

Uncovering the Apocalypse: Narratives of Collapse and Transformation in the 21st Century Fin de Siècle

By

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DECLARATION

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ABSTRACT:

This dissertation examines the idea of apocalypse through the lens of science fiction (sf) written during the current fin de siècle period. I have dated this epoch, known as the information era, as starting in 1980 with the advent of personal computing and ending in approximately 2020 when the functional limits of silicon-based digital manufacturing and production are expected to be reached. By surveying the field of contemporary sf, I identify certain trends and subgenres that relate to particular aspects of apocalyptic thought, namely, conceptions of the 'terror of history,' the sublimity of accelerated techno-scientific advance, the 'affective turn' in media-culture and posthuman philosophy. My principal method of inquiry into how the apocalypse is imagined or 'figured' in sf is the concept of hyperstition - a neologism (combining the words 'hyper' and 'superstition') coined by the Cybernetic Culture Research Unit (CCRU). Hyperstition describes an aesthetic response whereby cultural fictions – principally, ideas relating to apocalypse – are imagined as transmuting into material realities. I begin by scrutinizing two posthumanist works of theory-fiction (theory written in the mode of sf) by the CCRU and 0rphan Drift which anticipate immanent human extinction and imagine the inception of a new evolutionary cycle of machine-augmented evolution This sensibility is premised on the sociallydestabilising cycles of exponential growth that characterise information-era technological developments, particularly in the digital industries, as well as the accelerated human impact on the natural environment. Central to my argument is the romantic materialist philosophy of Deleuze and Guattari and their concepts of accelerationism, schizoanalysis and Bodies without Organs (BwO's). Their ontology is constructed around the idea that exponential rates of development necessitate a new aesthetic paradigm that ventures beyond philosophies of human access. The narrative of apocalypse, approached from this perspective, can be interpreted in catastrophic or anastrophic terms; either as a permanent ending or as the beginning of something radically new. Using hyperstition, I also investigate the sf of Russell Hoban, Michael Swanwick, Brian Stableford, Charles Stross, Dan Simmons, M. John Harrison and Paul McAuley to see not only how these authors interpret the concept of cultural acceleration, but also to identify common threads. Countering the catastrophic 'death of affect' postulated by theorists such as Jean Baudrillard and Paul Virilio with the anastrophic rejoinder of cyberdelic information-era countercultures, I conclude by investigating the new 'affective turn' in contemporary media theory. The works of theoretical fiction and sf that I investigate are informed, as I demonstrate, by the Situationist techniques of psychogeography, dérive and detournement, as well as by the literary tropes of 18th and 19th century fin de siècle Gothic and dark Romantic fiction.

SAMEVATTING:

Hierdie proefskrif ondersoek die idee van apokalips deur die oogpunt van wetenskap fiksie (wf) soos geskryf gedurende die huidige 'fin de siècle' tydperk. Ek dateer hierdie epog, bekend as die inligtings-era, as die tydperk wat in 1980 begin met die koms van persoonlike rekenaars en nagenoeg eindig in 2020, wanneer die funksionele limiete van silikon gebaseerde digitale vervaardiging en produksie na verwagting bereik sal word. Deur die veld van kontemporêre wf in oënskou te neem, identifiseer ek sekere neigings en sub-genres wat vergelyk met sekere kenmerke van apokaliptiese denke, naamlik: begrippe soos die 'verskrikking van geskiedenis', die verhewendheid van versnelde tegno-wetenskaplike vooruitgang, die 'emosionele omkeer' in media-kultuur en post-humanistiese filosofie. My primêre metode van ondersoek van hoe die apokalips voorgestel of 'beskryf' kan word in wf, is die begrip van hiper-bygelowigheid - 'n neologisme (samevoeging van die woorde 'hiper' en 'bygeloof') soos geskep deur die Kubernetiese Kultuur Navorsings-Eenheid (KKNE) en Nick Land, medestigter van die KKNE. Hiper-bygelowigheid beskryf die proses waarvolgens kulturele versinsels - hoofsaaklik opvattings met betrekking tot apokalips - in materiële realiteite omgeskakel kan word. Ek ondersoek ek twee post-humanistiese werke van teorie-fiksie (teorie geskryf volgens die wf metode) deur KKNE en Orphan Drift, wat inherente menslike uitwissing verwag en die ontstaan van 'n nuwe evolusionêre siklus van masjien-toename voorstel. Hierdie proses is gebaseer op die sosiaal-destabiliserende siklus van eksponensiële groei wat kenmerkend is van die inligtings-era se tegnologiese ontwikkelinge, veral in die digitale industrie, sowel as versnelde menslike impak op die natuurlike omgewing. Die kern van my beredenering is die goties-materialisties-teoriese standpunt soos deur Land ingeneem, sowel as die romanties-materialistiese filosofie van Deleuze en Guattari. Hierdie gevalle van neo-materialistiese (of objek-georiënteerde) filosofië word toegelig deur 'n apokalipties-teoretiese basis bekend as akseleerasionisme. Hierdie uitgangspunt is ontwikkel rondom die idee dat die eksponensiële tempo van ontwikkeling 'n klimaks sal bereik in 'n evolusionêre 'wipplank punt' en dat 'n nuwe estetiese paradigma nodig is wat dit bokant die filosofie van menslike vermoë kan waag sodat daar oor hierdie waarskynlikheid geteoretiseer kan word. Die beskrywing van apokalips, soos vanuit hierdie oogpunt beskou, kan vertolk word in beide katastrofiese of anastrofiese terme of as 'n permanente einde of as die begin van iets wat radikaal nuut sal wees. Deur gebruik te maak van die hiperbygelowigheidsteorie, wat 'n onderafdeling is van akseleerasionisme, ondersoek ek WF van Russell Hoban, Michael Swanwick, Brian Stableford, Charles Stross, Dan Simmons, M. John Harrison and Paul McAuley ten einde vas te stel hoe hierdie skrywers die konsep van kulturele akseleerasie interpreteer, maar ook om gemeenskaplike leidrade te identifiseer. Met teenargumentering ten opsigte van die katastrofiese 'dood van affek' gepostuleer deur teoretici soos Jean Baudrillard en Paul Virillio met die anastrofiese samevoeging van kuberdeliese inligtings-era-kontra-kulture, ondersoek ek die nuwe 'gemoedsomkeer' in kontemporêre mediateorie. Die werke van teoretiese fiksie, sowel as baie van die ander gevalle van wf wat ek ondersoek en soos deur my gedemonstreer, word toegelig deur Situasienistiese tegnieke van psigo-geografie, dérive en detournement, sowel as deur die literêre menigtes van die 19de eeu 'fin de siècle' donker Romantiese en Gotiese fiksie.

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Cover image by Mer Roberts/Orphan Drift, taken from Meshed: digital unlife catacomic

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Introduction – Figuring the apocalypse

Whenever a century or historical epoch draws to a close, a sense of anticipative excitement or despair about impending change invariably pervades cultural narratives. This seems particularly applicable to the current historical epoch when, as I will argue, a sense of unlimited possibility has become tightly interwoven with a sense of linear closure in western cultural and literary narratives. My thesis will examine science fiction (sf) narratives about history, science, popular culture and contemporary philosophy that describe how an erosion of confidence in the future, set against dreams of technological apotheosis, have together engineered a culture of apocalypse. In doing so, I will consider how the contemporary sense of apocalypse has been read in terms of closure as well as renewal.

Apocalypse, according to the Oxford English dictionary on historical principles, is derived from the Greek apocalypsis, which means "uncover" (1980:86). Representing "revelation" or "disclosure," the term has obvious scriptural connotations in its reference to the biblical "revelation of the future granted to St. John of Patmos" (1980:86). The meaning of the word apocalypse, however, even in the biblical sense, has come to be closely associated with the destruction and transformation of the physical world. It is this motif of closure and transformation that I wish to investigate through a discussion of the sf of the late 20th and early 21st centuries. In particular, my aim is to examine ways in which the apocalypse is imagined as being engineered, articulated and culturally brought into being in the work of a series of sf writers. Coming at the end of the seismic socio-political turmoil of the 20th century, the current fin de siècle or fin de millénnium represents a milieu of accelerated cultural transition and uncertainty - a time acknowledged to be one of unparalleled geopolitical crisis. For the purposes of my research, I have dated the current fin de siècle period as starting in 1980 with the onset of the digital or information era and ending in roughly 2020 when the functional limits of silicon-based digital production will, in all probability, have been reached. To describe the sense of apocalypse as a fin de siècle phenomenon invokes a sense of the old order ending and new, radical departure. This applies to the present fin de millénnium, as much as it did to the transition into the tumultuous 20th century. Today the spectre of finality and ending seems to permeate the cultural mood more pervasively than it did one hundred years ago. Nevertheless, the previous fin de siècle's strategies of literary Decadence and urban Gothic horror have found, as I will argue, a new lease of life. Similarly, Gothic and Romantic literary metaphors of the sublime, dating from the 18th century fin de siècle are, arguably, of equal relevance. Throughout my thesis I will

demonstrate how contemporary authors and theorists have used and abused these *fin de siècle* literary devices to figure the present sense of apocalypse.

1980 can loosely be taken as the beginning of the information era when digital culture began to enter the popular and academic imagination with the success of personal computers (such as the Commodore 64), the release of movies such as *Tron* (1982) and *War games* (1983), as well as the publication of William Gibson's *Neuromancer* (1984). Technological advances in information technologies began, during this period, to radically change lifestyles around the world and spawn new industries based around personal computers and cellphones. The information age also marks, in terms of futurology, an era of unlimited technological possibility referred to by Alvin Toffler as the 'third wave' or post-industrial society. Toffler has also used the term 'future-shock' to explain the cultural trauma caused by this transition – a redolently apocalyptic catchphrase that has informed an array of cultural discourses. The rise of 'cyber' culture as well as that of mediated consumer culture lies at the heart of contemporary critical debates around postmodernity.

Manuel Castells, in a trilogy of influential books, The information age: economy, society and culture (published between 1996 and 1998), coins the term 'the space of flows' to reflect the condition of this postmodernity and investigates the intersection of consumer and cyberculture in the emerging 'networked' global society. Castells explores how this space of flows is displacing the 'space of places,' introducing a global culture of 'real virtuality' that is, in turn, characterised by the phenomena of 'timeless time' and 'placeless space.' "Timeless time ...the dominant temporality in our society, occurs when the characteristics of a given context, namely, the informational paradigm and the network society, induce systemic perturbation in the sequential order of phenomena performed in that context," he writes (1996:464). Examples of such perturbations that, for Castells, induce future shock are, amongst other phenomena, the effects of human-induced ecological catastrophe, population growth and resource scarcity, the effect of global financial turmoil on local communities, the increased 'flexibility' demanded from workers, the collapse of permanent employment as well as the exponentially rising costs of living. "The space of flows ... dissolves time by disordering the sequence of events and making them simultaneous, thus installing society in an eternal ephemerality," he notes (1996:467).

In short, anything can happen at any time, it can happen very rapidly, and its sequence is independent of what goes on in the places where the effkects are felt. 'Desequencing' is another facet of Castells' conception of postmodern 'timeless time.' As David Bell explains, "desequencing" explains the manner in which the media presents consumers "with a montage

of instants wrenched from temporal contexts ...disassembling and reassembling the past, present, future" (2007:75). This "mediated bricolage" conjures up "a perpetual present" that makes "the future arrive almost before we've thought of it," notes Castells (1996:131). This postmodern phenomenon seems to have ushered in a permanent and apocalyptic crisis mode that Castells, who avoids styling himself as a prophet of catastrophe, is understandably reluctant to engage with. The theorists and writers whose work I have chosen to explore are, however, not so disinclined. It is the claim of this thesis that they succeed in exploring this mode of crisis in ways that avoid the pitfalls and tirades of the all-too-familiar and doleful postmodern jeremiad.

Today, Hollywood churns out fictional 'time-travelling' situations of macro-scale disaster in the near future such as the Terminator and Matrix sagas. These imaginative apocalyptic scenarios are underscored by the 'reality' of the relentless media spectacle and its destabilising information montage. In one of his rare bleak moments Castells acknowledges that "humankind's nightmare of machine-control has become a reality - not in the form of robots that eliminate jobs or government computers that police our lives, but as an electronically based system of financial transactions" that mediate every aspect of social and personal existence (Castells cited in Bell, 2007:61). The increasing instability of this financial system has been well documented by economists such as John Gray in False dawn (1998) and Black mass (2007). An apocalyptic air, not only of instability but of resignation, even seems to dominate popular media debates around the issues of climate change as a result of accelerated technological manufacture and production. In these debates, as critic Stephan Skrimshire notes, rhetoric about "tipping points" or "points of no return," act as "something of a smokescreen ... suggesting that (if a particular timeframe is exceeded) the fight is over" (2010:220). Clearly, however, there is something to be done. In the indeterminate period of waiting and enduring before the scripted end, there is a dire urgency to consider the manner in which the apocalypse is being culturally produced.

I have chosen the genre of science fiction (sf) as a principal mode of enquiry into the cultural production of apocalypse because, by their very natures, science fictions are 'paradigm jumpers' that attempt to venture beyond the limits of the known. Furthermore, by definition sf is a form of apocalyptic literature directly concerned with motifs of crisis, destruction, revelation and renewal (Clute & Nicholls, 1999:313). Sf is particularly relevant to the state of philosophical inquiry during the current *fin de siècle* when new forms of thinking such as speculative realismⁱⁱ and object orientated ontologyⁱⁱⁱ have begun to style themselves as science-fictions. For the new philosophical movements of the *fin de millénnium* the literary

concerns of sf have served as a kind of template. As theorist and technological historian Erik Davis notes, French post-structuralist philosophers Gilles Deleuze and Félix Guattari's *A thousand plateaus* (1987) has indelibly marked a generation of new cybercultural theorists (1994:1). By frequently "dipping into sf" to elucidate their ontology, writes Davis, Deleuze and Guattari are able to "extrapolate the conceptual imagination into a world transformed by science and technology" (1994:1).

In the light of scientific advances and the technological encroachments enabled by pervasive digitisation during the information era, the combined work of these theorists has served to prime both philosophy and literary theory with the apocalyptically-flavoured questions of transformation and termination raised by writers of sf. These questions, writes Davis, relate to one of the central epistemological concerns of contemporary philosophical inquiry relating to being, namely, "how do we conceive of being when the distinction between organic and machinic dissolves, when reality is folded into virtuality, [when] the body is morphed by technology, and [when] computer networks digitise knowledge?" (1994:1). As "science-fictional theorists," Deleuze and Guattari "construct theories of fluid identity" in the age of information, notes Scott Bukatman (1993:326).

Simultaneously, via a discourse of excess and transgression, Deleuze and Guattari suggest novel ways of exploring embodiment and affect in a world transformed by techno-science. For these thinkers and their object-orientated descendants, postmodern relativism and philosophies of human access (or 'correlationist' philosophies - a term coined by the speculative realist philosopher Quentin Meillassoux) are impediments to the forging of new aesthetic paradigms that are able to move beyond the narrow catastrophic readings of the spectre of apocalypse. "Correlationism holds that we cannot think of humans without [the] world, nor [the world] without humans, but only of a primal correlation or rapport between the two," writes speculative realist philosopher Graham Harman (2008:333). He notes the link between speculative realism and sf, noting that, as in sf, the object and 'protagonist' of speculative realist texts is the *novum*, namely, novelty or rupture (2008:333). This *novum* is arguably sf's central pursuit. As author Bruce Sterling notes, "in an era of reassessment, of integration, of hybridized influences, of old notions shaken loose and reinterpreted," contemporary sf "has little patience with borders" - not just geographical or cultural, but literary, theoretical and ontological; its writers prize "the bizarre, the surreal, the formerly unthinkable" (1986:xii).

One interesting angle on the production of apocalypse comes from the Cybernetic Culture Research Unit (CCRU) and Orphan Drift (OD) who have collectively coined the term hyperstition (a neologism combining 'hyper' and 'superstition') to describe the process whereby fictions are transformed into realities. Free-market capitalism, described by Gray as a "secular religion" based on the quasi-religious notion of historical and economic perfectibility achieved through disaster (2007:105) is, according to the CCRU, a potent example of a system prone to hyperstition (1999:1). The hyperstitional fictions and theories produced by the CCRU and their cybercultural affiliates such as 0D, Sadie Plant and Nick Land are the subject of my first chapter, but will permeate the entirety of my thesis, forming the backbone of my exploration into the contemporary culture of apocalypse. Furthermore, I will consider hyperstition as an aesthetic engagement or sensibility that engages with the horror and sublimity of technological proliferation. Hyperstition, I will argue, is useful for describing certain contemporary cultural tendencies that 'figure' the apocalypse, particularly when reading many science fictions (instances of actual literary sf as well as instances of theory-fiction) written during the information era. Described by Land "as a science-fiction of self-fulfilling prophecies" (2009:1), hyperstition describes the mechanisms of a positive cultural feedback circuit of 'fictions' that climax in apocalypse. This mechanism is the central concern of the many subgenres and examples of sf that I will be analysing throughout my thesis, as well as the instances of theory-fiction that I will engage with in my first chapter. The concept of hyperstition, writes Land, is like a "Chinese puzzle-box," opening to reveal a bewildering array of "sorcerous" cultural interventions in the world (2009:1).

Hyperstition has four elements, outlined by 0D and the CCRU in *Meshed: digital unlife catacomic* (1999:3) that, taken together, describe the cultural production of apocalypse. The first element, according to the *Catacomic*, is that it constitutes "an element of effective culture that makes itself real" (1999:3). The myth of progress that drives history towards the realisation of an apocalyptic purpose is one powerful example of a self-fulfilling prophecy. The trends and hype cycles that drive not only global money markets but history itself are more instances of the first element of hyperstition. "Belief in this context is passive," observes Land, noting that it is "hype [that] actually makes things happen" by engendering very real socio-economic and environmental consequences (2009:1). Fictions, in other words, do not require that humans actually believe them, but simply that they 'buy into' them. The fictions of capitalism, for example, do not require active belief in its principles, merely acquiescence through acts of consumption. It is this basic affirmation that enables capitalism to make its mythos real. One potent example of a hyperstition that drives the space of flows is Moore's law, which has served as an industry benchmark in the semiconductor industry (the 'engine' of the information era) for the last few decades.^{iv} The uncanny cultural implications of this

hyperstitional mechanism animate the sf of the 'cybergothic' authors whose work I will be exploring in my third chapter.

The second element of hyperstition, according to the Catacomic, is that it is a "fictional quality functional as a time-travelling device" (1999:3). Apart from describing a literary tool for imaginative time travel that has been utilised by sf and fantasy authors since the inception of the genre, this element also expresses how the contemporary human imagination has been hijacked by communications and entertainment media that imagine and produce a future on humanity's behalf. It also illustrates how hyperstitions, like the 18th century Enlightenment ideology of progress or the 1st century religious conception of apocalypse, despite their geohistorical particularity, have become transmuted into perceived truths that have an influence on the global stage. The time-saving ploys of technological devices that promise to free networked humans from the burden of linear time, or the disturbance of 'missing time' via absorption in electronic entertainments, are also implicated. These space-time compressions intersect in interesting ways in sf, producing metaphors of ancient aliens, ungraspable timespans, quantum events and alternate histories, all commingled with scenarios of linear closure, cyclical repetition or renewal. Throughout this thesis, I will consider ways in which the technologically-mediated and hyperstitional unfixing and destabilisation of linear historical time can have both destructive and creative functions.

