery 1989). In cyberpunk fiction, commodity culture is integrated throughout the novel as it is in our everyday life. Unavoidable allusions and references to products that exist in our present-day society – be it a television show, an actor, an automobile, a beer brand or the UPS, similar to industrial music's use of sampling from popular movies, from advertising, or from political speeches. According to Bruce Sterling, cyberpunk represents 'the overlapping of worlds that were formerly separate, the realm of high tech and the modern pop underground' (McCaffery 1991, p. 288), the converging of art and 'high culture' with that of commercial mass culture.

Cyberpunk novelists bring into their work a literary collage style that was first employed by the early Dada poets like Tristan Tzara, although this influence may have also come somewhat indirectly through the Beat poets. Correspondingly, the cut-and-paste composition of much early industrial music resembles that of the audio experiments of the Dada and Futurist musicians, including those of Russolo and Duchamp. It was Dada artist Brion Gysin who introduced author William S. Burroughs to the concept of the cut-up in the 1950s. Burroughs saw speech and language as the central dominating force of control in society, and viewed his automatic writing and cut-up methods as a way of dismantling these machines of control. Cutting pages of text up and re-assembling them in a different order would, according to Burroughs, reveal the truth in the text.

The word is now a virus . . . you are a programmed tape recorder set to record, and play back. In order to discover who 'programs' you, you must tape your own voice speaking automatically . . . and then cut up and re-splice the tape in a random pattern: or else run the tape manually back and forth across the pick-up heads. (Cited in Porush 1985, pp. 102–3)

Gibson acknowledged in an interview that 'I had to teach myself not to write too much like Burroughs. He was that kind of influence . . .' (cited in Leary 1994, p. 24). Burroughs was also an enormous influence on the early industrial musicians. As well as being a friend of Throbbing Gristle's Genesis P-Orridge, who once said that he was trying to put Burroughs' technique to music (cited in Vale and Juno 1982, p. 65), Burroughs released a record of his cut-ups, *Nothing Here Now But The Recordings* on Throbbing Gristle's label, Industrial Records. The industrial band 23 Skidoo not only used Burroughs' techniques, but also took their name from one of his stories (*23 Skidoo Eristic Elite*). Later industrial musicians also acknowledge the influence of Burroughs, like the band Ministry, who recorded the song 'Quick Fix' with Burroughs, and also sampled him on 'Just One Fix'. The German underground film *Decoder* (K. Maeck, 1984), which stars Einstürzende Neubauten's FM Einheit as well as P-Orridge, includes a dream sequence in which Burroughs appears.

Drawing on the early Dada 'word salad' poetry and combining this cut-up technique with a Luddite fear of technology and a paranoid scepticism of governmental control, Burroughs used the cut-up method as both a scientific experiment and as a 'guerrilla tactic' (see Porush 1985). 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 randomisation, the introduction of noise or entropy' (*ibid.*, p. 104). Such a view of language is in fact recurrent in many of the dystopian texts of the twentieth century (see Sisk 1997). Slovenian industrial artists 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.

The cyberpunks use other techniques drawn from the Dadas and Burroughs to change the language of the narratives, lyrics and music. *Bricolage*, defined by Novotny (1997, p. 102) as 'the transgressive activity of individuals who are able to appropriate cultural styles and images for their own ends', and *détournement*, the use of appropriated materials in ways that alter their original meaning, are seen in the sampling techniques applied by the industrial artists who use the debris of political speeches, television, film and advertising, cut them up and intersperse them into their songs. As the industrial band Manufacture has said, 'We use government footage, propaganda films, news clips, politicians speaking ... It's all a comment on how crazy [US] American society is' (Dery 1989). Politicians are frequently juxtaposed with samples from dystopian films, and it is reasonable to assume that listeners are making an active connection between the music, the politics, and the narratives of those films. Such cut-ups and juxtapositions are also common in cyberpunk narratives. According to McCaffery (1991, p. 290), the techniques as used by the cyberpunks are a 'presentation of idiomatic lingo, [which] serve to oppose the power and authority of public discourses and texts'. In *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'.