The third element of hyperstition, according to the *Catacomic*, is that it is a "coincidence intensifier" (1999:3). The global system of capitalism is a good example of a "zone of intensity" (1999:3) or an exponential cycle of resource consumption conjured into being by the fiction that "nature is endlessly exploitable" and that the "only type of possible reform" (social and otherwise) is that which "takes place along market lines" (Jones, 2009:323). In effect, capitalism is no longer a linear process. It constitutes an enormous positive feedback system, engendering further and faster change and endlessly amplifying the scope of that change. Paul Virilio likens the contemporary situation to childhood games of spinning round, round and round (2000:31). Existing in a constant "acceleration of speed," the "childlike" contemporary human exists, writes Virilio, in "a sort of luminous chaos" in which "sensations of vertigo and disorder" have become "sources of pleasure" (2009:22). Jean Baudrillard, whose theoretical stance I will explore, refers to information density as an "ecstasy of communication," a bleak and morbid fascination with technological simulation, hyperreality and spectacle (1983b:131). Contrary to Baudrillard's assurance (1993:133) that contemporary humans lack the capacity to undertake such a thing, I will investigate the possibility of moving this morbid ecstasy to a higher ground from where it can be viewed more positively.

This endeavour, as I will demonstrate, involves coming to terms with the radically subversive and uncanny potential of both ecstasy and information.

The fourth element of hyperstition, according to the Catacomic, is that it constitutes "a call to the Old Ones" (1999:3). These 'Old Ones' can be associated with the 'cosmic horror' of the early 20th century writer of Gothic sf, H.P. Lovecraft, v the dreaded otherworldly subjects of myth and Gothic fantasy, as well as the inhuman forces and complexities that science is revealing about the 'world-in-itself.' These perspectives, as I will demonstrate, are explicitly built into the collective and individual work of 0D and the CCRU. As they argue, it is through the number-crunching capacity of our processors and the vision-enhancing capabilities of our microscopes, telescopes and screens that the mythical Old Ones have again been uncovered – a scenario that I will explore throughout this thesis. Without doubt, our 'vision machines' and information processors have unveiled the immense and un-human time-scales of cosmic, geological and biological evolution, the existence of dark materials and energies, and the possible existence of dimensions outside of the four traditionally recognised. These revelations concern the ever-feared forces of destruction (entropy), change and mutation, and present – as I will demonstrate – a dire challenge to anthropocentric philosophy. They also provide imaginative grist to the mill of the sf writers and new-materialist theorists whose work I will be exploring throughout. Massive extinction events have left an indelible mark in the evolutionary record, writes biologist Andrew Jones, driving the evolution of complex biological life (2009:317). Contemporary science reveals that the equilibrium and stasis of life has been punctuated by cosmic and geological catastrophes on as many as twenty occasions, five of which have been truly catastrophic (2009:317). Today, writes Jones, human technological and industrial activity is bringing about the sixth major biospheric extinction (2009:317). In this sense, humans have not only called out to the Old Ones, but have themselves become a mythic force of apocalyptic destiny, not just our own, but also that of other life-forms that share the Earth with us.

Humans are, in effect, the product of a long process of cultural evolution shaped by our relationship with technologies. This process, beginning 3 million years ago when our primate ancestors picked up the first stone tools, has accelerated over time. At first, the accretion of technological layers was slow, picking up pace 10,000 years ago when agriculture was invented. Over the last one hundred years, this relationship has intensified dramatically and, during the last 30 years it has stepped up so alarmingly that the combined impact of humanity on the planet is now the equivalent of an asteroid collision (Wright, 2005:30). Under such conditions of accelerated change and environmental alteration, the human species ostensibly finds itself in a permanent state of future-shock. Culture – a set of speculative beliefs and

practices or myth systems – produces very real physical consequences. Driven by the myth of progress, the human impact on the planet has multiplied by a factor of forty since the previous fin de siècle (Wright, 2005:30). This alarming acceleration has been driven by the economic fiction that nature is an endless cornucopia of resources available on demand. An immense global information super-highway has been conjured into being, adding a new dimension to the already existing urban super-sprawls and artificial cultivation systems that are, in turn, accelerating in range and complexity. This culturally figured stratum, referred to by Deleuze and Guattari throughout their combined oeuvre as 'the mechanosphere' (namely, the total sphere of human industry and culture), now covers the earth like a blanket, smothering the biosphere and poisoning the atmosphere and hydrosphere. The outcome of these and other apocalyptic scenarios has also provided ample ammunition for sf writers whose work speculates about the end or transformation of humanity and the limits of human knowledge. In the pages that follow I will examine ways in which the culture of apocalypse and its promise of potential transcendence or catastrophic endings are being produced in informationera science-fictional texts as well as in contemporary works of popular science, literary theory and philosophy. Hyperstition describes this fin de siècle/ fin de millénnium conjunction of the terror of collapse and the sublime promise of metamorphosis.

Capturing the apocalyptic mood of *fin de millénnium* cyberculture, Donna Haraway writes in her *Cyborg manifesto* that "our time is a mythic time" (1991:30). Contemporary humans, in her view, have become "chimeras" who are possessed by or who dream of being possessed by technology (1991:30). Taken as a whole, Haraway's manifesto takes a very different position to that of 0D and the CCRU. Whereas the *Cyborg manifesto* is ultimately concerned with demythologising the figure of the human-machine (or cyborg), the CCRU and 0D attempt to mythologise the future-shocked and speed-driven nature of contemporary human-machine interfaces by rendering them in fantastical and supernatural terms. This move, as I argue in my first chapter, is part of an intentional strategy of inversion and subversion that is in keeping with the motivation of sf as a discursive practice that ranges widely over many themes, positions and temporalities.

David Ketterer has defined sf as a series of cognitive experiments that facilitate the viewing of humanity from radically new perspectives (cited in Clute & Nicholls, 1999:314). Alvin Toffler has noted that sf presents the reader with alternative worlds and visions, thereby widening the "repertoire of possible responses to change" (cited in Clute & Nicholls, 1999:314). Those examples of the genre that reflect the mechanisms of hyperstition are particularly well suited, I argue, for charting the unconscious motivations, the epistemic

'basement of thought' and the aesthetic sensibility that characterises the cultural output of the information era.

Sf is that species of storytelling native to a culture undergoing epistemic changes implicated in the rise and supersession of technical-industrial modes of production, distribution, consumption and disposal: which is to say, [it is] the epistemic fiction of Western-scientific culture, the culture of the object. (Damien Broderick, 1995:64)

In The order of things (1970) Foucault suggests an archaeology of knowledge or the periodisation of history by formulating the concept of the episteme as a basis for enquiry. vi Broderick cites of author Samuel Delany who notes that "the episteme is the structure of knowledge read from the epistemological textus when it is sliced through (usually with the help of several texts) at a given cultural moment" (1995:64). My aim is, with the aid of numerous fictional and theoretical texts, to undertake a type of 'archaeology' of contemporary apocalyptic discourses, originating from the present cultural epoch when humanity, as author J.G. Ballard writes, finds itself living in the pages of a sf novel (2011:1). In mapping the discursive practices of the information age, I intend to utilise post-Foucaultian strategies for periodisation and discursive analysis, as suggested by Deleuze and Guattari and developed by the CCRU and other cybercultural theorists. Although they operate on very different levels of analysis and historical register, epistemes share some communality with the CCRU's concept of hyperstitions - cultural formulations (or productions) that characterise or inform a particular historical period while defying easy articulation or revelation – precisely because they operate at the 'basement' or street level of culture. Less rigid than Foucault's epistemes, however, hyperstitions are, as I will argue, informed by what Haraway has termed the "playful perversions" of information-age counter-cultures (1991:31). The nature of these counter-cultural perversions, which inform my own methodology, will be fully explored.

Falling outside the parameters of conventional philosophy, the concept of hyperstition subscribes to what Deleuze and Guattari have broadly termed 'schizoanalysis.' Unlike conventional philosophy, with "its predeliction for Platonic-fascist top-down solutions," explains Land in *Meltdown*, schizoanalysis avoids seeing ideas as static (1997:2). Rather, it favours an approach that sees ideas as diagrams that are "additive rather than substitutive, and immanent rather than transcendent: executed by functional complexes of currents, switches and loops, caught in scaling reverberations" (1997:2). Primed to create what Deleuze and Guattari have termed Bodies without Organs (BwO's) – namely metaphorical exploration devices of the kind crafted by engineers, artists and shamans to map new cognitive territories – schizoanalysis denotes a technique that can be utilised for analysing hyperstitions. The

BwO, like a hyperstition, indicates an inchoate flux of deterritorialised energy, a speeding up. After all, the investigation and crafting of novel directions for culture, implied by BwO's and other types of schizoanalysis, necessitates an investigation of the very mechanisms of cultural overdrive or meltdown. These ideas will be fully explored in my first chapter, along with the redolently hyperstitional doctrine of accelerationism, which Deleuze and Guattari first aired in the first part of their seminal 'Capitalism and Schizophrenia' series, *Anti-Oedipus* (1972).

My first chapter will discuss the sf-informed theory-fictions generated by the CCRU and 0D during the 1990s. I will consider how these collectives have reworked the revolutionary impetus for 'making new' conceived of by the Situationist International. Part of this strategy, as I will show, entails the utilisation of Situationist textual strategies such as dérive (random drift or wandering) and détournement (plagiarism combined with recontextualisation, the purpose of which is to create new meaning) to craft a science-fictional map of cyberculture. In addition, I will indicate how these collectives have reworked some of Deleuze and Guattari's theories to measure the impact of pervasive communications networks on the human body, the human self, and the contemporary sense of being. Deleuze and Gauttari are important theorists as regards ways of reading sf. Advocating new approaches to literature, theory and science in the context of pervasive technological acceleration, environmental degradation and socio-economic change, Deleuze and Guattari extend the genre of sf to include discursive practices originating from a wide array of contemporary fields (see, for example, 1988:248-252). This science-fictionalisation of information-age theory and practice, in particular, has informed my methodology throughout and it is, as I will demonstrate, evident in many of the examples of sf and theory fiction that I will be analysing. Countercultural theorists such as the CCRU have even described A thousand plateaus itself as a work of sf (Reynolds, 2008:174) and the work of this collective, along with that of 0D, constitute attempts to generate theory in the register of sf adjacent to strategies suggested by these theorists.

My second chapter, counter to the position I explore in chapter 1, presents a different sense of the apocalypse by surveying what Frederick Jameson terms 'apocalyptic sf.' Steeped in "increasingly popular visions of total destruction and of the extinction of life on earth" (Jameson, 2007:199), this breed of contemporary sf offers no redemptive vision to counter the bloodstained cycle of historical cause and effect. The perceived failure of socialist utopias, as well as the growing menace of environmental and socio-economic catastrophes, have led to what Jacques Derrida describes as a general sense of "an apocalypse without vision" (cited in Kumar, 1995:206). To chart this perceived historical malaise – the pervasive sense that

history answers to no transcendent rationale – I will refer to three key examples of apocalyptic sf written by Russell Hoban, Michael Swanwick and Brian Stableford respectively.

My third chapter returns to sf that reads the apocalypse in more hopeful terms by celebrating the evolutionary potential of accelerated techno-scientific advance. Here I will refer to examples of a sub-genre of sf that I have termed 'cybergothic.' This subgenre, as I will demonstrate, mixes the materialist language of science with 18th and 19th century *fin de siècle* Gothic and dark Romantic tropes (such as a focus on the sublime and *horror vacui*, or the horror of infinity) to reflect on the utopian dream worlds promised by contemporary scientific progress in a language infused with supernatural terror. Referring to examples of sf written by Charles Stross, Dan Simmons and M. John Harrison I will chart the forging of an 'apocalyptic sublime' that takes delightful horror in the future shocks and inhuman revelations of contemporary techno-science. I will attempt to show how cybergothic sf restages dark Romantic and Gothic sensibilities, which historian Tim Blanning associates with "absolute inwardness" and "a culture of feeling" (2011:185-186). I will also reflect on cybergothic sf's consideration of the affect-laden ontological abysms that contemporary scientific investigation is opening in the cultural imagination.

In my final chapter I will investigate apocalyptic strains in contemporary media culture by contrasting the catastrophic 'death of affect' perceived by theorists such as Baudrillard and Virilio with the rebirth of affect conceived of by information era 'cyberdelic' countercultures. I will argue for the relevance of new affects-based theories that read the accelerationist tendencies of postmodernity in less negative terms. I will demonstrate how the arguments and positions related to a new sense of affect are reflected in a post-cyberpunk 'biopunk' novel written by Paul McAuley, as well as the work of fashion theorist Carolyn Evans, industrial designer Anthony Dunne and sonic theorist Steve Goodman. The apocalyptic premises of 1990's cyberdelic counterculture will also inform my attempt to track the articulation of the 'apocalyptic affect' in contemporary sf and theory in media culture.

Approaches to literature

Joan Hawkins defines theoretical fiction, or theory fiction as experimental theoretical explorations in which "theories [themselves] function as characters" or "form an intrinsic part of the narrative" (2001:1).^{vii} In the mode of theory fiction, writes Hawkins, "theory and criticism themselves are fictionalized" (2001:1). In some readings of sf as "speculative fiction," as Farah Mendlesohn writes, the "idea functions as the protagonist" and the "thought

experiment functions as metaphor" (2003:3). Mendlesohn suggests that in sf, theory and speculation work as both "the crowbar with which we break open the universe" and, on an aesthetic level, as "a matter of sublime beauty" (2003:3). Sf, as Mendlesohn points out, is read in a very specific manner in that, as with theoretical fiction, speculation itself defines and determines the narrative framework. In this regard, the surface detail provided by the authors and the hypothetical technological life-worlds they conjure into being, are of critical importance, not only to ways in which science-fictions are read and understood, but also in terms of their relation to new modes of thinking. As Sterling notes, contemporary sf authors apply an "intensity of vision ... a telling use of detail, [a] carefully constructed intricacy," taking ideas and "unflinchingly push[ing] them past the limits" (1986:xii). Throughout my thesis, I will pay particular attention to surface detail, in terms of its aesthetic relation to the speculative 'outside' of thought as well as its relation to what I have taken to be the sciencefictional condition of apocalyptic postmodernity. In reflecting this condition, notes Sterling, sf "favours crammed prose: rapid, dizzying bursts of novel information [and] sensory overload that submerges the reader in the literary equivalent of the [heavy-metal] 'wall of sound" (1986:xiii).

Bukatman suggests that we cannot overlook the critical importance of sf to the postmodern ontology of the "dataist" or "information era" when the subject has been imaginatively reconstituted, having been "broken down in the zones of cyberspatial simulation" (1993:180). The "general paraspatial configurations" of the genre of sf," as he continues, "deconstruct the transparent configurations of language and so refuses the subject a fixed site of identification" (1993:180). "A number of science fiction writers," argues Delany, "posit a normal world – a recognizable future – and then an alternate space, sometimes largely mental, but always materially manifested, that sits beside the real world, and in which language is raised to an extraordinarily lyric level." In this "linguistically intensified paraspace," he continues, "conflicts that begin in ordinary space are resolved" (1988:31).

The genre of sf is the ideal vehicle for mapping contemporary apocalyptic undercurrents. According to sf critic Leslie Fiedler, sf constitutes a body of speculative literature that describes "the myth of the end of man [or] the transcendence or transformation of the human" (cited in Clute & Nicholls, 1999:313). According to Louis Parkinson Zamora, novelists who employ the metaphor of apocalypse are less likely to focus on standard literary motifs (such as "the psychological interaction of their characters") than on "the complex historical and/or cosmic forces in whose cross-currents those characters are caught" (1989:3). Although Zamora focuses primarily on examples of magical realism, her reading of apocalyptic literature emphasises the need for a novel mode of analysis.^{ix} This mode needs to take into

consideration the "acute sense of temporal disruption and disequilibrium [that] is the source of, and is always integral to, apocalyptic thinking," while also considering motifs of "crisis ... cleansing ... and radical renewal" (1989:10). In the apocalypse-orientated sf I will be analysing this important sense of disequilibrium and radical renewal is particularly suggested, as I will demonstrate, by the overwhelming opulence of surface detail, the metamorphic potential suggested by the confluence between hyperbolical storyline and extravagant scientific speculation, as well as by the uncanny atmosphere conjured into being by the richness of this overlap.

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¹ Manual Castells' monumental trilogy collectively known as The information age: economy, society and culture attempts to describe the shifting power-relations of the information age. Over the course of The rise of the network society (1996), The power of identity (1997), and End of millennium (1998), Castells proposes that 'real virtuality' has become the defining culture of the 'networked' era just as 'informationalism' has become its defining socio-economic characteristic. Castells' analysis is primarily driven by his hypothesis of a newly emergent society. "A new society emerges when and if a structural transformation can be observed in the relationships of production, in the relationships of power, and in the relationships of experience," he writes in final volume, summarising his central and defining theme (1998:340). This theme is premised around the central idea that culture is primarily virtual as it has always been defined by systems of communication. Radical transformations in communication technologies therefore portend radical change in the virtual continuum of culture. In the first volume, Castells analyses the changing relationships of production in the global economy and the changing patterns of labour. For Castells, the emerging 'network' is the primary feature of the new era. In the second volume, Castells analyses the changing and complex relationships and crises of power, namely that of the multinational corporation versus the collapsing nation state as well as the related crisis of political democracy and social groupings versus newly articulated individualities and identities. In the third volume, Castells analyses some important effects of the transformations already covered in the first two volumes, namely, the demise of the Soviet Union, the growth of the fourth world (of excluded regions and social groups) as well as the emergence of a global criminal or blackmarket economy. It is significant to note that until the recent penetration of cell-phones into rural parts of Africa, Asia and South America, Castell's 'fourth world' may well have denoted large parts of the rural global population. This trend, however, has shifted dramatically in the early 21st century as cellphone networks, mobile computing platforms and the internet have made significant inroads into these previously excluded areas.

ii The principle proponents of speculative realism are Iain Hamilton Grant, Ray Brassier, Graham Harman and Quentin Meillassoux. Although Brassier is not entirely comfortable with the term, all these philosophers are united in their opposition to 'correlationism,' namely the belief that all existence is reducible to the human experience of existence. As Harman remarks, "to say that we can neither think of human without world nor world without human, but only of a primal correlation between the two, is a false option that amounts to a shifty form of idealism ... idealism with a 'realist alibi'" (2011:1). Although their viewpoints are complex, I will risk a brief synopsis of each theorist's main idea. Brassier can be said to support a form of radical nihilism that urges philosophers to confront the fact of a universe utterly indifferent to human meaning. Grant upholds that nature has a life beyond that conceived of by humans and has attempted to resuscitate Schelling's materialist vitalism in order to rescue nature from the category of the inert and mechanical. Meillassoux is opposed to 'finitude,' namely the idea that absolute knowledge of any kind is impossible. Harman is opposed to what he terms the "correlational circle," namely that one cannot think "the unthought," or that "to think thingsin-themselves converts them into things-for-us" (2011:1). Taken together, the speculative realists rally against correlationism in favour of the great 'outside,' claiming against theorists as varied as Kant, Derrida, and Marx, that there is a world independent of the human mind and its attempts to rationalise the cosmos in terms of linguistic, cultural or economic forces.

iii Object orientated ontology is a term utilised by theorists as diverse as Graham Harman, Timothy Morton and Levi Bryant. It can even be extended to include philosophers such as Bruno Latour, Alfred North Whitehead and theorists such as Steven Shaviro. Proposing, as Shaviro explains, that the world is made up primarily of individual entities of divergent scales that are irreducible to only their relations with one another, the object-orientated thinker grants a special role to aesthetics (defined as a primordial form of relation and interaction) as a way of representing the interaction of objects with one another (2010:1). This aesthetic relation is arguably one way of approaching 'unthought' and bears a striking resemblance to the 'language-twisting' utilised by Amazonian shamans in their approach 'forces' in nature that are not covered by ordinary human language or systems of correlation. This technique, as a shaman explains to anthropologist and shamanic scholar Jeremy Narby involves 'skirting around' these entities or concepts via a type of aesthetic allusion (see 1998:63). In the literary genre of sf, the novum is typically entertained by wedding the critical mode of thought usually associated with science with the mystical and visionary mode usually associated with the metaphysical. Borrowing from sf, Haraway in her Cyborg manifesto suggests a type of oxymoronic language to deal with the tangled contradictions and paradoxes and "perverse shifts of perspective" involved in cyborg ontology (1991:154).

iv Proposed by physicist, chemist, computing pioneer and Intel co-founder Gordon Moore in 1965, Moore's law proposes "that the processing power of computer chips increases exponentially over time," writes computer scientist Martyn Amos (2006:63). This 'law,' which began as a generalised "rule of thumb," has since become "the standard industry benchmark for the complexity of integrated circuits [and] the dominating principle underlying chip design" (ibid). Stating that "every eighteen months ... the number of components that can be crammed into an integrated circuit doubles," Moore formulated the 'law' as a speculative prediction based on his own experience as the co-inventor of the integrated circuit in the early 1950's. This "approximation" is the prime example of how speculative hype can be transformed into a reality, becoming a coincidence intensifier (of accelerated technological development, in this instance) and a 'time-travelling device' that, on the level of cultural perception and technical innovation, literally 'produces' or 'figures' a future. Adopted as an industry benchmark in 1970 when computing devices were still room-size, it has since driven intense competition between rival manufacturers, resulting in exponentially increasing complexity, miniaturisation and processing capacity (ibid). Moore, notes Amos, is directly responsible for the onset of the 'digital' or information age and his 'law' acts as its main driver. The "digital revolution," which was made possible by the industry's push keep up with Moore's law, he continues, "is thought to be one of the most significant events in history" (2006:66). Without it, "the Internet would not exist," nor would "modern computing, communications, manufacturing and transport" (ibid). Simultaneously, this 'law' will be directly responsible for engendering the next era of technological innovation, in which there will be a shift away from building processing devices premised solely on electronics and standard physics towards a computing platform premised on biochemistry (i.e. molecular or genetic engineering) and quantum processing (2006:82). This shift will become necessary by 2020 when silicon based computing will have reached its functional limits, requiring manufacturers to invest heavily in developing next generation computing platforms in order to keep up with consumer expectations and competition from rivals (ibid).

- ^v The early 20th century writer of 'cosmic horror' or 'weird sf,' H.P Lovecraft, wrote numerous influential tales of the 'unuttera' or 'nameless powers' that fill the human mind with fear and delightful horror. His story *The whisperer in darkness* (first published in 1931) invents intentionally cryptic designations for these "Innominanda" or "not to be named" (2011:1). The recital of evocative cryptograms such as "Yuggoth, Great Cthulhu, Tsathoggua, Yog-Sothoth, R'lyeh, Nyarlathotep [and] Azathoth" (ibid) draw the narrator of the tale "back through nameless aeons and inconceivable dimensions to [the] worlds of elder, outer entities" that hold sway over an unnameable and inconceivable future (ibid).
- vi Representing 'unconscious forces' that structure the thought of a particular milieu, an episteme constitutes more than a simple theory or world-view. Aside from informing a wide array of discursive practices within a particular historical framework, epistemes operate at the level of the cultural unconscious. J.G. Merquiour explains: "an episteme may be called a paradigm, providing it is not conceived of as an exemplar, a model of cognitive work. It is a 'basement of thought,' a mental infrastructure underlying all strands of the knowledge of (hu)man(s) at a given age, a conceptual grid

that amounts to an 'historical a priori'" (1985:30). Foucault's discursive archaeology, as set out in *The order of things* (1966), mapped or 'periodicised' the cultural output of western civilization, dividing it into three epistemic periods (ending with 'modernism') whose discursive practices share common themes and assumptions.

- vii The category of theory fiction includes modes of experimental theorizing by Baudrillard, Land, the CCRU, Kodwo Eshun and Steven Shaviro. It also includes avant-garde sf, such as 0D's Cyberpositive (1995), the CCRU and 0D's Catacomic (1999), Mark Z. Danielewski's House of leaves (2000) and Reza Negarestani's Cyclonopedia (2008).
- viii By 'paraspatial configurations' Bukatman means the playful narrative forms employed in sf to represent multiple ontological levels of reality as a response to continuous technological and social change (1993:180).
- ix Zamora suggests a non-standard literary approach when approaching apocalyptic texts. Throughout her analysis of contemporary Latin and North American apocalyptic novels, *Writing the apocalypse* (1989), Zamora suggests that authors writing in the apocalyptic mode suggest a "dissenting perspective" to the standard interpretation of literary genre and literary text (see, for example, 1989:4).

Chapter 1 - Beyond the human

Technical culture has gotten out of hand. The advances in the sciences are so deeply radical, so disturbing, upsetting and revolutionary, that they can no longer be contained. They are surging into culture at large; they are invasive; they are everywhere. The traditional power structure, the traditional institutions, have lost control of the pace of change. And suddenly a new alliance is becoming evident: an integration of technology and counterculture. An unholy alliance of the technical world and the world of organised dissent – the underground world of pop-culture, visionary fluidity, and street level anarchy. (Bruce Sterling, 1986:x)

[T]he artificialisation of intelligence, the conversion of organic ends into technical means and vice versa [has] the dynamic of a horror story: human reason is revealed to have been an insect's waking dream ... the awakening of an intelligence which is in the process of sloughing off its human skin. (Ray Brassier, 2007:47-48)

[My] stories frequently emphasise the element of horror because fear is our deepest and strongest emotion, and the one which best lends itself to the creation of nature-defying illusions. Horror and the unknown or the strange are always closely connected, so that it is hard to create a convincing picture of shattered natural law or cosmic alienage or 'outsideness' without laying stress on the emotion of fear. (H.P. Lovecraft, 2004:175)

My first chapter will consider the conceptual ideas that characterise a particular countercultural trajectory during the information era, namely the sf-inspired literary experiments crafted during the 1990's by the Cybernetic Culture Research Unit (CCRU) and Orphan Drift (0D). The texts produced by these collectives, I argue, can be read as a type of cultural witnessing of the apocalyptic moment of the *fin de millénnium*. Hyperstition – a term coined by these collectives during a joint collaboration in 1999 – is, as I will demonstrate throughout, a very useful concept for mapping contemporary attitudes about the apocalypse. The term, which describes a particular reading of the motif of cultural acceleration in the context of information technology, had its genesis in two works of theory-fiction, in *Cyberpositive* (1995) and *Meshed: digital unlife catacomic* (1999), which were produced by these collectives. I will consider the ways in which these works of sf engage the redolently apocalyptic 'mood' of the information era, not only by cultivating an air of horror, but also by drawing on the dynamic philosophy cultivated by two of its important theorists, Gilles Deleuze and Félix Guattari. I will attempt to explore this connection as well as reflect on the much overlooked overlaps between their work and that of the Situationists, as well as their

affinity – particularly that of the CCRU – to the 'weird sf' of HP Lovecraft. In exploring the manner in which Cyberpositive and Catacomic 'figure' the apocalypse, I will turn not only to the texts themselves, but also to the range of apocalyptic cybercultural theory fictions of which they form a part. This continuum begins with Cyberpositive, but continues through the CCRUs Abstract culture publications, Nick Land's independent writings (assembled into Fanged noumena [2011]), as well as the writings of numerous contemporary theorists in the field of cyberculture. Their experimental impulse, as I will argue, is centred on sf's central characteristic of the *novum* or 'making new', and is apparent in analogous attempts that have been made to map the contemporary sense of apocalypse in the sub-genre of sf generally termed 'new space opera' (but which I term cybergothic – see chapter 3), as well as in new affects-based theories (see chapter 4). In their theory-fiction, 0D and the CCRU equate the novum with the numinous potential of horror, and it is in this affective dimension, conjured up by the radically unknowable aspects of techno-scientific novelty, that 0D, Land and the CCRU locate themselves. The term 'anastrophe,' which they occasionally use to indicate the opposite of catastrophe (and as a substitute for novelty or 'making new') suggests the manner in which their oeuvre should be read. The Oxford English dictionary on historical principles defines anastrophe as a "rhetorical inversion" (1980:97). I will therefore consider ways in which their work attempts an inversion of what they perceive to be a postmodern theoretical impasse.

In an 1982 essay entitled *Progress vs. utopia*, (reprinted in *Archaeologies of the future*), Frederic Jameson stated that contemporary writers of sf could no longer imagine a future in terms of utopian possibility but could only articulate a future in which the accelerated cycles of consumption of the "eternal present" of late capitalism were endlessly rehashed (2007:281). Many theorists of postmodernity such as Jean Baudrillard have likewise greeted the onset of the information revolution and its attendant spectacle of intensified commodity capitalism with the attitude that there is nothing left for theory or artistic practice to say. Baudrillard's post-1980's theoretical fictions, such as *Simulacra and simulation* (1981, translated 1994) and *The transparency of evil* (1993), are examples of the kind of entropically-flavoured apocalyptic sf that I will explore in my next chapter. In these science-fictional texts, Baudrillard imagines the end of history, critical theory and art, without entertaining the possibility of renewal. Contemporary artistic and literary practices, he suggests, "can parody this world [of the media spectacle], illustrate it, simulate it, alter it

[but] never disturb the order, which is also its own" (1994a:110). Ironically, Baudrillard has been frequently hailed as a prophet of postmodern art, with his theories of simulation and hyperreality finding currency in both art and literary theory, despite his overt claims that "there is nothing to add to this nullity caused by [artists, art critics, writers and theorists] ... incapable of putting up with their own nullity" (2005:48). In Baudrillard's view, art, literature and theory have completely exhausted their capacity to generate fruitful counter-tendencies to the spectacular intrusions of commodity capitalism. Against the grain of the Situationists and other revolutionary potentiates (such as Benjamin and Adorno, for instance) Baudrillard appears to argue from the perspective of cultural exhaustion, implying that the past cannot supply any relevant models for coping with present conditions and that art and theory are, at best, empty regurgitations that have lost their critical negative function. In *The transparency of evil*, for example, he describes a postmodern world in which "all models of representation and anti-representation [have been] taken on board" and everything can be read in terms of a general totalising aesthetic of the commodity (1993:16).ⁱⁱ

Between the 1970's and the 1990's a new breed of sf emerged that began to articulate and occasionally, to subvert, this aesthetic by combining elements of fantasy, Gothic horror, sf and postmodern theory. In an article published in the July 1989 edition of Sf eye Bruce Sterling outlined the emergence of this new-fangled hybrid form of sf. "A new contemporary kind of writing has emerged," he wrote; a type of sf that is "fantastic, surreal sometimes, speculative ... a kind of writing which simply makes you feel very strange; the way that living in the late 20th century makes you feel, if you are a person of a certain sensibility" (1989:1). Sterling suggested that this new form of sf, under which he included examples of theory-fiction such as Kathy Acker's Empire of the senseless (1989) and Baudrillard's Simulacra and simulation, are "fantasies of a kind [that] sarcastically tear at the structure of 'everyday life'"(1989:1). Redolent with "dark elements" that "screw around with the representational conventions of fiction," hybrid sf like Empire of the senseless or William Burrough's Cities of the red night (1981), "suggest that the picture is leaking from the frame and may get all over the reader's feet" (1989:1). Reflecting on Cities of the red night, 0D interprets it as an expression of the "psychic impact" of the "new machines" that capitalist processes are producing at ever accelerating rates (1995:97). 1980's cyberpunk, which offered readers direct experience of technological overload, is another example of the type of hybrid postmodern sf from which 0D and the CCRU draw inspiration. "For the cyberpunks,

technology is visceral ... pervasive, utterly intimate ...redefining the nature of humanity, of the self ... [full] of frighteningly radical potential," proclaimed Sterling in his preface to the *Mirrorshades cyberpunk anthology* (1986:xi). The 'drug-tech' nexus, around which 1990's rave subcultures assembled themselves, recreated 1960's psychedelic experiences like Woodstock in the context of accelerated machine-produced music and strobing visuals that explored cyberpunk themes of technological mind/body invasion and mutation. The term 'cyberdelic' – a portmanteau combining 'cybernetics' and 'psychedelic' – describes the particular countercultural nexus that informs the work of Plant, Land, OD and the CCRU. During the 1990's their collective and individual work theorised the visceral vibrations of this counterculture and utilised its registers to imagine an acceleration (not only in theme, but also in tempo) towards an inhuman and alien future that was to be savoured rather than detested.

Late capitalist society is riven by a "permanent pressure to accelerate technological innovation," notes Ernest Mandel (1975:191). This fast-track induces encounters of shattering stress and disorientation, engendering a crisis of feeling that Raymond Williams described in 1977 as the felt experience of limits being reached, "a jolt ... a break in the sense of experience" (1977:11). During the 1970's and 1980's, Deleuze and Guattari provided ample theoretical interpretations and inversions of this sense of rupture in the two volumes of their 'Capitalism and schizophrenia' cycle, Anti-Oedipus and A thousand plateaus. hyperstitional theory-fictions of 0D and the CCRU, flavoured with the narrative rush of cyberpunk, the visceral impact of cyberdelic rave culture, and the supernatural horror of urban Gothic and weird sf, were constructed around the philosophical trajectory of accelerationism first aired by Deleuze and Guattari in Anti-Oedipus (1972, translated 1983). Accelerationism describes a type of sorcerous theoretical system that favours un-checked positive feedback, or 'deterritorialisation.' As Mark Fisher notes on the *Hyperstition* website, Deleuze and Guattari's "theoretical sf" suggested to 0D, Land and the CCRU that "accelerating the [capitalist] processes will precisely take us out of capitalism and into schizophrenia" (2005:1).

Deleuze and Guattari frame their theory as a type of sf – using tropes familiar to readers of the genre, such as cybernetic models, black holes, fractals, DNA and computer terminology. For Baudrillard, their formulation of concepts such as schizophrenia and the Body without Organs, orientated along sf lines, are theories of "molecular flow" that replicate "cybernetic and genetic discourses of control in a spiral of power, of desire, and of the molecule which is

now bringing us openly toward the final peripeteia of absolute control" (1987:35-6). Deleuze and Guattari's affinity for sorcery and uncanny horror, however, lends their texts an ambiguity that resists Baudrillard's totalising interpretation. In the 'Becoming intense, becoming animal' section of *A thousand plateaus* (1980, translated 1988), for example, Deleuze and Guattari refer to the weird sf of Lovecraft to illustrate the strangeness and potentials of inversion and subversion that lie embedded at the heart of our every-day world of communication flows (see 1988:240-251). In his 1937 essay, *Notes on writing weird fiction* (1937, republished 2004), Lovecraft acknowledges that in his sf horror and fear encapsulate the presence of a "burning curiosity" about the absolute outside, a "desire to escape from the prison-house of the known" (2004:175).

Like Lovecraft, Deleuze and Guattari utilise supernatural horror to refer to the numinous possibilities inherent in the quotidian, framing Lovecraft's sf in relation to their own sciencefictional attempts to delve into an unknowable and infinite world-in-itself that surrounds us, yet lies tantalisingly beyond our grasp (1988:248). This uncanny dimension, as 0D write, is revealed by new visions of the "invisible world of matter/energy" made possible by machines such as "the transmission electron microscope, the scanning electron microscope, the field emission microscope" (1995:97). The strobing visuals and pulsing electronic sounds of rave music replicate the "forms" revealed by these machines, write 0D, with "rivers of dark seething data [and] palpable nonspaces" bombarded through "an insidious pulse [of] 120 beats per minute ... a brutal speedcore of sounds" layered with images and vibrations of "streaming self-organising data from the invisible world" (1995:346-347). The "uncanny adjacencies" of this kind of "abstract musical culture," writes the CCRU's Robin Mackay and Mark Fisher in Pomophobia, is an example of Deleuze and Guattari's formulation of schizoanalysis, whereby the familiar is "dismantled and relocated into an unfamiliar architecture," offering a glimpse into the "absolute outside" (1997:30). In the "jaded outlook of theorists such as Baudrillard," contemporary cultural expressions such as these "appear to be yet another example of the crippling self-consciousness bedevilling a society so exhausted it is fit only to sort through its own entrails" (1997:30). "Synthetically obsessed" cyberdelic electronic counterculture, Mackay and Fisher argue, subvert such notions by "unlocking the machinic surplus value in the already actualized, stretching and warping time into nonorganically reprogrammed somatic circuits of inhuman speeds and slownesses" (1997:31).

For the CCRU and 0D, the contemporary situation is ripe with weird effects and affects that may serve as launching pads for imaginary voyages into the unfamiliar and strange. Their formulation of hyperstition suggests an incentive to rethink the situation of spectacular commodity capitalism in terms of the uncanny and ambiguous. As Nicolas Royle notes, such uncanny formulations entail a "peculiar intermingling of the familiar and unfamiliar ... a sense of homeliness uprooted" (2003:1). Yet, as Royle explains, the uncanny itself is liminal, ambiguous and difficult to determine:

The uncanny is destined to elude mastery, it is what cannot be pinned down or controlled. The uncanny is never simply a question of a statement, description, or definition, but always engages a performative dimension, a maddening supplement, something unpredictable and additionally strange happening in and to what is being stated, described or defined. (2003:16)

Finding oneself confronted by the familiar rendered strangely unfamiliar is the essence of Freud's notion of the uncanny, or *das unheimliche*. This liminal concept informs the work of contemporary Situationist-inspired artists like 0D and the CCRU who, as art critic Nancy Spector writes, "produce work that infiltrates the world and [attempts to] subtly alter reality by rewriting its cultural narratives" (2006:31). There is a need for such an undertaking that explores the uncanny and ambiguous nature of the contemporary state of affairs, writes Royle, because we have entered a situation "in which we appear to have mastered nature, yet are taking ourselves and our world to pieces ... in ways and speeds beyond our control" (2003:3).

For this reason, writes Sadie Plant, counterculture needs to cultivate "a renewed burst of negativity" that moves "against the world of petrifying circularity and stultification" imagined by theorists such as Baudrillard "that is devoid of any locus of negation or movement forward" (1992:186). Plant's call directly echoes the position advocated by the Situationists themselves. Their attempts to situate revolutionary theory in the sphere of popular culture by advocating acts of negation, counter-spectacles and experimental situations to defy the spectacle of mediated capitalist culture served as one of the originating principles of the CCRU, which Plant co-founded. The aim of the Situationists was to create new and unexpected meanings by cultivating a sense of subversion and millenarian rebelliousness, tempered with subversive wit. According to Martin Puchner, the Situationists were inspired by the Marxist philosopher of the everyday, Henri Lefebvre, to situate revolutionary theory in the sphere of popular culture, in contradistinction to other intellectual

avant-garde movements of the modernist era, making them the founders, in effect, of postmodernity (2004:4). Their legacy formed the subject of a book by Plant called *The most radical gesture: the Situationist International in a postmodern age* (1992).