Another interesting element of both industrial lyrics and cyberpunk is the tendency to create neologisms. Industrial artists 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', say the band (Dolimont 2001). Aside from having specific meanings, neologisms are often used in lyrics for onomatopoeia, although in context they often seem to carry some relevance other than texture; for example, blutopia is obviously a pun on utopia, but with a blue filter (hence, dystopia). Cyberpunk literature is rife with neologisms – from the very term 'cyberpunk', to what are now quite commonly used words, such as cyberspace. Cyberpunk neologisms are often drawn from computer culture or from Japanese, such as the *zaibatsus* (the corporate multi-nationals), or the SimStim, a communication device.

Musically speaking, one of the biggest influences on the cyberpunks is that of proto-punk and punk, notably the Velvet Underground. Well acknowledged by the cyberpunk authors, writer John Shirley's characters talk about the band in his novel *Eclipse*. Rudy Rucker and Gibson both named novels after Velvet Underground songs (*White Heat*, and *All Tomorrow's Parties*, respectively). Gibson also considered using a line from the Velvet Underground song 'Sunday Morning', 'Watch out for worlds behind you' as an epigraph to *Neuromancer* (Lupton 1995, p. 113). The influence of the Velvet Underground on early industrial bands has also been well documented.⁴ Throbbing Gristle's genesis P-Orridge recorded several covers of

Velvet Underground and Lou Reed tracks, and Coum Transmissions were even recommended by BBC Radio One's John Peel to the Velvet Underground as an opening act. Newer acts like Norway's Apoptygma Berzerk have recorded cover versions of Velvet Underground songs (e.g. 'All Tomorrow's Parties'). Lou Reed's solo *Metal Machine Music* album of 1975, a bewildering assault of feedback and machine noises, has been described by journalist Dave Thompson as 'massively influential' on industrial music (Thompson 1997, p. 68).

The Velvet Underground's image – that of money-spurning independent cult idols; pale, detached, dressed in black and associated with the 1960s New York art scene, combined with Reed's flat, emotionless singing style, reflects a cool pre-cyberpunk image that would also go on to influence the punk movement. Many early industrial bands sprang from punk bands that had broken up. While the instrumentation differs between the guitar-and-drums of punk and the early industrial artists who largely used found machinery and synthesizers, the basic punk idea of using non-musicianship as an advantage, that anyone could record an album, still held true with industrial, and punk's 'no future' outlook is evident in the lyrics and attitudes of most early industrial artists. Not only this, but the fashions used by some industrial bands, who draw style from dystopian cinema as well as bondage wear, motorcycle leathers, and paramilitary clothing, was first exemplified by the punks.

The history upon which both the literature and music draw is clearly very similar, and while it is possible that this congruence represents simply a similarity of tastes on the part of the artists involved, it is more likely that an identification with some wider themes are occurring, which will be explored next.

Major recurrent dystopian themes

The most important influence on industrial and cyberpunk is the long history of science fiction, particularly that of dystopian sci-fi. In fact, it is fair to situate cyberpunk as one sub-genre of dystopian narratives. Cyberpunks, industrial artists and their fans often draw their fashion from dystopian films, and the visual imagery used on book jackets or album covers are often dystopian based. Many industrial bands also draw their names from dystopian texts; Tolchock (from *A Clockwork Orange*), Mark 13 (from *Hardware*), 'Logan's Run' (Babyland). Musically speaking, there is a very significant connection between the soundtracks and underscores of dystopian films such as *Terminator* (J. Cameron, 1984), *Logan's Run* (M. Anderson, 1976), *Equilibrium*, *The Matrix*, *Planet of the Apes*, and the music of industrial (see Collins 2002, 2003), and most samples used in industrial are drawn from dystopian films (see Collins 2002). In exploring the major dystopian themes, the further overlap between industrial and cyberpunk will be made more apparent.

Summarised by Mark Hillegas, dystopias often follow a fairly standard pattern:

the cataclysmic war which precedes the new state, the rule of an omniscient director, the guardian elite, the standardisation 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. (Hillegas 1967, p. 150)

Or, as Warrick points out, underlying many dystopias are several recurrent threads:

mankind has barely survived a third world war; everyone wears standardised 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, p. 134)

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 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.