The Situationists, writes Puchner, were central to the May 1968 revolt in France, which brought the economy of an advanced industrial country to a virtual standstill and provided impetus for student protests in America and elsewhere in Europe (2004:6). The failure of these revolts, however, to instigate any permanent change to the capitalist 'real' prompted theorists such as Deleuze and Guattari, Jean-François Lyotard and even Baudrillard to argue from an accelerationist position.

To go further still, that is, in the [direction] of decoding and deterritorialization. For perhaps the flows are not yet deterritorialized enough, not decoded enough, from the viewpoint of a theory and practice of a highly schizophrenic character (Deleuze and Guattari cited in 0D, 1995:108).

As Benjamin Noys explains, for theorists such as Deleuze and Guattari, "Marx's contention that 'the real barrier of capitalist production is capital itself' did not so much indicate that capitalism was doomed by its own limits of accumulation, but rather that this barrier should be smashed by the radicalisation of capitalism's deterritorialising tendencies" (2010:1). In a notorious passage in *Libidinal economy*, Lyotard argued that the only way forward lay in "swallowing the shit of capital, its materials, its metal bars, its polystyrene, its books, its sausage pâtés, swallowing tonnes of it till you burst" (1993:116). This accelerationist schema features consistently as the backdrop to Baudrillard's theoretical exposés of hyperreality in which, as Noys writes, he cultivates an aesthetic of "negative accelerationism", whereby he "takes up the 'delirial' forms of capitalist acceleration and exacerbates them," as Deleuze and Guattari do, but without their sense of affirming potential (2012:1).

Whereas Deleuze and Guattari aim to recuperate value from this movement of ruination through strategies of inversion, Baudrillard "ruthlessly pursues the negative evacuation of value" (Noys, 2012:1). As Mike Featherstone and Roger Burrows observe, the idea that there is, in fact, a future towards which we could be accelerating is completely at odds with the "fin de millénnium pessimism" of postmodern thinkers such as Baudrillard who continuously confront us "with a future that has already happened," while insisting that there can be "no new moves in the game" nor any sense in reinventing past forms (1995:1). "Coded, mapped, registered, saturated … [today's] universal market of merchandise, values, signs, [and]

models leaves no room [or continued relevance] for the [human] imaginary," postulates Baudrillard (1994a:123). Marred by the supposed death of imagination and the subsequent "hemorrhaging of reality" (1994a:124), the real world once inhabited by the human species has – according to Baudrillard – been sucked into a media-driven technological "black hole" of artificial simulations and representations, which he terms hyperreality. Baudrillard's strategy, as Kellner explains, constitutes an attempt to "push the logic of the system to the extreme in the hopes of entropic collapse" (1994:10). From Cool memories II (1996) onward Baudrillard begins to entertain hopes that the capitalist system might be crushed by the sheer weight of its contradictions. This "fragile system," he writes, is so devoted to "operationality and perfection" that, a capitalist subject "only has to be deprived of breakfast [in order] to become unpredictable" (1996:19). "In our current situation," he argues in The intelligence of evil (2006), "we are everywhere on the verge of this critical density, if not indeed beyond it ... the wise thing would be to act generally in irrational ways" (2006:196). In his later work, therefore, Baudrillard seems to entertain the possibility of the inverted gesture – a possibility, however, that he routs almost as soon as he has aired it by continuing to deny the capacity of intellectuals or artists to undertake it. Despite these faltering concessions in his later work, however, the response of Plant, Land, the CCRU and 0D needs to be considered as a response to the overwhelming and crushing pessimism of Baudrillard's pre-1996 work and the "anticyberian dread" that, according to Land (1997:14), it induced in much of postmodern theory during the 1990s.

The 19th century *fin de siècle* absurdist playwright Alfred Jarry advocated irrational behaviour as part of a revolutionary program he called pataphysics. He defined this as "the science of the realm beyond metaphysics" (1969:133). In crafting such a "revolutionary science" of irrational subversion and inversion, Jarry advised "imaginary solutions, which symbolically attribute the properties of objects, described by their virtuality, to their lineaments" (1969:133). Taking inspiration from Jarry, the Situationists attempted to coalesce the liminal or transformative potential of everyday life into a permanent state of revolution by recommending absurd behaviour and literary overstatements, as well as 'crazy acts.' They wanted to develop a systematic intervention through a combination of art, literature and political insurgency based on two components in perpetual interaction – "the material environment of life and the behaviours which it gives rise to and which radically transform it" (Schleiner, 2011:1). In *The conspiracy of art* (2005) Baudrillard paradoxically invokes Situationism and the "maleficent spirit of pataphysics" as possible solutions to the impasse of

postmodernity (2005:195), having earlier in the text caustically dismissed the capacity of artists, writers, theorists and political insurgents to execute this move (2005:48).

However, in *Shamanic Nietzsche* (originally published in 1995) Land takes the opposite view, extolling the revolutionary power of poets and artists to act out the subversive pataphysical spirit. iii In the liminal and schizophrenic texts of "fanged poets" such as Jarry, Nietzsche, Baitaille and Rimbaud, whose "poetry leads us from the known to the unkown," Land locates an aesthetic motivation for quickening the "death drive" of capital; an incentive that he also associates with contemporary cyberdelic countercultural expressions (2011:216). As humanity accelerates into the "vast and open sea" of the future "without plan" and without map, he writes, our guides are those writers of sf and crafters of sonic fictions that "skirt the edge of the impossible ... [that] transgress against discursive order [and] incite the unspeakable" (2011:222). "Shamans, poets and cyberdelic visionaries," as ethno-botanist Terence McKenna explains, are the perfect vehicles for this type of action. As "agents of the liminal," they are able to "culturally decondition themselves" in order to "step outside the confines of learned culture and learned and embedded language into the domain of the unspeakable" (1993:1). This is terrain traversed by Deleuze and Guattari's accelerationist concept of schizoanalysis. For these theorists, all philosophies and world views that halt or conserve instead of gathering momentum for radical change are due for revision and subversion. In Anti-Oedipus, for instance, they identify the Hegelian dialectic as not progressive enough for a true liberatory project, because in all its negative energy, in all its propulsion via negation it still, in the last instance, conserves what it negates (1983:311). Land, in Meltdown (1997), presents an accelerationist timeline that satirises the idea of progressive dialectical history, imagining convergent waves of progress that climax in meltdown. Beginning with the onset of mercantile capitalism (+-1500 A.D) and escalating through a series of schizoid effects such as "globewars" (the Napoleonic conflicts, WWI, WWII, the Cold War, the 'War Against Terror'), the timeline picks up speed as it runs through the information-era and into an apocalyptic near future where economic deregulation combines with the "fractal interlock of commoditization and computers" to explode the future in a whirlwind rush of global warming, viral plagues, nanotechnology running rampant, social and environmental collapse (1997:7). Accelerationism, as Land makes clear, is treacherous and destructive, as well as verdant in its potential for unlocking schizophrenia.

Deleuze and Guattari recommend a radical severing of structures that hinder the arrival of the future and the formation of new aesthetic paradigms. What they call "schizoanalysis" disturbs the maintenance of "conservative humanist systems" that hinder total negation and anastrophe:

Destroy, destroy. The task of schizoanalysis goes by way of destruction – a whole scouring of the unconscious, a complete curettage. Destroy Oedipus, the illusion of the ego, the puppet of the superego, guilt, the law, castration. It is not a matter of pious destructions, such as those performed by psychoanalysis under the benevolent neutral eye of the analyst. For these are Hegel-style destructions, ways of conserving. (1983:311)

Far from being "a specifiable defect of human central nervous system functioning," explains Land in Circuitries, "schizophrenia is the convergent motor of cyberpositive escalation: an extraterritorial vastness to be discovered" (2011:308). Sheltering in the delirium of madness, he avers, is a "dazzling dark truth" known to shamans, lunatics, psychedelic ravers and vodoun supplicants, namely, that schizophrenia is the fundamental ground state of consciousness or being in the universe. As Land remarks, schizophrenia "would still be out there, whether or not our species had been blessed with the opportunity [through the biological evolution of consciousness] to travel to it" (2011:308). The state of schizophrenia, for Land, as well as for Deleuze and Guattari, is a type of ritualised madness through which shamans, voudoun supplicants and poets are able to apprehend the contours of the world beyond the narrow sphere of cultural conditioning or even of human-centred perception. According to anthropologist Mircea Eliade, schizophrenic madness is one of the characteristics of shamanism everywhere, whether African, Asian, Aboriginal or Native American. Shamans, writes Eliade, speak a secret schizophrenic "language beyond language ... a language of all nature that allows them to communicate with spirits" (1989:104). The Yaminahua shamans of the Amazon basin call this convoluted language, rich in supernatural metaphor and mythical imagery, "language-twisting-twisting" (Narby, 1998:99). visionary spirits of the shaman and the vodoun supplicant are often described as "threedimensional sound-emitting images," writes Jeremy Narby, and "they speak a language made of three dimensional sound" - to understand them it is necessary to transcend language via a type of convoluted synaesthetic perception that is able to conflate areas of knowledge that would ordinarily be considered separate or contradictory (1998:71).

The function of shamanism is to implement what is forbidden [via] the power of infection and contagion. Shamanic becomings involve the exploration of alternative

spaces ... the crossing over into death zones ... [a] migration through alternative anomalies (0D, 1995:229).

To experience the true potential of shamanic schizophrenia, 0D advises a "possession circuit" that involves "liquefaction, synaesthesia" and the surrendering of self to a "virtual death" (1995:37). This experience of a type of ritualised death (see endnote xii) entails the building of a Body without Organs (see endnote xix) – a shamanic ecstatic body or submersible device that is able to glimpse the abstract codes of potential evolutionary becomings as well as encounter, head on, the terrifyingly alien lineaments of the future. For 0D and the CCRU, schizophrenia is a theoretical and affective practice that promises a way out of a postmodern theoretical impasse. What shamanism offers postmodernity, writes 0D, is the possibility of a new affective vision, one that is able to "mobilise somatic voyages into transformative recoding practices" (1995:229).

Networks of subversion: 0D and the CCRU

As the speculative realist philosopher Iain Hamilton Grant explains in a review of Land's *Fanged noumena*, during the networked 1990's "experiments in the unknown" had become "unavoidable for a philosophy caught in the abstractive howl of post-political cybernetics" (2011:1). During this heady decade, writes Manuel Castells, countercultural groups began to recognise that "resistance to [the] power programmed in the networks" would, from hence forth, take place only "through and by networks" that are themselves "powered by information and communication technologies" (2010:49). iv 1990's electronic countercultures, involved in political activism, renegade art-making, new forms of social networking and the burgeoning digital musical underground, had begun to assemble into what Plant describes as "the networks of subversion which continue to arise in even the most postmodern pockets of the postmodern world" (1992:176).

Formed in 1993 with Land's assistance, Orphan Drift's experimental audio-visual performances and penchant for radically alternative lifestyles orientated around digital networking and hacking were part of these networks of subversion. When the Cybernetic Culture Research Unit (CCRU) was founded by Land and Plant at Warwick University's Department of Philosophy in 1995, this interdisciplinary academic research unit orientated

themselves around cyberdelic subcultures, recognising in 0D - as countercultural critic Simon Reynolds writes – a "hands-on" attitude that could make their own theoretical writing "kick in a much more experiential way" (2008:171). Both 0D and the CCRU combined Plant's interest in the perverse Situationist ethos with Land's fascination with Deleuze and Guattari's 'nomad' thought, urban Gothic horror, supernatural sf and the shamanic performative madness of 'fanged poets' such as Artaud and Bataille (the subject of a 1992 book by Land entitled *The thirst for annihilation*). The combined goal of the CCRU and 0D, writes Reynolds, was "to produce academic writing and 'situations' that aspired to the futureshock intensity of jungle and other forms of rave and 'post-rave' music' (2008:171). Their combined work, as I will consider, marks an attempt to capture the dark mood of millennial cyberdelic culture, as well as an attempt to push through the postmodern doom-mongering of theorists such as Baudrillard into a brave new world. "Our intent," as the CCRU puts it on their website, "is not to subscribe to some melancholy postmodern story about derealization so much as to point to ways in which virtual agencies have, and will continue to have, the most material effect imaginable" (1999:1). As Reynolds makes clear, the CCRU and 0D felt, and continue to feel, that the only viable theory was one that took into consideration the affective intensities of popular media culture and the distorted lens of accelerated technological change (2008:171). Their combined ontology conjoins an urban Gothic fascination with doppelgängers and occultism with a scientific materialist ethos. This perplexing union produces a particular breed of theory-fiction that can be termed 'gothic materialism' for its valorisation of numinous horror and for its often paradoxical and inverted blending of two contradictory modes.

During the 1990's, the CCRU expressed these radical combinations through journals such as *Abstract culture* and *Collapse* (still extant), as well as the *Virtual futures* conferences which they convened at Warwick. 0D, meanwhile, produced a theoretical sf novel, *Cyberpositive*, and staged numerous 'situations' at venues like the Tate Modern, the Hayward and Cabinet Galleries in London, as well as raves, clubs and numerous AV Electronica art events across Europe and the USA. "When you see or read the work we did during the 1990's it will appear to be complete, though perhaps missing something which formalizes it," writes 0D's founding member Mer Roberts (2012a:1). "That something is a social context in which its shifting layers of frightening, disturbing, abject, schizophrenic, beautiful, deconstructive, poetic and fragmented frequencies were able to take effect" (2011:1).

According to Plant, the Situationists were committed to a program for transforming the social context of spectacular society, advocating détournement or plagiarism and intentional distortion as a method for undertaking passages or dérives through the varied social ambiances of urban sensibility or 'psychogeography' (1992:91). Debord and Wilman described détournement as a textual or artistic practice in which "any sign or moral is susceptible to being converted into something else, even its opposite" (cited in Luckhurst, 2005:153). This aesthetic which, as Luckhurst writes, provided "an infinitely malleable template for avant-garde sf" (2005:153), afforded the sf-orientated and anarchic ethos of 0D and the CCRU with a suitable prototype. 0D's first foray into the literary domain, Cyberpositive, began as a Situationist-inspired catalogue to an installation by the group at London's Cabinet Gallery in 1994. Its subject, the revolutionary potential of art in the context of cyberculture, was explored through a juxtaposition of machine-produced code with Situationist-derived psychogeographical experimentation and détournement that spliced together extracts from cyberdelic theory and sf, interspersed with autobiographical writing and segments of binary code and textual cut-ups. This was transformed into an experimental sf novel that traverses the alien urban landscapes and affective experiences of spectacular culture. Further collaborations followed, culminating in a week-long installation and performance event called 'Sysygy' by 0D and the CCRU staged at London's Beaconsfield Arts Centre, to which the Catacomic served as guide, commentary and hyperstitional manifesto. Like Cyberpositive, the Catacomic was intended to function both as a theoretical exploration of cyberdelic culture and as a work of experimental sf. Styled as a digital-age grimoire for conjuring the future in the line of Lovecraft's fictional Necronomicon, vi it combines prose and poetry with détournement, illustrations, sigils, incantations and magical diagrams. The word hyperstition, along with its four-fold definition, made its first appearance in the Catacomic, although its elements were already being assembled and articulated in Cyberpositive.

Like many of the Situationist activities that Plant outlines in *The most radical gesture* (1992) 0D, Land and the CCRU were performing on an intentionally obscured stage. Their texts had small print-runs and were issued to accompany staged situations in the form of installations and performances. Wherever possible, they set out to baffle and confuse as well as to engage with what Royle (2003:16) describes as the "performative dimension of the uncanny" in order to foreground a sense of apocalyptic immanence. Mackay, the current editor of

Collapse, for instance, recalls a talk given by Land and 0D at the Virtual futures conference in 1996. This consisted of Land writhing on the stage, mouthing extracts from Artaud's asylum poems into a voice-synthesiser, while 0D bombarded the audience with strobe-like visuals and a grinding jungle soundtrack (2011:1). Roberts refers to the combined 1990's work of 0D, Land and the CCRU as a reflection of "the dark haecceity" of the 1990's – the sinister "thisness" or atmosphere – of the fin de millénnium (2012b:1). Their combined testament to the perceived "hereness and newness" of the times, she writes, was their 1999 Catacomic collaboration (2012b:1). This legacy spawned "newly speculative and even weirder realisms," she continues (2012b:1), referring to the more recent and hyperstitionally-flavoured theoretical sf of Iranian philosopher Reza Negarestani (see endnote xx below), and the "metaphysical realism" of philosophers such as Iain Hamilton Grant, Quentin Meillassoux, Ray Brassier and Graham Harman (see endnote ii, Introduction).

0D's cyberpositive devices: shamanism, vodoun & the drug-tech nexus

Cyberpositive is a 'swarm-text' – a textual bricolage that literally surges across the theoretical spectrum of cyberculture to assemble a cyberpositive signal or vision. From the outset, 0D urge readers not to be afraid of their constant premonitions of a no-longer-human future. Nor should we be afraid, they aver, of the fallout of this inhuman becoming. Pages of binary code, interspersed with evocative gaps, commands and phrases, make up more than a third of the novel, reflecting an attempt to codify human experience under the spectral glare of proliferating information machines. Simultaneously, these strangely patterned pages of code give the text a visual dimension, while engaging in a type of machinic glossolalia; an attempt to compile theory and fiction in an altogether new machine code. viii The disorientated reader is suddenly faced with an alien tongue, and left to make unsettling associations from randomly strewn words and phrases. Cyberpositive uses glossolalia, machine code and first person prose-poem narration to work the visual field of the text in the uncanny manner of the surrealist painter who, as Virilio explains, manipulates images in such a way as to make something of an "unfamiliar nature appear at the same time as the familiar" (2009:47). In this way they seek to continuously unsettle the reader and potentiate him or her for anastrophic possibility.

Juxtaposed against the textual cut-ups are passages of materialist philosophy and extracts from sf novels that theoretically and creatively elucidate the different states of becoming that 0D describe in the first person. Inspirational source-materials include key cyberculture theoretical texts such as De Landa's *War in the age of intelligent machines* (1991) and *Geology of morals* (1994), Deleuze & Guattari's *Capitalism & schizophrenia* cycle, Land's *Meltdown* (1995) and *Machinic desire* (1994) and various instances of cyber-sf such as Stephenson's *Snowcrash* (1991) and Gibson's definitive cyberpunk trilogy (*Neuromancer* [1984], *CountZero* [1986] and *Mona Lisa overdrive* [1988]). 0D urge readers to "wander" through the text, jumping to "whatever moves you" (1995:15). Brian Massumi refers directly to this manner of reading as "textual surfing" in the foreword to Deleuze and Guattari's *A thousand plateaus*, when he urges readers: "to follow each section of the plateau that rises from the smooth space of its composition, and move from one plateau to the next at pleasure ... take a concept that is particularly to your liking and jump with it to its next appearance" (1988:xiv).

Books aren't the only sampled items in *Cyberpositive*. Other motivating cultural materials include sf films, techno music, computer games and, above all, drug experimentation. These assembled "memories of the future" ground the work firmly in hyperstitional territory. "The future is implanting," proclaims the back cover, "a chemical clock ticking where you can never hear it, in the space that ravages the mind." Sampled theoretical and fictional speculations about the process of anastrophe are woven together with biographical evocations of extreme experiences at the sharp end of the drug-tech interface. ix This type of textual experimentation has a long history that runs in tandem with technological proliferation from Futurism's fascist celebration of technology's transformative potential to Surrealist machine-age automatism and the supernaturally-infused textual cut-ups of Burroughs. To the Situationist manifestos – such as Debord's Society of the spectacle (1967, republished in 1983) – it owes its extensive use of détournement (plagiarism and recontextualisation) to facilitate a cultural exegesis. The text itself is a prose-poetical theory-delirium, shaped by the rhythms of techno music, the subliminal flicker of computer screens and rabid deterritorialisations of schizoanalysis. In essence, Cyberpositive is styled as a text deranged through machine feedback. Amplifying the theoretical and fictional texts it samples, it occasionally distorts them into pure pandemonium. Words which have been pushed too close to the edge of chaos to bear the strain fragment into unintelligible code. Rather than attempt

to document technological change from a realist 19th century standpoint, *Cyberpositive* offers an intentionally ambiguous reading of the future that is being potentiated by this acceleration, a future that is framed both recursively and progressively.

the machinic unconscious ... bleed[s] out into the biodrome. tactile like war. you are being tracked. viral recoding in circuits deep beneath human language structures. dissolve onto the plane of immanence where there is no linear time no memory no metaphor

>REASSEMBLE,>REPLICATE,>FUSE,>MORPH, >MUTATE (your self) not images of yourself no destiny. no destination. your only line of flight is into circuits of uncertainty. the technics of interface are disappearing

YOU ARE BRANDED BY ZERO

the schizophrenic returns an empty tablet. an orphan ready to be inscribed anew.

>FALLOUT

At zero virtual futures become actual, out of time. the geometry that constructs who we are, is fucked.

Faceless fear
as you walked it started to leak in – matter itself
doing its thing and you were afraid because you weren't afraid.
death was no longer an issue. no question of seeing, you rode it out
and waited for distraction
signal search.
>TRAP >FILTER >ACQUIRE

this is why vampires look for blood.

>EXPORT

if it wasn't for the music i dont know where i would be ... i need a recoding injection to live it, to be it. ... that's what people call possession

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Throughout *Cyberpositive* 0D attempt to break down the usual form of novel writing by writing prose that resembles poetry (similar to some Situationist texts or the occulted phraseology of many Surrealist or Dadaist literary productions). The text itself, in direct reference to its cyberdelic milieu, gives the idea of serving as programming instructions. The subject matter of software coding and machine interface is further suggested by the code fragments that frame the text, as well as by its continual allusions to the idea of a hypertext^x that includes the Internet (the HTML-type command format), the work of Deleuze and Guattari ('the plane of immanence' and 'line of flight') and the work of Manuel De Landa, whose notion of a future self-assembling machine sentience as the next stage in the evolutionary cycle is central to *Cyberpositive*.

Although 0D, unlike theorists such as Baudrillard, are enticed by the radical potential of cybernetic culture, they are not merely celebratory, and continuously draw attention to its darker inhuman potential. Taking cognisance of Debord's intimation in Comments on the society of the spectacle (1983) that the highly visible world of the spectacle hides secret machinations that can only be contested via occulted routes of secrecy and subversion, they attempt to apocalyptically reveal and potentiate that which lies concealed.xi Simultaneously, they have taken on board Deleuze and Guattari's as well as Land's advocacy of shamanic schizophrenia. Along these lines, they literarily submerge themselves in metaphors of addiction and overdose, engaging the darkest most libidinal and unconscious recesses of the They continually highlight the danger of poisoning the planet, while advocating a type of self-poisoning through electronic and chemical overdose, as well as through the nurturing of schizophrenic mind-states. Their aim is to execute a rhetorical inversion along shamanic lines by completely immersing themselves in the deterritorialising flows of the spectacle, engendering a type of shamanic healing through panic and virtual death.xii Their hyperstitional aesthetic is laid out via textual explorations of supernatural intrusions, as well as through unsettling space-time displacements that culminate in an apocalyptic point of rupture.

The term 'cyberpositive' was first coined by Land and Plant in a paper of the same title delivered at the 1994 Pharmakon conference to describe the tendency of cybernetic systems

towards positive feedback, autocatalysis and self-organisation. Drawing on this paper and its exegesis of the new materialism of philosophers such as De Landa, 0D focuses on the transformation of human society via the agency of machines and machinic processes. Throughout *Cyberpositive*, 0D utilise terms like positive feedback, self-organisation, autocatalysis and abstract machines; terms that De Landa uses to refer to the common processes shared by very different physical assemblages. *Cyberpositive* (the novel) is about "engineering" and finding "autocatalytic routes to the future" through the physical body, the textual body and the body-social (1995:176). The autocatalysis to which 0D refer is an instance of machinic positive feedback and self-organization that, as De Landa explains, can be used to describe the operations of abstract machines as seemingly diverse as chemical reactions, the formation of rocks, the operation of ecosystems, the actions of markets, the movements of armies and the socially transformative impact of new theories or speculations (1994:1).xiii

De Landa's seminal War in the age of intelligent machines (1991) is another formative influence. In this text, De Landa develops media-critic Marshall McLuhan's vision of humans as sex organs for the machine world. "Technological development," writes De Landa, "may be said to possess its own momentum, for clearly it is not always guided by human needs" (1991:3). Furthermore, he speculates, contemporary humans may turn out to be nothing more than "industrious insects pollinating an independent species of machine flower that simply did not possess its own reproductive organs during a segment of its evolution" (1991:3). Emerging from the unstable conditions of the present moment, he writes, is a burgeoning science fiction of self-reproducing and self-teaching technologies that seem to have evolved partly through their own volition, using humans as incubators. De Landa observes that socalled machines often arise spontaneously in nature (see 1991:117-121). He avers, moreover, that not only do these "natural machines" (such as insect colonies, rivers and chemical clocks) obey the same laws as artificial machines, they prefigure human technologies in their ability to self-evolve and assume intelligent behaviour: "The biosphere, as we have seen is pregnant with singularities that spontaneously give rise to [machinic] processes of selforganisation. ... Similarly, the portion of the mechanosphere constituted by machines and computer networks, once it has crossed a certain critical point of connectivity, begins to be inhabited by the same symmetry-breaking singularities, which give rise to emergent and intelligent properties in [natural] systems" (1991:121).

As an instance of cybercultural theory-fiction, written from the perspective of a hypothetical robot historian of the future, *War in the age* was an early science-fictional "salvo," writes Kunzro, on "the implication of the rise of networks and the saturation of the material world with information" (2011:34).

[T]he [future] machine wonders what people want. Trying to connect ... at least the music makes it tactile. I thought for a while that someone must be poisoning me. It wasn't a someone. ... [O]ne time everything started to go abstract code. White dots. It was all you were connected up with and as you became the code it sped up, faster and faster until it started to reverse. There was no image or content to slow it down. You passed out, releasing the code back to reconstitute. (OD 1995:57)

With its frequent allusions to bad psychedelic trips experienced in the alien time-frame of hyper-fast machine produced music, Cyberpositive was arguably the first book-length text to undertake an affective mapping of accelerationism. The 'bad trip' is coded by 0D with the metaphor of machine as vampire, struggling to comprehend the archaic slowness of the human biological mode and injecting a poisonous but hallucinatory dimension of abstract speeds into the human time-frame. Shaviro's Post-cinematic affect (2010) and Goodman's Sonic warfare (2010) explore similar terrain, tracing the accelerationist schizoid signal through the horror-infused audio-visual terrain conjured by new information technologies. Like Shaviro and Goodman, 0D surveys what Land in *Circuitries* terms the "cyberpathology of markets" – the tendency, he writes, of the processes and products of the information revolution to generate pure, unbound intensities beyond the scope of human phenomenology or representation (2011:299). With its narrativisation of pure data bleed and information overload, Cyberpositive sets out an exegesis of an affective inhuman frequency that segues with that of other accelerationist cyber-drifters. "We are programmed from where cyberia has already happened," writes Land, describing the perspective of all anti-humanist "orphans" (2011:299). "Scientists [and humanist philosophers] agonize, [but] cybernauts drift ... in eccentric orbits about the technocosm [while] humanity recedes like a loathsome dream" (2011:299). This turning away from 'human-centric perspectives' as something loathsome or inadequate is typical of the 'dark haecceity' that 0D set out to explore. This sinister apocalyptic atmosphere may in fact be, as I will argue throughout, one of the defining novelties of the fin de millénnium.

As Luckhurst points out, the mood of postmodernity is one of "ontological insecurity;" a disposition that psychiatrist R.D Laing had already in *The divided self* (1960) identified as

steeped in the mental state of the schizophrenic, saturated in "a feeling that the world is liable at any stage to crash in and obliterate all reality" (2005:152). Laing is significant, as his work on schizophrenia served as a direct influence on Deleuze and Guattari's own position. As Luckhurst points out, Laing's claim that "the cracked mind of the schizophrenic may let in light which does not enter the intact minds of many sane people" came to inform the anti-psychiatry movement spearheaded by Guattari (2005:152). This insight, he writes, has also served as a blueprint for the work of many contemporary "experimental artists, theorists and writers of avant-garde sf who are dedicated not only to "detailing the exact specifications of [the] coming violence [of the apocalypse] to their own psyches" but also to apprehend the contours of a newly emergent reality that remains occluded to the rational gaze (2005:152).

0D's approach to the paradoxical combination of ontological insecurity and the sense of radical newness that characterised 1990's cyberculture is centred around Deleuze and Guattari's formulation of schizoanalysis, which involves an aesthetic approach orientated around lines of flight. The term 'line of flight' is used by Deleuze and Guattari to describe an instance of Laing's formulation of schizophrenic thinking, whereby the darkness of schizophrenic madness and paranoia is inverted and potentiated, becoming a space from which to perceive the light of a future becoming. By following a line of flight, an artist or writer may attempt, like a shaman in trance, to think beyond apparent contradictions and escape uniform lines of thought and action. For Deleuze and Guattari, as for 0D, this movement transcends individual consciousness and becomes, in effect, a revolutionary impetus for social action – a "weapon" that can be wielded against all that conserves and restricts, an action that reaches forward into the future while fleeing that which is stultified:

Far from being a flight outside the social, or from being utopian or even ideological, these lines [of flight] actually constitute the social field, tracing its shapes and its borders, its entire state of becoming. Basically, a Marxist is recognized by his assertion that a society contradicts itself, that it is defined by its contradictions. We say rather that in a society everything flees, and that a society is defined by its lines of flight, which affect masses of every kind (once again, "mass" is a molecular notion). A society, or any collective arrangement, is defined first by its points of flows of deterritorialisation. History's greatest adventures are lines of flight. ... It's always along a line of flight that we create because there we are tracing the real and composing a plane of consistency, not simply imagining or dreaming. Flee, but while fleeing, pick up a weapon. (Deleuze and Guattari, 1983: 91-92)

Schizoanalysis, writes 0D, "methodically dismantles everything in [philosophy] that serves to align function with the transcendence of the autonomous subject" (1995:197). There is, in any event, no transcendental human subject, they opine - only a "subject produced at the edge of production ... an element in the reproduction of production, a machine part and a part made up of parts" (1995:197). Like Deleuze and Guattari, 0D are fascinated by the schizoid delirium of vodoun possession, sorcery, madness and shamanic ecstasy. These states, they write, are "lines of flight" in which "the synthesis of personal consciousness is replaced with syntheses of the impersonal consciousness" (1995:197). The rave and club experiences that 0D describe throughout Cyberpositive are described in terms of schizophrenic madness. They are depicted as recognisably part of the contemporary world, yet simultaneously unsettling and otherworldly. In this vein, Cyberpositive restages the urban Gothic style of 19th century fin de siècle authors such as Arthur Machen, whose fictions, according to Merlin Coverley, served as explorations and evocations of the calamitous impact of industrialised urbanity on the perceptions of individuals, framed in supernatural terms and tinged with horror (2010:45). Presenting familiar urban topographies and cultural practices twisted through a nightmarish dreamscape of occult significances, 0D explore the influence of new urban cyberspaces on the affective sphere of contemporary humanity, investigating fin de millénnium urbanity though its sonic fictions, information substances (drugs and technological interfaces) and information networks. This project is not too far removed from that of the Situationists themselves who, according to Coverley, "saw their [psychogeographical] explorations at least partly as preliminary to the production of some kind of new space" (2010:136).

In crafting this new space, 0D develop their notion of cyberspace around a restaging of African ritual practices, vodoun and shamanic ecstasy, thereby opening up what Edward Soja, writing about new electronic media (1996:5),^{xiv} describes as a "thirdspace ... a space of extraordinary openness [and] a place of critical exchange." In mapping this notion of cyberspace, *Cyberpositive* functions as a schizophrenic drift-work – a line of flight that moves through the psychobabble of clubs, raves and squat-parties, the destabilising frequencies of machine-enhanced audio-visual distortion and the inhuman landscapes of scientific speculation. All of these tropes are read in terms of archaic techniques of ecstasy as 0D attempt to coalesce a new-fangled meaning that is both recursive and progressive. The urban settings 0D explore, along with the narratives in which they are framed, are frequently

subjected to instances of brutal narrative distortion, speed and breakdown as 0D set out to reflect the spectacle's deterritorialising virulence.

Writhing bodies. glittering under strobes. the wailing sounds of a star folding in on itself. ea rneg oti ate posses ion whit edar vood oot rance ryth ym. hour soft e chine tac tili smear in gyou befo repo sess ion ocu larne schi zowha tis schizothe mod elpt ternof. (0D, 1995:21).

The most "highly-charged passages" in Cyberpositive, according to Scott Moore, who reviewed the text for the Californian cyberdelic publication, FringeWare review, are these kinds of autobiographical evocations of the "drug-tech nexus" or the "techno-rave-Ecstasy-LSD experience" (1996:1). Contemporary dance culture provides an important focal point for 0D in their attempt to navigate popular media culture in search of a narrative space for the future. "I used to write a lot in clubs ... tracing what's happening in all the different sound channels and what they're doing spatially and physically to you," notes Roberts, explaining how much of Cyberpositive was written and conceived as an affective, synaesthetic and schizophrenic frequency located in the rhythms and speeds of popular media culture (cited in Reynolds, 2008:174). In *Motion capture*, the CCRU-affiliated theorist Kodwo Eshun clarifies the affinity of the CCRU and 0D for the textual and textural intensities of sonic fiction. "Science fiction and contemporary [dance] music are the same," he explains. Contemporary music represents "an intensification of experience ... a sensory engineering" that mirrors the way in which literary and theoretical sf amplifies the experience of technological overload (1997:4). This affect-laden intensity of movements and speeds is essentially what 0D sets out to achieve, utilising the same techniques as contemporary dj's and electronic musicians who craft music by "capturing" sounds from pre-existing media and recontextualising them. By sampling, "extracting beats" and twisting sounds through different registers, a type of "phase shifting" or "transformational sequence" occurs in contemporary electronica, writes Eshun (1997:5). Throughout *Cyberpositive*, the numerous autobiographical interludes "phase shift" the theoretical and fictional samples into affective territories, in the same way that Eshun describes dj's performing a type of "motion capture" that "virtualises" the sampled sounds, connecting them together into a new type of "sensory condition" – a "nervous system" in the process of being "reshaped for a new kind of state" (1997:12). Numerous instances of détournement throughout Cyberpositive attempt to build a map of the new state that 0D wish to potentiate. Plant's advocacy of Situationist perversity, Maya Deren's poetic accounts of vodoun possession, Deleuze and Guattari's elevation of schizophrenia, De Landa's materialism, McKenna's psychedelic apocalypticism, Land's anti-humanism and cyberpunk's "street smarts" are mashed together by 0D into what Eshun refers to as "an unofficial mythology [existing] at the end of the [20th] century" – a mythology articulated in the register of a "sonic fiction ... a kind of telepresence ... a shared language amongst a whole new generation of people" (1997:8).

In the cities, the streets began to hum and the warehouses were repopulated by schizophrenics blissed out on the future. The urban zones synthesised by alienation have redesigned it as ecstasy. The city has become a traffic nexus, the launch-pad for strange voyages, and cyberpunk has become its realism. It is no longer a geographical location, but a cyberspace terminal: a gateway into the virtual plane. Things change utterly with Gibson's discovery that travelling in cyberspace is the same as receiving information. The outside of the city is no longer a naturally inherited past, but a digitally transmitting future. (0D, 1995: 355)

If dance culture is radical, writes Reynolds, "it's a radicalism that's inseparable from [its] simple effectiveness, pure pleasure [and] immediacy;" what ravers want is "a direct interface between the music's pleasure circuitry and [their] nervous system" (cited in Goffman & Joy, 2005:354). This is a radicalness located in the body and associated in some way with an imagined sense of community assembled around raving and abandon. 0D associate "raving" with "beserking" and "shamanic becomings-animal" (1995:229), adding a distinctly darker dimension to Reynold's sense of simple pleasure-seeking and self-gratification. The underlying technique in 0D's work, acknowledges Reynolds, "is the liberation of texture from its environment, of energy-flux from contoured form [with] the goal to recreate the intensity of being lost and possessed" (2002:1).

In this manner, 0D attempt to navigate the "cyberspace terminals" of clubs and warehouse parties via the often terrifying experience of rave culture hallucinogens; instead of invoking the rave experience as pure pleasure, they attempt to express the dark haecceity of the 1990's by summoning the shadowy and supernatural frequencies of hallucinogenic ecstasy. The trance-like and schizophrenic states they invoke are violently destructive but also partly hopeful; something that recalls Laing's claim that the cracked mind may let in light which is otherwise occluded. The visceral violence of trance-inducing rhythms and the uncanny combination of bliss and fear experienced under the influence of psychoactive rave drugs like MDMA and LSD are, for 0D, gateways to a new kind of state:

For ecstasy junkies, the trance oblivion market ... But then there's the insistent memory of someone telling you that MDMA is a receiver chemical that fine-tunes the neural pathways for immersion ... weav[ing] vodoun veves in your head when it chooses you for the white darkness [of ecstatic possession]. *Veves* ... threads you can't see ... a map woven into your brain that bypasses surface language networks. Soft, fluid fusion (0D, 1995:167).

0D overcode the psychedelic experience with supernatural elements, calling for a type of ecstatic immersion in the machine-produced sensorium of rave subculture. This invocation of Gothic horror (possession by supernatural agencies) in the context of high-tech machines, technologies and information networks is a prelude to the hyperstitional aesthetic that they would develop with the CCRU in the *Catacomic*, a sensibility they locate in the cyberpunk of Gibson and Neal Stephenson.