Inherent in nearly all dystopias is a *critique of the socio-economic system* prevailing within that narrative: for cyberpunk, this is generally corporate capitalism. 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, as Andrew Ross points out:

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

Cyberpunk's criticism is commonly of present-day systems of power taken to their logical conclusions. Corporations are seen as the corrupt elite: the omnipotent Tessier-Ashpools of the *Neuromancer* trilogy (Gibson), the IntenSecure company in *Virtual Light* (Gibson), or Omni Consumer Products of *Robocop* (1987) would suggest a growing fear of power in the hands of profiteers. Industrial music's lyrics also often mesh dystopia with the capitalism of the West, and the control over society by the multi-national corporations and media conglomerates. This is most obvious in the work of Australian band Snog, whose album *Buy Me I'll Change Your Life* has songs based on Orwell's 1984 – including 'Big Brother', and the 'Prole Song', and makes multiple references to advertising slogans and the acquisitiveness of modern Western consumers. Babyland also frequently make such references – such as the songs 'Double Coupon', 'Increased Turnover' or their album *Business Casual*. Others have gone to further extremes – Throbbing Gristle, for instance, juxtaposed images of Auschwitz with that of a local Tesco supermarket.

Many dystopias are situated either in a *post-apocalyptic world* or one where an apocalypse is imminent (that is to say, a world of impending doom or catastrophe, not necessarily an apocalypse in the Biblical sense). More often in cyberpunk, the apocalypse is a metaphoric one, rather than a cataclysmic disaster, developing slowly and usually representing the end of the 'American dream', giving way to a hyper-commercialised corporate oligarchy. 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.

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 realisation that he must fight against the state' (Baker 1998, p. 17). Such subversive rebellion underlies most cyberpunk narratives. In fact, 'John Shirley maintains . . . that cyberpunk writers like himself are indeed "preparing the ground for a revolution"' (cited in Cavallaro 2000, p. 193). Significantly, the hero is rarely the macho Hollywood all-American stereotype; the hero is nearly always an outsider, an alienated social misfit, disempowered, and a member of some 'underclass' of citizens.⁵ 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. Cyberpunk and industrial revere the underdog as protagonist, the independent maverick, the cognitive dissident, always with a good heart and with hope for something better, struggling to escape *the sprawl*, the living space of the urban populace. It could even be argued that by appropriating the outsider as hero, and celebrating difference, the authors and artists make one more strike against the mass-culture society presented in the narratives.

Technology as power and alienation

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, p. 118). Technology in cyberpunk has several related themes: it is representative of power, used as a symbol of alienation, and exposes a growing dehumanisation through a 'technocolonisation'⁶ of the body.

The technological devices used by the elite in cyberpunk are built primarily for the purpose of social control, and as such, the technology becomes a symbol of the loss of individual sovereignty. Typically, a kind of 'friendly fascism' is maintained through media manipulation. Mass media, particularly advertising and television, is viewed with disdain as propagandistic and mind numbing. But the anti-technological stance is not one of a literal neo-Luddite tradition. Technology in cyberpunk is also viewed as potentially liberating, however, and is often appropriated by the resistance movement to their own benefit (see Kellner 1995). However, the technology used by the resistance is often the cast-off older technology rather than the latest high-tech products, as in *The Matrix*, or *Johnny Mnemonic*. 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 cyberpunk and industrial. Cyberpunk, 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 in which it has been employed that enslaves humankind.

Industrial artists such as Einstürzende Neubauten have used instruments that include air ducts, glass, passing trains, ventilation shafts, a shopping cart, jet turbines, pneumatic pistons and various mechanical tools, among many other unconventional sound-making devices. Similarly, other early industrial artists create music by using instruments that were recycled, stolen or discarded. At the time of the birth of the industrial genre in the late 1970s, these instruments were sometimes held by artists and fans to represent anti-consumerist technology, requiring no expenditure of capital, opening up the possibility of music-making to all (see Vale and Juno 1982, p. 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.

Mark Dery argues that 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' (Dery 1996, p. 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, p. 82)

As well as being a symbol of power, and by extension the appropriation of power by the disempowered, technology is also used as a metaphor for dehumanisation. Gibson's opening line of *Neuromancer*, 'The sky above the port was the colour of television, tuned to a dead channel', according to Hollinger (1990, p. 205), 'invokes a rhetoric of technology to express the natural world in a metaphor that blurs the distinctions between the organic and the artificial'. The integration of characters in the books with mechanical parts – the turn on, jack in, drop out technology of the escapist media or the taken-for-granted artificially generated prosthetic organs and the privileging of the intellect over the 'meat' of the body – as well as the literary metaphors which reflect this same integration, is analogous to industrial music's use of mechanical metaphor (see Collins 2002). Voice distortion control devices such as the Vocoder are heavily employed by industrial musicians, and speak to the integration of man with machine.⁷ While certainly there are cases of robotic voices used for novelty purposes in popular music – Styx's 'Mr. Roboto' or Black Sabbath's 'Iron Man', for instance – in industrial, the cyborg or robot is commonly used as a metaphorical representation of alienation (see Dery 1996, pp. 6, 88, 233). Brian Aldiss writes:

The robot is (generally) to be pitied. The robot is in many ways a shadow of ourselves . . . Robots are generally solitary since they represent outsiders or antiheroes in human society . . . Robots are lonely people because they exemplify current isolations inseparable from our industrial society. (Aldiss 1982, p. 3ff)

Robot voices representing alienation are quite common in industrial, and are typical in songs dealing with modern life (for example, Skinny Puppy's 'Smothered Hope' (1986), Fracture's 'On Earth' (1997), or Covenant's 'Replicant' (1992)). Many industrial concerts today use pre-recorded material, the only live element prevailing being that of the voice – and this, having been electronically processed means that what the audience hears is usually that of the human mind and body filtered entirely through the body of the machine. Likewise, the use of robotic voices in cyberpunk films is similar. In *Tetsuo: The Iron Man*, the voice of the protagonist becomes increasingly mechanised as he loses his humanity and becomes closer to a machine, reflecting the dehumanisation central to cyberpunk and industrial's basic philosophy.

Mood: anguish, darkness and the future

In addition to history, subject matter and technique, industrial music shares with cyberpunk a similar outlook or philosophy, expressed in the general underlying mood or tone of the music, films and books. Cavallaro links cyberpunk and gothic horror with a series of keyword similarities relating to the moods evoked by the narratives: decay, decomposition, disorder, helplessness, horror, irresolution, madness, paranoia, persecution, secrecy, unease and terror (Cavallaro 2000, p. xiv).⁸ Similarly, my study of connotations of industrial music (Collins 2002), using free-inductive methods of listener response tests on a selection of industrial recordings, found that the most common responses were 'sad', 'dark', 'anxious', 'futuristic' 'death', 'urban', 'violent' and 'anguish'. There were several elements within the

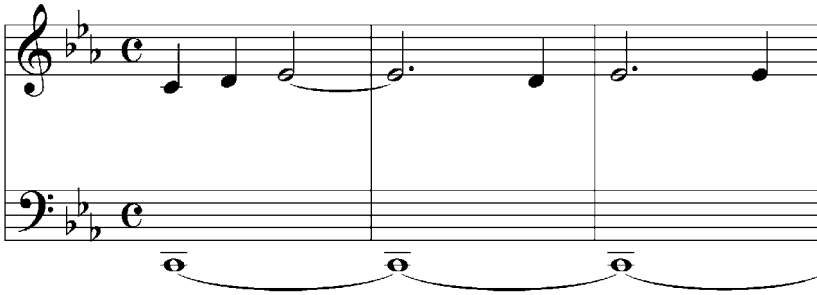


Figure 1. Flesh Field, 'Allegiance' (2000) (1-5-♭6). Used with permission from Inception Records and Flesh Field.

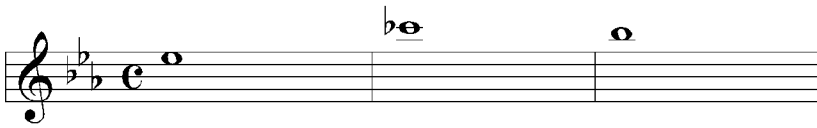


Figure 2. Assemblage 23, 'Purgatory' (2000) (1-♭6-5). Used with permission from Tom Shear.

music that contributed to such connotations, including low bass pedal points, mechanical sounds, and distortion, but tonally the most important element was the use of minor modes, in particular aeolian and phrygian tonality. Aeolian and phrygian tonality has become more prevalent in popular music in general in the past two decades, particularly in electronic and heavy metal music. Although these modes are not used in *all* industrial music, they are nevertheless common in a significant proportion of the industrial repertoire, especially recently in that of the most popular artists, such as VNV Nation and Assemblage 23.