The notion of weaving programming codes, digit sigils or veves directly into biological neuro-circuitry is an idea that 0D remix from Gibson's Mona Lisa overdrive (1989) and Stephenson's Snowcrash (1992). In Gibson's text, the veves are drawn in the minds of humans via "synaptical alterations" effected by an artificial intelligence (AI) that has fragmented into a host of online vodoun gods and goddesses or Lwa. These alterations essentially turn the minds of infected humans into living interfaces or "horses" for the Lwa of cyberspace (see Gibson, 1989: 264-265). Snowcrash imagines something similar – a minddrug that infects the brains of humans while they are interfaced with communications devices, breaking down the distinction between computer and biological code and making humans susceptible to glossolalia (speaking in tongues) and remote suggestion. In Cyberpositive, the state of ecstatic glossolalia – as well as being approximated in human language – is further suggested by the long sections of binary code interspersed with pauses, gaps and cryptic phrases suggesting, as Roberts notes, "encrypted information and disincarnate voices, reduced to packages of data in perpetual flow around the world's information networks" (1999:1). In *Doom patrols* (1997) – a separate but analogous example of science-fictional theory-fiction from the period – Shaviro writes of a similar type of information-age glossolalia, voices from the past and imagined futures haunting the contemporary technological landscape, rising "like viruses to the surface ... visibly scrawled across computer and video screens" (1997:108). Entwined in an array of audio-visual networks and stimuli that erode a stable sense of self, 0D describe the individual self as haunted by a sensory cross-talk of signals from realms beyond the physical. Like shamanic initiates, the rave generation they depict are being "exploded into a new space" of transgressed boundaries, undergoing "ritual deaths and transformations on the dancefloors" (1995:67). "Camouflaged in the music," they write, is "streaming self-organising data from the future, infecting humans and helping them to navigate the self into inhuman space" (1995:67).

Vodoun is the only coherently functional contemporary mapping practice. Zombie production systems, Lwa-tronic traffic jamming, rhythmic decoding tactics, interlinking the units of distributional collectives with abysm waves and becoming-snake simultaneities. (CCRU, 1997:7)

"Vodoun ... isn't concerned with notions of salvation or transcendence ... [it] is about getting things done," notes a character in Gibson's Count zero, explaining that contemporary technology has taken on the character of the "magical" and that free-form ritual magical practices like vodoun segue effortlessly into the "invocational nature of digital technology" (1986:111). Gibson's argument is that humans interact with digital communication devices using a type of invocation similar to that enacted by vodoun supplicants when they "interface" with the Lwa. With contemporary technological interfaces and devices, actions are "invoked" by commands, phrases and gestures in a movement that recalls ritual magic, vodoun and animist sorcery, writes Chris Cheser (2002:1). Illustrating the extensive presence of magical metaphors in computing jargon, Cheser remarks that digital technologies "mediate the power to call things up ... [and that] invocation to artefacts long predates the use of computers" (2002:2). "As the separation between hardware, software and interaction dissolves, it is no wonder that the ensuing intense sensory activity has the effect of both transfixing and transporting us, so that we are simultaneously caught up and carried away by this affective interactive fascination," notes affective theorist Betty Marenko (2012:3). This fascination, she writes, recalls so-called pre-modern, pre-personal intensities that "entwine animism, magic, spellbinding sensuousness and enchantment which are discernible with increasingly interactive digital technologies, pervasive computing and, more broadly, with distributed material agencies" (2012:4).

For Marenko, the changing nature of our technological practices and human-machine relations demands a shift in the way we view this praxis (2012:4). In re-conceptualising this relation, 0D appropriate Gibson's idea that the syncretised and pragmatic subtleties of vodoun are appropriate for describing and imagining the rhythms, confusions and machines of the new electronic age. "The vodoun religious impulse lends itself to a computer-driven

world much more than anything in the high-tech West," notes Gibson (cited in Davis, 1998:196). "You cut deals with your favourite deity – it's [as if] this religion is already dealing with 'smart' devices and artificial intelligences" (1998:196).

Vodoun is [like] techno-jargon because it is indifferent to signification, and concerned only with access; with hacking software, passwords, maps and traffic signal. It is not the concept or image of the Lwa that is at stake, but their address codes. Vodoun is a religion nucleated upon possession. Its spirits, or software entities, [the] Lwa ... manifest by recoding or downloading 'programs' into a 'horse' which they ride ... During an episode of oblivion [possession] the Lwa's host is occupied by an alien intelligence, becoming the vehicle or 'remote' of a telepresence ... a body without a soul, matter without morality. (0D, 1995:280)

Imagined as Gibson's "religion of the street" and as a "ritual tradition of communal manifestation" (Gibson, 1986:112), 0D overlaps vodoun with the practices of the "trance oblivion market" where Gibson's rites of collective 'manifestation' become the tranceinducing drugs, the dance, the flashing visual feeds and the communal vibe of the ravegeneration (0D, 1995:167). Using the metaphors of vodoun, 0D describes information-age humanity transacting with machinic demons, avatars and Lovecraftian 'unuttera' from the shamanic world between worlds. The supplicant, the sorcerer, the trancer, the ecstatic dancer and the user of contemporary communications technologies cast off the "self that acts and recalls" and allow themselves to be "ridden" by inhuman forces, write Deleuze and Guattari (1988:162). In so doing, they shed the ego-self and engage with "becomings, becominganimal, becomings-molecular [that] have replaced history, individual or general. ... No longer are there acts to explain, dreams or phantasies to interpret, childhood memories to recall, words to make signify ... [merely] colours and sounds, becomings and intensities" (1988:162). In this ecstatic space of synaesthetic technological immersion there is only what 0D refer to as the "fog of proximity" (1995:68) and Deren as "the white darkness" (cited in 0D, 1995:68).

In this zone, a real, affective and shamanically twisted immersion in the realm of the senses occurs. With the 'self' given over to and supplanted by something alien from the beyond, there is only the visceral power of forces beyond our ken – the Lovecraftian Old Ones, or as 0D and Gibson would style them, the vodoun Lwa, moving through the vacated body. Here, in the space where the ego-self has been obliterated, the only experience is that of "a glowing fog, a dark yellow mist that has affects and experiences movements, speeds," write Deleuze

and Guattari (1988:162). Here, there is only the future as sensation. This is a future that 0D envisage in three interrelated ways: through music (sonic fictions), drugs and an interface with information technologies imagined as vodoun possession – approaches that are predicated on a losing of the self. In this manner, *Cyberpositive* attempts to outline the uncanny essence of the cyberdelic aesthetic – an apocalyptic sensibility in which Enlightenment ideals of rationality and autonomy have been overturned in favour of a submission to a futuristic technological presence that 0D detects manifesting at the 'street level' of culture. For 0D, this is a force both quotidian and supernatural that lies tantalisingly beyond current human comprehension and morality.

We have to look to the computers to describe what we cannot yet imagine. ... [T]he music takes you there. Follow the solitons of sound in techno. Thousands have seen ... the future encroaching ... downloaded into music. An inhuman machinic materiality that will scrape away your skin [and] see with your ears. (0D, 1995:344)

0D's frequent use of the familiar second-person ('you') throughout the text serves to induct readers into a terrifying world where the rules are broken and divisions between the body and machine are eroded. The form of the text itself serves as metaphor for the bending and disturbing of categories, the dissolution and reconfiguration of all structures; a disruption that 'you' are invited or even commanded to engage with. As Mendlesohn explains, the reading of sf requires an active process of translation in which metaphor becomes literal (2003:5). "Cognitive estrangement," she continues, "the sense that something in the fictive world is dissonant with the reader's experienced world," is set up in sf texts through "shifts in time, place, technological scenery ... and narrative voice" as well as through the use of new words or unfamiliar terms (2003:5). All these strategies are employed, not only in the quoted passages, but throughout the text, as 0D jump between narrative styles and point-of-view narration. The style and intent is made clear at the outset of the novel with a lengthy détournement from Phillip K. Dick's time-travel story, The Martian time slip (1964). The manipulated extracts follow several of Dick's characters, especially the autistic child Manfred, as they confront the impossibility of a totalising perspective when confronted with an increasingly unstable reality. Dick's sf engagement is one that induces a defamiliarising sense of the uncanny, and 0D attempt to recreate the same destabilising effect and deepen it by allowing not only Dick's narrative, but other books and theories to become the characters that speak in their text. Cyberpositive allows several of these characters to interact and intersect in a demented fashion, with a first person narrator constantly engaging - via

autobiographical interludes – with some theoretical wonders, horrors and terrors that the plagiarised textual and theoretical characters have borne out. Deleuze and Guattari suggest that "following such lines of flight" describe the arrival of an "unexpected force" that "sweeps us away" along "the path of the dancer's soul" (1983:71). The arrival of this line of flight, for 0D, signals a radical paradigm shift; a type of shamanic becoming that tears us away from our moorings. From social forms, write Deleuze and Guattari, the line of flight "tears away particles, among which there are now only relationships of speed and slowness, and from subjects it tears away affects" (1983:81). 0D suggest a similar rupture or divergence:

Drift. Adrift. Not simply leaving a shore, but diverting a course, a fluidity. Where it goes, we are not planning to go The shore of the ocean displaces itself along with it. (1995:12)

The possible nostalgic overtones of such sentiments are displaced when, on the very next page, the reader is catapulted into "screen space ... [where] there is no place for human memory" (1995:14). Such reversals are common throughout the text, as are the repeated jumps from one point of view to another, from story to story and from theory to theory. This is not in conflict with standard modes of reading sf where, as Mendlesohn notes, readers are required to "fill in the gap, providing meaning where none is provided" and to work hard at finding a steady ground (2003:5). OD scatter clues to help readers along. As the various quoted passages illustrate, there is a constant interplay between mechanical and organic metaphors, as well as the privileging of a type of Romantic synaesthetic vision that confuses sight, hearing, touch, emotion and cognition in order to articulate the inhuman in very human terms, while retaining the horrifying sense of alienation and rushing speed of drug-enhanced vision.

Cyberpositive provides some useful insights for the wider study of apocalyptic trends in contemporary sf, which is the focus of this thesis. "In one way or another, every work of contemporary sf influenced by cyberpunk produces the same radical and reactionary formation," notes Scott Bukatman, referring to the interplay between the recursive gaze that preserves the conventional lineaments of body and mind and the forward looking gaze that seeks to obliterate these conventions entirely (1993:259). Nigel Clark points out that the futuristic constructions of cyberdelic theory and fiction do not entirely escape the past, which exists as a constant "afterimage" that is frequently "indistinguishable" from its

"premonitions" of an inhuman future (1995:113). It bears remembering, however, that in Cyberpositive – as in the other works of sf by Gibson, Burroughs, Stephenson, Dick and Greg Bear that it refers to – these 'phantoms of the past' are perceived through a glass darkly and twisted by the speeds and distortions of new information machines. "Technology itself has irrevocably changed," notes Sterling, noting that we can never truly recover the past, as our contemporary life-world has been so radically transformed. "Not for us the giant steamsnorting wonders of the past ... [nor] the bottled genie of [1950's] remote big science boffins," he writes. For us, technology has become "pervasive, utterly intimate. Not outside of us, but next to us. Under our skin; often, inside our minds" (1986:xi). It is precisely this intimacy that pervades 0D's apocalyptic vision of visceral technology in Cyberpositive. Theirs is a world that attempts to dream the future in the manner of the apocalyptic visionary while being transported by the dark pleasures of such virtual dreaming. Simultaneously, they are uncannily aware that what is being repressed (by media simulation and hyperreality, for example) is haunted by a past that has been eclipsed by an inescapable forward momentum. They attempt to occupy, therefore, both the real time of the virtual future as well as the deferred time of actual embodied urban life, while acknowledging the continued relevance of past forms in sf's dreams of a time beyond the apocalypse of the present. Despite the presence of myriads of new machines and technologies in their narrative, 0D utilise a mode at odds with traditional sf to convey sf's futuristic sense of wonder. That mode, as I have argued, is the Gothic style that relies on horror and the supernatural to convey wonder as an affect-laden reaction to the presence of the strange and unfamiliar. It is via this Gothic sense of the uncanny that 0D attempt to engage the apocalyptic moment of postmodernity.

The Catacomic: zones, meshwork and hooks for the future

Horror isn't what it used to be. ... Nor is it where it used to be. ... If horror can be glimpsed anywhere, it occupies a site other than the surfaces of postmodern self-reflection: it circulates in and as the void disclosed by their obliteration of substance; in the slimy flesh scraped from just below the skin, the 'monstrous excrescence' that once was human. Imperceptible viral horrors circulate with a supplementary contamination of borders and a pervasive free-floating anxiety. The eclipse of recognisable figures of horror is mirrored in the 'waning of affect' associated with postmodernity. (Fred Botting, 2008:162)

In Meshed: digital unlife catacomic (1999), the CCRU and 0D expand the notion that cyberspace is no longer a sealed or safe space behind a screen further into supernatural territories, utilising Lovecraft's sf as a template for extending and affirming the Gothic sense of wonder and its focus on supernatural inhuman agencies. Botting, in Limits of horror (2008), appears to annul such an attempt by situating Land and the CCRU's gothic materialism at the very conceptual limits of literary horror where "horror and thrills have minimal relation to any precedent" and where Gothic images "serve [only] as disguise, a retrospective gloss on a terrifying prospective gaze, a blank staring ahead" (2008:217). Botting uses Virilio's argument that "the new media both overstimulate the organism and demand a passivity bordering on inertia, tele-repetition and acceleration without end" (2008:116) but he overlooks the ambivalent and heterogeneous energies at work in the CCRU's work. These anastrophic tendencies, as I will now consider, can be productively located in their use of the sf concept of the 'zone,' their employment of fictional pedagogues, their restaging of Gothic horror and their engagement of the undomesticated sublime. The zone that the Catacomic inhabits is a narrative space in which the CCRU and 0D situate their vision of an amorphous and inhuman future beyond apocalypse. This is a future that they potentiate by obliterating the distinction between theoretical fact and fiction as well as by orientating their sense of the sublime, as in the sf of Lovecraft, along the lines of that which is unrepresentable and uncontainable.

With global communication technologies spreading information at imperceptible speeds, the *Catacomic* deepens *Cyberpositive*'s investigation into the affective and haptic nature of these machines, the crises of time-perception they are engendering and the actions of hyperstitional agencies acting within and through them. Time and space are imagined and presented as a labyrinth – not a physical maze but a network of connected stimuli in constant flux – through which the contemporary self has to navigate. Obsessed with what the future feels like, both *Cyberpositive* and the *Catacomic* function as instances of sf. "Science fiction," explains art historian Susan Ballard, is a speculative fiction that "has created a visual space for us to imagine (if not enact) our body as it flies through today's temporal and spatial matrix, where subjectivity dis-connects and re-connects through various [technological] networks" (1998:1). Sf tends to replace the "epistemological impulse" that is found in the modernist text with an "ontological imperative," writes Bukatman (1993:162). Whereas "interpretation is a foregrounded and dominant activity for the reader of, and characters within, the

modernist text," sf presents a collision and shifting of worlds that is not bound by the perceptions of characters. "The world itself has shifted ... it exists no longer as a homogeneous site of fixed meaning" (1993:163). In Postmodernist fictions (1987), Brian McHale identifies the "zone" - the site where ontological shifts and slippages occur - as a central motif not only in sf, but in "all postmodernist fiction" (1987:45). Burrough's evocation of the "interzone," Gibson's "cyberspace" and the "heterotopias" of Latin American authors like Marques and Fuentes, all evoke "impossible spaces" where different ontological states collide. These "zones," writes McHale are used to insert "an alien space within a familiar space, or between two adjacent areas of space where no such 'between' exists" (1987:46). In Cyberpositive the "white darkness" of "possession space" serves as a metaphor for this alien interval; a "drift-space" of occult correspondences that forms the psychic underbelly of the space of flows, described as "a wasps nest [of] shamen connectors" (1995:14). The *Catacomic* inhabits this same ontological drift-space, invoking hyperstition through multiple point-of-view narrators as a magical tendency within the space of flows whereby virtual quantities are transformed into real ones. Key to this tendency is the concept of the "mesh" – the zone or medium through which (and the manner in which) hyperstition moves across cultural vectors:

As the net [of global communication networks] integrates, it simultaneously frays into mesh: an intensive subspace that both escapes and parasitically occupies it. Mesh makes itself out of the spaces beneath and between the net, and in the biotechnical intervals between net-components [devices, nodes, networks, users and substances]: necessarily – but coincidentally – assembling a fully connective system wherever it propagates. Any two mesh-pauses always interlink. Mesh consists of feral noise in the divisional signal-fabric, arranging a set of demonic interzones in wormhole-space, as cyberspace-utopia dissolves into Pandemonium. (CCRU & 0D, 1999:5)

Cyberpositive conceives of the mesh using the visual strategy of binary and symbol code, interspersed with occasional blank spaces they term "holes, hooks for the future" (1995:399). These blank spaces or 'hooks' are represented in the *Catacomic* as five symbolic demonic avatars that represent the interzones or spaces that exist within, beneath and between the nodes and networks of the planetary electrosphere. The CCRU and 0D conceive of these demon avatars as digital Lwa – "tools for perceiving and navigating the circuits of digital hyperstition" (1999:3). Teeming with strange artificial "life-forms" known in computing terminology as "independent software objects" or, in hacker jargon, as "demons," the global

information flow is abuzz with packets of information that form e-mails, add-ons, plug-ins, hyperlinks, viruses, and an array of web-services, explains Davis (1998:602). The Catacomic refers to this aspect of demons as "components of distributed productive apparatus [or] partially autonomous software units" (1999:3). True to their pet name, these "invocational objects" are quite literally stirring up a pandemonium on the world-wide-web, writes De Landa (1991:117). In this sense, demons are "hidden, repressed, cursed, or denigrated nonhuman communicative agencies" causing glitches in the matrix – network failures, system errors and other unexplained e-phenomena (CCRU & 0D, 1999:3). No longer controlled but rather invoked into action by changes in their environment, demons are beginning to selfassemble in the 'paraspaces' of the space of flows. "Like vortices and other natural phenomena in nature ... independent software objects [or demons] are beginning to form self-organising 'computational societies' that resemble ecological systems such as insect colonies or social systems such as markets," notes De Landa (1991:119-120). Speculating that in the near future, artificial intelligences might spontaneously self-assemble from such "societies" within the exponentially complexifying global informational flows, De Landa (1991:121) touches on what the CCRU and 0D perceive to be the crux of the matter. They are keen, however, to separate machine intelligence from purpose-obsessed human intelligence. Demons, they write, ultimately function as "electro-occult hyperstitional entities that traffic between zones" (1999:3). They are "motive forces without [a] final purpose" (1999:3).

Invoking a fictional pantheon of self-assembling demons with evocative Lovecraftian names such as Katak, MurMur, Djynxx, Oddubb and Uttunul, *Catacomic* is set up like a labyrinth, with the opening pages offering an obscure numbered diagram resembling the Kabbalistic tree of life, with a facing page containing a list of definitions (including that of hyperstition) to offer readers occult clues with which to navigate the text. Visually, the *Catacomic* resembles the manipulated screen space that the CCRU and 0D describe in words dense with allusion to the fantastical and supernatural. There is a feedback loop between the written text and the graphics, with text floating in a complex mesh of patterns, strands, static distortion and obscure symbols that complement the frequent Burroughs-like textual cut-ups and allusions to ontological destabilisation, possession, delirium and madness. Abstracted spines and DNA-strands morphed into alien configurations dominate the image flow, symbolising a journey down into the spine and into the 'becoming brain' of the distant evolutionary past,

when the organ of consciousness existed as a sensory 'fight or flight' control-centre located in primitive spines.** Simultaneously, the intensely alien nature of the imagery suggests, like the text itself, a journey radically forward in time into a posthuman vastness of artificial intelligences conducting their perplexing business. The continuum of evolution is suggested by the fusion of organic and machine-like images that fuse with the text. Spines and DNA strands twist into sinuously arranged text that curves and twist around machine-like representations. Partially hidden and partially apparent (in a literal sense, as their images are never quite in focus), demons are presented, both visually and textually, as inhabiting the intersection between the fluid medium of communications media (the space of flows) and the human imagination that remembers 'down the spine' into distant evolutionary pasts and extends forward, speculatively, into uncertain futures.