The primary distinguishing elements of the aeolian mode are the minor third and minor sixth intervals, both of which are frequently used in connection with their neighbouring semitones (second and fifth) to connote grief, anguish or pain. Melodic minor thirds in the European classical repertoire were characterised by Deryck Cooke as symbolic of 'unrelieved tragedy' and 'unhappy endings' (Cooke 1959, pp. 57–8).⁹ Many composers throughout the centuries, including those medieval churchmen who used the minor key to express a stern, sedate, or sober satisfaction, have expressed painful emotions by bringing the minor third into prominence, melodically or harmonically (*ibid.*, p. 58).¹⁰ The minor sixth acts much in the same way as the minor third, engendering, argues Cooke, 'a feeling of acutely painful dissatisfaction – a feeling of anguish, in fact' (*ibid.*, pp. 64–72, 146–50).¹¹

'Something I Can Never Have' (Nine Inch Nails) is one of the most clear examples of aeolian tonality in industrial. In this song, a single bar with a 5-♭6-5-1 pattern repeats throughout the entire song without stop, emphasising the sadness in the lyrics. Prominent minor sixth or minor thirds which repeat throughout the song can also be heard, for instance, in Flesh Field's 'Lost' and 'Allegiance', and Assemblage 23's 'Purgatory'.

Emphasised minor thirds or minor sixths, some as capping notes, are also common in cyberpunk/dystopian films, as part of *Terminator's* theme tune, in

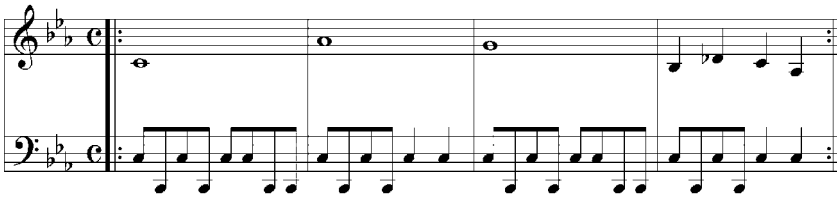


Figure 3. Wumpscut, 'Opening the Gates of Hell' (2001). Used with permission from Dave Heckman at Metropolis Records.

The Matrix, and in *Tetsuo*, for instance. Tetsuo in particular has a repeated motif on a guitar with a 1-5- \flat 6 pattern.¹² Alf Björnberg found aeolian harmony in popular music was commonly used in connection with lyrics

dealing with subject matters such as historical and mythical narratives, static states of suspense and premonition, alienation in life and in personal relationships and fear of, but also fascination by, the future and modern technology and civilisation.¹³ (Björnberg 1985)

Björnberg indicates a series of keywords of associations with aeolian harmony as 'vast stretches of time and space', 'staticness', 'uncertainty', 'coldness', 'grief' and 'modernness' (*ibid.*). Björnberg even goes so far as to suggest the aeolian mode

may be seen as the musical coding of a conflict between important traits of the dominant ideology and the way in which reality is actually experienced. Faced with the growing threats affecting Western industrialised societies today: atomic war, environmental pollution, increasing unemployment, the rapid dissolution of traditional social values and institutions, people in widely differing social situations, it can be argued, experience a more or less conscious distrust in the optimism of the future contained in the dominant ideology. (*ibid.*)

The aeolian mode differs from the phrygian in that the latter includes a flat second. Flat second modes, including the phrygian, are common in Spanish or Arabic music. Acoustically speaking, the minor second is considered to have the strongest dissonance of all twelve notes in the Western chromatic scale (Berry 1987, pp. 109–11), and feels particularly unstable in the bass registers. Cooke argues that the minor second represents 'unrelieved hopelessness', 'hopeless anguish' and 'despair' (Cooke 1959, p. 78). The phrygian mode is frequently found in industrial songs, for instance, in the bass ostinato of Flesh Field's 'Serene Image' or, with a minor sixth cap, in Wumpscut's 'Opening the Gates of Hell'. Similar phrygian inflections are also found in dystopian films, such as in *Tetsuo: The Iron Man*, which shares a repeated 1- \flat 2-7-1 motif with the original *Terminator* film (1984) when the Terminator is shot through a window at Tech Noir.

The phrygian has been called the 'austere' or 'severe' mode, and is often referred to by many Westerners as 'dark', 'heavy', 'sombre' or 'gloomy'.¹⁴ William B. Kimmel has shown that phrygian inflections are common to Western 'death' music, specifically as recurring elements in requiems (in Rosar 2001, p. 110). The semiotic connotations of industrial music, particularly in its tonality, seem closely related to the moods and tones of cyberpunk – despair for the future, darkness, anxiety and uncertainty, urban decay, and violence, fitting in to the wider themes discussed above. An examination of the music, then, could be argued to provide us with some clues as to how we are to interpret the irony in the texts, and vice versa.

Conclusion

It is perhaps this mood of alienation and anxiety that is the most important aspect of commonality between cyberpunk and industrial: an expression by what may be an increasing proportion of our society (if the success of *The Matrix* films are to be taken into consideration), an indication of an increased identification with feelings of dehumanisation or alienation, and anxiety towards the future. From the overwhelming evidence of the common ancestry in film, literature, art and music, we can deduce that similarities in the work are not merely coincidental, but rather that these artists are branches on the same tree, one sharing a lineage with the criticisms of the Dadaists, Burroughs, punks, and science fiction authors. It would be futile to develop a chicken-or-egg argument over the use of the techniques, symbolism and themes in industrial and cyberpunk. It seems more likely that a sharing of ideas flows two ways between the genres, and that by making reference to each other, the authors or artists are subtly directing readers and listeners towards another form of cultural expression which they may enjoy or identify with, and to which the artists and authors deem as relevant or related to their own work. For example, the largely disempowered music fans attracted to industrial music may be attracted to the outsider characters in novels that subsequently share a similar mood to that expressed by the music.

By comparing a body of literature with that of a musical genre that shares such similarities, we may be afforded greater insight into each. It may help us to develop an argument as to what are the most important elements in a body of work, or what distinguishes a work or a genre from others. For instance, there is a great body of work which now gets referred to as industrial, despite many stylistic differences: what holds the genre together is often the ideological basis behind the creation of the music, and the use of cyberpunk themes and motifs as an expression of this ideology.

Endnotes

1. Although 'non-musical' is perhaps not an ideal term, for the purpose of this paper it will refer to sounds created by instruments not originally designed or primarily intended for the purpose of producing sounds intrinsic to musical discourse.
2. Other influences include, for instance, futurism, Andy Warhol, performance artists like Stelarc and Survival Research Laboratories, and gothic horror.
3. See the description by Simon Ford in *Wreckers of Civilisation* (Ford 1999, p. 4.5).
4. See Thompson (1997) or Ford (1999).
5. Such heroes and outsider figures are not exclusive to science fiction, of course; horror, 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' (Walker 1994, p. 8).
6. 'Technocolonisation' is the term used by Andrew Ross, in Dery (1996, p. 250).
7. The connotations of this effect seem to be largely dependent on the context of the song's lyrics and musical parameters, rather than the voice itself, although there are specific connotations of, for instance, a narrow pitch range. Leeuwen has pointed out that anguish is characterised by an extremely narrow pitch range (i.e. close to a monotone), on a mid-pitch level (Leeuwen 1999, pp. 95, 172), while a completely monotone voice is common in machine-speech.
8. Cyberpunk and industrial could also be argued to sometimes have an underlying humour that helps to lighten this mood.
9. Although Cooke has been contested by some authors (see, for instance, Middleton 1990, p. 233), many of his ideas, while perhaps too generalised, remain indicative of some of the basic trends in the usage of such elements.
10. Cooke gives pages of references – including, significantly, the *Dies Irae* (e.g. the last trumpet in the *Dies Irae* of Verdi's *Requiem Mass*) (Cooke 1959, pp. 57–64).
11. Some have heard the minor third and sixth as less anguished, however; Sonnenschein suggests that the minor third has an elated, uplifting effect, and the minor sixth 'soothing, but delicate and sad' (Sonnenschein 2001, p. 121).
12. In fact, although there is no minor sixth in *Terminator's* most apparent melodic phrasing,

- there are minor sixths in the ethereal choir in the background during the theme song.
13. Perhaps made even more significant by synthesizers. Moore argues that synthesizers impose a kind of feeling of alienation by removing a sense of physicality – that they lack the human gesture of instruments like the guitar (he points to ‘air’ guitarists as an example) (Moore 1993, p. 136).
14. For examples, type the search terms ‘dark’ and ‘phrygian’ into Google.

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