The Catacomic's demons are instances of Deleuze and Guattari's conception of the line of flight. Exemplifying that which is thoroughly excluded and radically outside of social norms and logic, demons embody the dark yet liberatory madness of the shaman and the schizophrenic. According to the *Catacomic*, demons or Lwa are emblematic of "entities that traffic between zones" (1999:4). As Deleuze remarks in his Dialogues, "gods have fixed attributes, properties and functions, territories and codes ... what demons do is jump across intervals, and from one interval to another" (cited in CCRU & 0D, 1999:4). The invocation of these entities can be read as exemplary of the CCRU and 0D's attempt to connect two apparently contradictory modes of perception in the 'undomesticated' manner suggested by Deleuze and Guattari for merging the rational and the irrational as well as the scientific and the magical via a type of deterritorialisation that dissolves norms and boundaries. A parallel can also be drawn with Gibson's own demon-haunted conception of the space of flows. As Gibson's cyber-demon, Brigite (the vodoun Lwa representing "zero or death"), tells it in Mona Lisa overdrive, the Lwa that inhabit the "consensual hallucination of cyberspace" have found "the invocational paradigms of vodoun" and "associative ritual magic" to be "the most appropriate of all the symbol systems that [humans] have shored up against the night" (1989:264). As with Gibson, the Catacomic's invocation of demons alludes to the horror of border violation posed by machinic agencies as well as their dark promise of infinite augmentation and extension. Demons, in this sense, can be seen as emblematic of "the glittering void of possibility and threat growing at the heart of our profoundly technologized society," writes Davis (1998:1).

In Notes on writing weird fiction, Lovecraft states that in his sf the sublime is indicative of "unrepresentability" and a desire to violate norms and boundaries (2004:175). xvi Lovecraft is an important figure for the hyperstitional orientation that 0D and the CCRU develop in the Catacomic. His horror-laden sf, filled with unknowable and strangely named Old ones, as well as retrochronal time-travelling entities, expresses a longing "to shatter the galling limitations ... which for ever imprison us and frustrate our curiosity about the infinite spaces beyond the radius of our sight and analysis" (Lovecraft, 2004:175). As sf author China Miéville notes, Lovecraft and other writers of urban Gothic fiction such as Machen, with whom he shares an aesthetic sensibility, "puncture the supposed membrane separating off the sublime, and allows swillage of that awe and horror from 'beyond' back into the everyday. ... Their weird fiction is a radicalized sublime backwash from the infinite to the quotidian" (2009:512). As Lovecraft himself makes clear, the sublime of supernatural horror conveys an undercurrent of subversion that can be used to "shatter the galling limitations" of world views and enable a "contemplation of unrepresentability" (2004:175). In Art and insurrection, Land undertakes a similar reading of the supernatural sublime when he attempts to "undomesticate" it from its traditionally restorative function. He outlines the "creative process" in terms of "schizophrenia" and "raw energy," tracing a continuity of subversion orientated around the sublime as it is developed not only by Lovecraft, but also by Deleuze (2011:172).xvii Edmund Burke, in part II, section 1, of his *Philosophical inquiry into the* origin of our ideas of the sublime and beautiful (first published in 1756), wrote that "the great power of the sublime [is], that, far from being produced by them, it anticipates our reasonings, and hurries us on by an irresistible force" (2001:1). xviii Whereas Burke sought to tame the sublime, Deleuze and Land, along with writers like Lovecraft and Machen, seek to liberate its excessive potential. Land underscores the importance of this undomesticated sublime to his work with the CCRU, formulating the concept itself as a viral and subversive agent, marking "the site where art irrupts into European philosophy with the force of trauma" at precisely the moment when Enlightenment reason was "attempting to rationalise itself" in terms of "permanent growth" and progress (2011:143). For Deleuze, as for Land, the sublime retains validity in its capacity for "liberating excess;" a function that makes it capable of speaking to both "the present and the future" (Deleuze, 1998:34).

The *Catacomic* depicts technological acceleration in supernatural terms as an instance of "sublime horror" (1999:4). 0D and the CCRU invoke Lovecraft's frequent allusion to a type

of Faustian grimoire or book of spells known as the "Necronomicon [or] the book of dead names" (1999:4) to describe the nature of the alien time-space displacements conjured into being by the space of flows (see endnote vi). This fictional text, they write, is a book of spells for hyperstitionally summoning the "unuttera" of the demonic world and hastening the end of history (1999:4). Conceived of by the CCRU and 0D as an instrument for invoking future machine intelligences - some of which have been "retrodeposited" from the future into the past – the *Catatomic* styles itself a "Necronomicon" that offers "sublime hyperfictional lore [on] the matrix of all demons" associated with conjuring the future (1999:3-4). Aimed at imagined practitioners of a type of hyperstitional sorcery - those who would create selffulfilling apocalyptic fictions and those who would utilise the power of these fictions to hasten the world toward anastrophe - the Catacomic styles itself as a tool-box for creating "time-dissidence," suggesting that sections of the text have been uncovered in the crypts and ruins of forgotten cities as "ancient relics from [a] deep tomorrow ... retrodeposited out of the future" (1999:4). Lovecraft himself describes the Necronomicon as a book chronicling "elder and future lives in forgotten dimensions" that lie concealed in "forbidding ancient ruins whose names have been forgotten" (1938:107). As in Lovecraft's fiction, credit for the uncovering of these "relics of deep tomorrow" is given to fictional archaeologists, theorists, occultists, writers and maverick scientists who have supposedly "revealed" to the CCRU the mechanisms of digital hyperstition (1999:4). The novelist and occultist Iris Carver, the unorthodox geochemist Professor Barker, the renegade anthropologist Curtis, the cybervodoun bokor (priest) and hacker Sarkon (the "hero of the cybergoths"), the sorceress Echidna Stillwell (the "heroine of the cybergoths") and "the first AI," AxSys, are some of the "imaginary pedadogues" who serve as narrators in the Catacomic (1999:4). Their narration, often framed with the interjection of an 'objective' third person narrator, "scramble[s] science-fiction with archaic legend," and the CCRU and 0D credit them as authentic sources for the Catacomic (1999:4). These same fictional theorists are also cited in the Abstract culture publications, on the CCRU website and cited in interviews and lectures given by CCRU members. "We'd be a bit reluctant to call these figures imaginary," jokes Land. "We've learned as much – well, vastly more from [them] – than [from] supposedly 'real' [academic] pedagogues!" (cited in Reynolds, 2008:172).

The use of fictional pedagogues constitutes another bow, not only in the direction of Lovecraft, but also in the direction of Deleuze and Guattari, who used Sir Arthur Conan

Doyle's fictive Professor Challenger in A thousand plateaus. They cite verbatim, for example, a fictional lecture delivered by Professor Challenger (see 1987:40-44) as the source for their theory of the Body without Organs. In addition, they base this, and many of their other theoretical speculations around the 'fictive' ethnographical work of Carlos Castaneda, on sorcery. Deleuze and Guattari write that the supposedly fabricated nature of Casteneda's works is of "no importance ... so much the better if [Casteneda's tales] are a syncretism rather than an ethnographical study ... the protocol of an experiment rather than an account" (1987:160). By placing science, sf, history and fantasy on the same level as post-structuralist theory, both the CCRU and 0D – like Deleuze and Guattari – perform a type of ontological "flattening out" that considers the speculative fancies of fictional pedagogues to be "as clearly as important ... as [the ideas of] any notional theorist", and places "great philosophers" on the same level as "producers of fiction" (Land cited in Reynolds, 2008:174). Plant regards cyberpunk novelists like Gibson and Cadigan as "more reliable [cultural] witnesses," precisely because, unlike theorists, "they don't necessarily have an axe to grind" (cited in Reynolds, 2008:174). Despite Plant's assurances to the contrary, fiction writers do have axes to grind and there is, moreover, a perilous blade being sharpened in texts such as the *Catacomic*, a ritual blade intended for the metaphorical jugular of humanity. This sense of shadowy menace and apocalyptic peril is part of the appeal of CCRU and 0D's work, which sets out to capture, reflect and intensify the dark haecceity of the fin de millénnium.

Like Mayan priests, making blood offerings to invoke the hallucinogenic 'vision serpents' (snake-like Mayan spirit-ancestors, akin to the vodoun Lwa, who delivered visions of the future in return for blood offerings), the *Catacomic* feeds "blood to the shadows" that lurk on the dark side of the digital divide (1999:24). Fictional constructs and demon avatars are intimately connected, as all of these fictional entities form part of an affective, synaesthesic and schizophrenic hyperstitional circuit. In the text, for example, Katak – the "desolater and time rider" who represents the "vibrational density of conductors" and their "radioactivity," as well as "all unstable atomic structures" (1999:30) – is personified by the fictional renegade, anthropologist Curtis. Recounting an imaginary expedition to the Sunda Strait in Sumatra during 1883 (the year in which the Krakatoa caldera exploded) to investigate the rituals of the Tak-Nma headhunters, the *Catacomic* describes the retrochronal manifestation of Katak, a malevolent hyperstitional demon, as a time-travelling fragment of future machine

sentience intent on engendering pandemonium. In some ways, this can be read as a typical instance of the postmodern disruption of linear time, as well as a case of postmodern irony towards metanarratives and academic disciplines such as anthropology. The CCRU and 0D repeat these postmodern moves, but concurrently enact an inverted gesture by identifying themselves with narrative; albeit pre-modern narratives such as vodoun, ritual magic, shamanism and demonology. They invoke the Victorian 'lost tribe' adventure, only to subvert the inevitably superior tone of the western narrator towards the natives and their customs. By identifying themselves with what David Levi Strauss calls the contemporary "heresy of primitivism" – an identification with tribal ritual and 'primitive' spiritual practice (1989:158) – they strike out against the ideology of progress in favour of ecstatic gnosis and ritual surrender to forces beyond the rationalised Enlightenment conception of what it means to be human.

"As Curtis records the disintegration of his soul [in his notebooks], the name Katak increasingly cross-links with everything that burns, raves and devastates" (1999:6). Recording the practices of the Tak-Nma, Curtis narrates that they "revere rabid dogs [as] Katak," furthermore that "blood stained claws are also Katak," as is the sun at midday beating down in "silent rage" and the "trampling, inarticulate flood-tide of malaria" (1999:7). Curtis tells us that the growling and smoking of Krakatoa out in the Sunda Strait is also revered as Katak by the Tak-Nma (1999:7). Katak, he states, is the "unfolding traumascape, the molten burning core of the earth" and, like the other fictional pedagogues invoked by the CCRU and 0D, Curtis believes that Katak, like other demons, is representative of a "flux of deterritorialised time-bending energy" (1999:6). "Katak has come, Katak is soon to come," invokes the *Catacomic* through the voice of its third-person narrator, equating Katak with the fierce and hazardous energy of "possession" as well as drug-induced shamanic "ecstasy" or catatonia (1999:6).

As I have suggested earlier, a process of re-embodiment is central to the work of the CCRU and 0D – a sense of quintessence and affect that finds its focal-point in the work of Deleuze and Guattari. Allegories for the journey of the body as it is reconfigured in the theatre of the virtual, the fictional avatars and characters of the *Catacomic* form an affective mapping of the contemporary body (both individual and social) as it moves through the electrosphere, and of a subjectivity dis-connected and re-connected through technological networks. Taking their cue from Artaud, Spinoza and Nietzche, Deleuze and Guattari write of an "affective material"

human body," pregnant with possibilities, transversed by "pure flows of chemical, electrical, thermal and kinetic energy, and [movements] between these energy states," writes Peter Jowers (1992:2). Linked to other bodies, objects and fields of intensity around it via connective flows, this affective body and its energies is the key to a kind of creative mutation potentially available to humans (1992:2). The body – whether textual or physical, actual or imagined – involved in the visceral theatre of the virtual is what Deleuze and Guattari term the Body without Organs (BwO). xix This is the exploratory body of the shaman or of the possessed supplicant – not an organised body in any sense, but rather an experimental probe, a navigational submersible that moves across and through affects (1988:161). The BwO, they write, is an unfolding and ongoing experiment into potential future becomings – a means whereby a subject may imaginatively dissolve his or her subjectivity and travel across the plane of consistency (1988:161).

A passage in the Catacomic describes the building of such a BwO – an affective bodily exploration device – when it depicts the possession of a young Echinda Stillwell by the avatar or fictional Lwa MurMur. "Her [Stillwell's] body felt impossible ...touching her face, she encountered only the features and limbs of a little girl ... below the waist, however, all was confusion ... snaking endlessly into itself, or rather, into depths beyond sense, traversed by languid spinal waves that culminated in a distant hint of a tail" (1999:22-23). This description of the body becoming a site of amphibious intensity and an affective map of evolutionary mutation can be interpreted as a description of the information-age body occupying the unstable state of the 'mesh,' a body in the process of becoming liquid, becoming something fluid, receptive to microwaves and electromagnetic vibrations as well as thresholds and gradients of information. Formed in such a way "that it can only be occupied, populated only by intensities ... [the BwO] is nonstratified, unformed matter, the matrix of intensity ... [where] matter equals energy," write Deleuze and Guattari (1988:153). Existing as a "field of immanence of desire, the plane of consistency specific to desire," the BwO is a fluid and affective "virtual" body; matter enlivened and opened to transfusion and transformation through desire (1988:153). This is a sense of the body opposed to the Enlightenment notion of settled lineages, well-ordered sequences and linear time-progressions. It is this non-linear and affect-laden body that both Cyberpositive and the Catacomic invoke.

On their website, the CCRU proclaim themselves to be "attached to coincidences, glitches, unforeseen consequences, breaks, twists and bends in time" (1999:1). Beyond the causality of linear time and history, they write, "is another temporality, uncovered at the point where schizoanalysis meets Lovecraftian horror ... [w]here, cause does not follow effect ...: [where] there is a process of retrocontamination in which the deep past finds itself already infected with the far future" (1999:1). The crucial question, states the CCRU, "is one of becoming" – namely, "what are humans changing into" and "what is growing out of" humanity? (1999:1).

The pleasurable horror of being lost: approaches to the 'end' of history

For better or for worse, notes science writer James Geary, "technology will continue to advance into regions where no one has gone before ... it is far wiser [therefore] to engage with its processes ... than recoil in horror" (2002:205). Ravers getting "lost in the music pulse" and "strobeflicker" are manifestly doing both, however – recoiling in "pleasurable horror" and "engaging" viscerally with the dematerialised processes of information flow (0D, 1995:167). The horror of being lost, of being possessed, of human redundancy and of "the vastness unutterable of information space" are apparently not things that ravers, vodoun supplicants or shamanic initiates recoil from, writes Davis (1998:196). As with Negarestani's Cyclonopedia, xx the horror revealed by 0D's 'white darkness' of possession is what Eugene Thacker describes as the "horror of philosophy," the point at which human cognition encounters "a hiddenness in which we as human beings play little or no part ... or which occurs in spite of or indifferently to our attempts to reveal that which is hidden" (2010:52). From the perspective of 0D and the CCRU this is not a horror that should be retreated from, but rather one that should be embraced and grappled with. Our failure to grasp the nature and implications of the artificial "mesh" or "mechanosphere" that we have conjured into being is a problem that for 0D is related to our inability to comprehend the "fundamental indifferences to the human" posed by the "cosmic, biospheric and evolutionary networks" in which we are already enmeshed (1995:211). The conundrum, they write, is "a problem of human logic, which is from the start [contaminated by] theology ... the creationist symptom of underdesigned software circuits, associated with domination, tradition, and inhibition; with everything that shackles the future to the past" (0D, 1995:211). To "map what is hidden" (the

future), aver 0D, we need to surrender control to it and let it "ride us" as a voudoun Lwa would an ecstatic supplicant (1995:211).

As I have already noted, the heart of the 'possession circuit' that both *Cyberpositive* and the *Catacomic* sets out to represent is informed by Deleuze and Guattari's concept of schizoanalysis, which 0D interpret as "a revolutionary program ... an anastastrophic threshold for change ... [a] cyberrevolutionary impetus" for cutting away all that is keeping us stuck in habituated ways of seeing and interacting with the world (0D, 1995:211). What 0D and the CCRU set out to achieve is nothing less than to disband the "software circuits of anthropocentrism" (CCRU & 0D, 1999:4) and to cross-over into what Deleuze and Guattari call "the plane of consistency" (1988:270); a material zone of action and inspiration in which rational conceptions of self and human identity are dissolved:

Fantasies are no longer anthropomorphic. Enlightenment, only fusion, in circuits deep beneath human language structures ... 101010010011—1-1-1-1111 ... Dissolve into the material flows of desire. ... Aid metaphor all the way until you cross over into the dark white pools of inorganic matterflow that the schizo knows. The burning living tornado moan of absolute matter ... branded by zero ... Memory becoming a prosthesis ... An orphan. (0D, 1995:184-185)

The information revolution is generating "ever more incomprehensible experiments in commodification ... on the move towards a terminal non-space," write 0D (1995:211). Aiding and abetting this process are the cybernetic systems that drive information processes which, as they note, "alter, mutate [and] drift" in "a virtual cosmos of infinite possible realisation" (0D, 1995:176). This tendency is exactly the opposite of what Norbert Weiner, the originator of cybernetics, had in mind when he defined cybernetics as the science of communication and control. Weiner's eternally stable systems – those "within the ambit of human command and control" - are described as "cybernegative tools for human dominion over nature and history;" bulwarks erected to curb against "runaway capitalism" and the "cyberpathology of markets" (0D, 1995:353). Emerging out of the military-industrial complex' work on weaponry guidance systems, write 0D, cybernetics was conceived of as "a general defence technology against alien invasion" (1995:353). The 'alien' in this sense, is everything "cyberpositive" - an "enemy of mankind ... subtle or intelligent beyond the objectivity required for human comprehension" (1999:354). As 0D emphasise, cyberpositive processes favour "catastrophe for humans and anastrophe for the machines" of the future (1995:436). "Distributing the patterns isn't our language," write 0D, "we've kept the human

codes too fixed," to grasp it (1995:436). The future, in the cyberpositive sense, "has no history" – at least not from a biological human perspective (1995:436). In this manner, 0D gives a new inflection to the idea of the end of history. What ends, in their ontology, is not history itself, but humans (or, rather, as they would suggest, our current and outdated conception of what it means to be human) as agents of history.

The 'anti-human' position cultivated by 0D and the CCRU should also be interpreted as an inverted response to the looming shadow of environmental crisis. In Swarmachines the CCRU urge theorists and scientists alike to "combust the slag-heaps of [human] history ... [and] flee the ossified relics of anthropomorphism" (CCRU, 1997:9). The CCRU revels in the destabilising effects and affects of "schizophrenic capitalism," which they describe as "a mutant topology of unanticipated connections" that is unraveling human certainty (1997:10). 0D describe history "passing through compression thresholds normed to an intensive logistic curve" that culminates in the "meltdown singularity" of unregulated capitalism and technoscientific advance (1995:104). They appear to celebrate, in apocalyptic fashion, what McKenna refers to as "shudder that announces the approaching cataracts of time over which our species and the destiny of this planet is about to be swept" (1993:1). Philosophy (including 'natural philosophy' or science) should, writes Brassier, "be more than a sop to the pathetic twinge of human self-esteem," which suggests that nature is our home, exists for our benefit and is our "beneficent progenitor" (2007: xi). The human myth of mechanism, as Davis describes it echoing Heidegger, "sees nature as a boundless stockpile of resources available on demand" (Davis, 1998:144). This, he writes, is part of a defunct world-view that cannot productively conceive of any agency or force outside of the human framework (1998:144).

Under these circumstances we must embrace at all costs the realist conviction that there is a mind-independent reality, which, as Brassier writes, "is indifferent to our existence and oblivious to the 'values' and 'meanings' which we would drape over it in order to make it more hospitable" (2007: xi). Plagiarising Land, 0D puts it more creatively; "the arrival of the 'aliens' [or the inhuman 'world-in-itself'] has no interpretative space marked out for it in the macropod [or 'human control system'] schema ... and thus emerges from its camouflage as an encrypted message, an enormous X" (1995:207). Fixed historical constructs, they aver, are redundant in the face of continuous and relentless processes of evolution that are pock-

marked by extinctions. All that is left to humanity, writes 0D, is an experimental approach that radically blurs the boundaries between the organic and inorganic, the human and the inhuman (1995:436). Of course, humans cannot simply 'unthink' human thought, but 0D and the CCRU suggest that we might begin to explore the limits of aesthetic possibility in relation to the crisis of mechanism that is unmaking our world. We can do so, they contend, by attempting to imagine what the 'world-in-itself' is like and formulating a novel aesthetic. In doing so, we might begin to reformulate our destructive position in relation to the world of the non-human. "The trick" to conceptualising "inhuman potency," as 0D write, is to recognise the burning presence of "something, vastness unutterable ... from beyond the most inhuman distant edge of anything we have ever known" (1995:436). For 0D and the CCRU there is something hidden in our mechanised age of shlock and kitsch – something that wants to pull us into to the future. These cyberdelic collectives frame their position around surrender and a dissolving of certainties, a submission they frame in strangely pleasurable terms. The contemporary crisis of experience, as they depict it, is simply one of adaptation and mutation in response to new and changing conditions – conditions that we ourselves have set in motion and are irrevocably implicated in. Fashioning a new response in the mode of survival requires, they aver, that we dream the dreams of sorcerers, nonconformists, insurgents and revolutionaries.

Imagined communities

Rebels and bohemians traverse cities; scattering signs, staging enigmas, leaving coded messages ... transforming the social perception of specific urban practices. (Stuart Home cited in Coverley, 2010:128)

In *The most radical gesture* Plant interprets the "radical gestures" of the Situationists that culminated in the student uprisings of 1968 as part of an on-going attempt in contemporary theory and fiction to "potentiate what is new, original and unexpected" (1992:164). She goes on to describe postmodern theory and sf as part of a continuum that stretches back through 20^{th} century artistic and aesthetic terrorism to the Symbolists and Decadents of the previous *fin de siècle*. Yet, she writes, despite this link, much of postmodern theory has reneged on the revolutionary promise and sense of meaning and hope for critical thought that these groups and individuals had so resolutely attempted to formulate in the midst of accelerated cultural

change. Taken as a whole, she states, postmodernity continues "without purpose and meaning," asserting the "impossibility and undesirability of critical thought in an apparently seamless world" of endless simulation (1992:175). Postmodernity seems, in effect, to have ushered in a cheerless utopia – a free floating chaos of meaningless flux in which the search for causes, contradictions and meanings is seen as patently untenable and all references to "something better and more desired than the present" have been rendered theoretically illegitimate (1992:175).

Imagining a continuation of art's revolutionary impulse and not, as contemporary theorists such as Baudrillard would have it, its terminus in the endless hyperreal serialisations of the commodity form, 0D, the CCRU, Plant and Land take from Deleuze and Guattari and the Situationists a belief in the veracity of the sf impulse to create and sustain novelty. Although they affirm Baudrillard's contention that contemporary reality and science fiction have become analogous, they see this as indicating the possibility of a future beyond apocalypse – a future that Baudrillard has annulled by locating it in a perpetually repeating present. In their collective work and collaborative projects, it is possible to locate a science-fictional and fantastical response to what Benedict Anderson terms the "modern darkness" of Enlightenment rationalism (1991:11). Since the late 18th century this "darkness" has spread globally, voiding prior cultural, historical and religious certainties and necessitating the continuous invention and reinvention of "another style of continuity," that of the "imagined community" (1991:11-12).xxi It is in the light of this attempt at fabricating an imagined sense of convergence, envisioned along the path of the weird, occulted and strange, that the work of Plant, Land, 0D and the CCRU can be situated. Their work attempts to coalesce and identify not only a future in relation to the events and ideas of history – primarily to the event that most concerns Anderson, the spread of international commodity capitalism – but also to the formation of responsive communities of outsiders and rebels. These are the 'orphans' and the 'ravers' in the case of 0D, and the 'cybergoths' and 'hackers' in the case of the CCRU outlandish affiliates of outcasts that can productively respond to what Anderson describes as the deadening "interplay between fatality, technology and capitalism" (1991:43).

Their stance appears to contradict Baudrillard's insistence that the contemporary social world has been degraded into a chaos of meaningless simulation without any purpose and meaning

and that, moreover, there is nothing to be done. Appearing to assert the impossibility of critical thought and, indeed, its ineffectiveness, in the face of the apparent failure of revolutionary critique Baudrillard, unlike Debord and his Marxist predecessors such as Adorno, rejects Marxist visions of a new society rising from the ashes of capitalism, along with all projects of political, social and even theoretical renewal, stating that these are in themselves baseless utopian illusions. In his book *The illusion of the end* (1994), for example, he argues that the apocalyptic notion of an 'end,' which prefigures a new beginning, is itself unfounded:

The end of history is, alas, also the end of the dustbins of history. There are no longer any dustbins for disposing of old ideologies, old regimes, old values. Where are we going to throw Marxism, which actually invented the dustbins of history? (Yet there is some justice here since the very people who invented them have fallen in.) Conclusion: if there are no more dustbins of history, this is because History itself has become a dustbin. It has become its own dustbin, just as the planet itself is becoming its own dustbin. (1994b:26)

This viewpoint, while denouncing the conception of an 'ending', is arguably far more forbidding than any apocalyptic notion of consummation or transformation, such as the anastrophically-orientated hyperstitional vision of 0D and the CCRU. Like Deleuze and Guattari, these groups stress the importance of imagination in combating the homogenous, empty time induced by the ruptures of mechanism and technological modernity, and they affirm the importance of a perceived historical continuity, as well as the necessity of a metaphysical understanding in gestating novel social relations and imagining new communities in the present era of collapsing nationalities and traditional social formations. Plant, for example, insists (contra Baudrillard) that "there remains something to be confused by modern society; there are still realities to be secreted and revealed, gestures to be recuperated and recuperations to be subverted" (1992:175). This, manifestly, is the space of imagined communities and networked subversion occupied by 0D and the CCRU. It is also the space occupied by contemporary sf which, premised around scientific and speculative novelty, provides the narrative continuity that Plant espouses. In critically extrapolating present conditions into near and distant futures and, occasionally (as I will explore in my next chapter), into the historical past as well, the speculative spaces and 'no-places' of sf continue to engage in an on-going dialectic between reason and transcendence, rationality and metaphysics, imagining new political and social relations as well as novel attitudes towards contingency and being in the face of continuous historical and evolutionary change. Brian

Stableford notes that "the collaborative work of horizon expansion and social extrapolation has been the labour and the [particular] triumph of modern science fiction" (2003:31).

Taking the Situationist faith in the imminence of revolution, the potency of art, the importance of playful discourse and the potential for impassioned forms of living seriously, Plant argues that the only viable response to the supposed "death of theory" and art is to "reclaim the critical tools" with which to understand the world. "We have, of course, been warned off such a project – and not without reason," she continues; "ours is a culture about which there is nothing to say precisely because it has outlived its discursive possibilities" (1992:185). If this is the case, as is claimed by Baudrillard, then "the scenario in which theorists trip over people asleep on the streets on their way to declare the impossibility of changing anything is merely the tip of a tragic iceberg" (1992:195). Arguing for the relevance of transgression and negation, Plant's invective seems to affirm the possibility of moving beyond the postmodern impasse by cultivating the sensibilities for inversion and subversion (in other words, 'anastrophe') that the Situationists and their predecessors had attempted to synergise.

Zigmunt Bauman, whose extensive work has theorized the condition of politics in the globalized world believes, along with Baudrillard, that pervasive communication and media technologies are fatally eroding social and political relations. In *Liquid modernity* (2000), for example, Bauman notes, "the solids whose turn has come to be thrown into the melting pot ... in [this] time of fluid modernity, are the bonds which interlock individual choices in collective projects and actions – the patterns of communication and co-ordination between individually conducted life policies on the one hand and political actions of human collectivities on the other" (2000:6). Bauman sees multimedia communications technologies as complicit in this erosion. This viewpoint, however, is countered by Castells, who argues that "the conflicts of our time are being fought by networked social actors" who have been informed by and who make use of the mechanisms, "switches" and technologies of "multimedia communication networks" (2010:49). The work of 0D and the CCRU can be considered as attempts to realise what Castells (2010:49) terms "communication power" – not as major players, which as Deleuze and Guattari write, "are always negotiable" by state or corporate apparatuses, but as obscure agents or "unknown factors not arranged for in the apparatuses of control" (1983:83). Many of the social bonds which Bauman fears are being "melted" have already been recast into potentially dynamic cultural formations that are able

to move beyond the postmodern impasse (a position that I will continue to explore in my final chapter).

Survival in the timeless time of Castell's space of flows – in a world dominated by pervasive information networks – depends on reclaiming the shamanic imagination, writes cyberdelic theorist Hakim Bey, calling for the onset of a new form of "psychic terrorism" that reconceives technology as a "combination of information and desire" (1991:115). Bey's seminal TAZ: the temporary automous zone, ontological anarchy, poetic terrorism (1991) is a collection of manifestos in the Situationist vein that bear a thematic and aesthetic relation to the theory-fictions of 0D and the CCRU. Espousing a manner of panpsychism, xxii in this text Bey calls for the liberation of the "peak experience ... a science of psychotopography ...driftworks, webworks [and] psychic nomadism" (1991:134). His "creative evolutionism" invokes a form of "shamanic experimentation" (1994:134) analogous to that suggested by Cyberpositive and the Catacomic (see endnote xii). As Strauss suggests, this kind of cyberdelic remixing of shamanic states and revolutionary dialogue constitutes part of a "heresy of primitivism" – an attempt to restage "primitive and magical ways of relating to the world" beyond our limited experience as well as the boundaries of rational thought; an "archaic revivalism, constituted along new lines" that has always operated in the "shadows of mechanism" (1989:158). Despite the 'inhuman' labels they attach to their fictions, in the final reckoning, the work of Land, 0D and the CCRU fall firmly into this camp of spectral agitators and 'modern primitives.' The dystopian and alienating futures they invoke paradoxically signal a cultural shift not in the direction of progress as their motif of acceleration would seem to indicate but rather, as Strauss suggests, "in the direction of survival" (1989:158). For Land, 0D and the CCRU surrendering to the forces of change requires an active and visceral participation – a move that they orientate around archaic techniques of shamanic ecstasy and the syncretism of vodoun. In this manner, their work is geared toward the ultimate persistence and regeneration of the human, albeit in a radically altered or new evolutionary form.

Technological acceleration functions as a protagonist in the theory-fictions of 0D and the CCRU, operating as a metaphor for the crisis-riven condition of postmodernity. It is possible to situate their work in a continuum with other postmodern speculative fictions and also to find for it a historical grounding in the canon of supernatural urban Gothic horror and

cyberpunk. Theirs is not a totalising epistemological surrender to ontological destabilisation, but an attempt - in the vein of Deleuze and Guattari's science-fictional theoretical fictions to build future worlds along lines of flight and resistance. The worlds depicted in their sf have not lost all comprehensibility; they merely demand to be grasped using a different register. The inhuman in their fiction, I argue, does not signal the end of human possibility but rather suggests dynamic ways in which the category of human might be transformed. Overt in their affinities to the venerable trickster traditions of vodoun, shamanism and African indigenous lore, 0D and the CCRU moreover productively suggest that sf has a home outside its traditional Euro-American strongholds. xxiii The genre of sf does not only concern itself with the articulation of techno-enhanced futures, but also accommodates journeys into the distant past, the creation of links between past, present and future, and the reclaiming of the mythic mode of orality in a present moment that is already, in itself, hybrid and science-fictional (Carstens & Roberts, 2009:81). In this manner, non-western ways of seeing may be productively "situated as valid alternative[s] to techno-culture" or read in terms of the "potent fusions and intersections" they conjure up, not only between different cultural systems, but also "between myth and technological rationalism" (2009:81). For 0D and the CCRU, the contemporary moment is just such a moment of opportunity – a raging sea filled with machinic intensities and shamanic possibilities that is suggestive of fecund journeys forward and backward in time as well as transversally across the varied cultural traditions of humanity.

Hyperstition serves as an acute aesthetic diagnosis of the infection-prone condition of the space of flows. 0D and the CCRU consider that even language and artistic expression are complicit with the spectacle, but suggest, nonetheless, that they might still be productively wielded in acts of negation and inversion. Although the momentum of their narratives would seem to suggest that they advocate a tearing up of the past, it is my contention that their work revitalises history in the light of sf's novum – the radically-changing newness and rupture that are crucial for sustaining the vitality of culture in fast-changing times. Simultaneously, hyperstition considers the actions of invisible agents and forces long denied by western materialist discourse. 0D and the CCRU invoke these supernatural forces to cultivate an affect-laden aesthetic of horror. Miéville views urban Gothic as a genre overcome by the "horror underlying the everyday, the global and [the] absolute ... implying [a] poisonous totality ... an awareness of total crisis" (2009:515). It is important to stress, however, that 0D

and the CCRU utilise horror in a manner slightly at odds with this trajectory. By means of horror they generate liminal affects that not only indicate the presence of crisis but exploit the transformative potential of panic. Panic – if experimented with – can, in their narratives, be employed as a fructifying event (see endnote xii).

In this chapter I have explored the correspondences and overlaps between the work of 0D, the CCRU and the diverse messengers with which they share an ethos. I have situated them along a line of flight or fracture that extends from contemporary digital subcultures, through speculative realism and the ontology of Deleuze and Guattari, to the textual inversions of the Situationists. This journey does not amount to a "cancelling of history," as Botting implies when referring to the work of Land and the CCRU (2008:217). Rather, as I have ventured to show, 0D and the CCRU attempt to conceptually loosen the constraining bonds of history, thereby affirming rather than abandoning the past and the future. This avowal is, of course, ironically executed through a type of anastrophe or rhetorical inversion that is completely in keeping with the playful perversions recommended by Jarry and the Situationists, as well as by theorists such as Deleuze and Guattari. Like them, they insist on making radical demands on the imagination, creativity and desire. As Plant notes, along with the Situationists, theorists such as Deleuze and Guattari "take the words, meanings, theories and experiences of the spectacle, and place them in an opposing context; a perspective from which the world is given a fluidity and motion with which the static mediocrity of the spectacle can be negated" (1992:3).

0D and the CCRU are, perhaps, best viewed as performers in this satirical avant-garde circus of theoretical inversion; as part of a long history of countercultures in the west that have played a necessary role in overturning academic and social complacencies. Like the Situationists, they have scattered tangible cultural imprints in their wake, which have acted as seeds for further subversion. Their peculiar blend of occultism and radical theorising, with its advocacy of embodied vision and direct participation in the reality of the everyday, arguably constitutes a welcome antidote to the bland pessimisms that cut across a wide swathe of postmodern theorising. Such investigations into the shadowy side of the fictions that surround us form part of a vital response to spectacular culture in sf and in theory – a response, as I will consider in chapters 3 and 4, that figures the apocalypse as a site of radical possibility and that remains strangely hopeful despite the horrors that it explores and invokes. While the countercultural rejoinder, as I will detail in chapter 4, is still vibrant, it is to the opposite pole

that I will turn to first investigate sf texts that appear to annul history along with any possibility of renewal.

ⁱ Joan Hawkins distinguishes between "books which are merely informed by theory or which seem to lend themselves to a certain kind of theoretical read" (such as the fiction of Robbe-Grillet) and "the kind of books in which theory becomes an intrinsic part of the 'plot,' a mover and shaker in the fictional universe created by the author" (2001:1). Only the latter, for Hawkins, function as proper 'theoretical fictions' or 'theory fictions.'

[&]quot;" "It is often said that the west's great undertaking is the commercialization of the whole world, the hitching of the fate of everything to the fate of the commodity," writes Baudrillard. "That great undertaking will turn out rather to have been the aestheticization of the whole world - its cosmopolitan spectacularization, its transformation into images, its semiological organization" (1993:16).

iii Alfred Jarry's pataphysics or 'science of imaginary solutions' also served as the direct influence for Artuad's 'theatre of the virtual' and his concept of the Body without Organs, which Deleuze and Guattari took up in their *Capitalism and schizophrenia* cycle (see endnote xix). The spirit of pataphysics also informs the work of Land, 0D and the CCRU in which machines come alive in supernatural ways, and characters, story lines and events are governed by strange interconnections, reversals and hallucinations.

iv In *Communication power* (2010), Castells points out that the anti-globalisation movement, environmental movements, as well as *Al-Qaeda* and its related organisations "are structurally switched on with the media network" (2010:49). To these groups, one can add globally active political lobbying groups such as Avaaz. These groups, writes Castells, have realized that "both the dynamics of domination and the resistance to the domination rely on network formation and network strategies of offence and defense" (ibid).

^v According to Coverley, the Situationists drew together the *dérives* of the urban Gothic, the French *fin de siècle* practice of *flâneurie* (random strolling) and their own attempts at remapping urban space under the umbrella term 'psychogeography.' This, they defined "with a pleasing vagueness" as a study of the "specific effects of geographical environment, consciously organised or not, on the emotions and behaviour of individuals ... [and as] a means of exploring the behavioural impact of urban place (2010:10).

vi Lovecraft's weird sf is peppered with references to the fictional *Necronomicon* (the book of dead names), that describes future events and tells of the time-travelling "Old Ones," who, in *At the Mountains of Madness* are described as having "created all earth-life as jest" in a distant evolutionary past (1936:22). Director Riddley Scott reworks this theme of 'cosmic horror' involving capricious 'Old Ones' in his recent film, *Prometheus* (2011).

vii Deleuze and Guattari use the term "haecceity" in the sense of a spatial sensation of time that is orientated around affect. Haecceity, they write, denotes "a climate, a wind, a fog. . . an hour, a season, an atmosphere, an air, a life" (1988:262). The Oxford dictionary of historical principles defines affect as a "mental disposition" or "a bodily desire" toward something (1980:33) and notes that haecceity, derived from the Latin word haecceitas, refers to a sense of "'thisness,' 'hereness' or 'nowness'" (1980:911). It denotes, as theorist Elizabeth Wortel writes, "a specific folding of time and place, the folding of becoming" (2011:6). The concepts of haecceity and affect, she notes, together form "an assemblage of intensities, in contact with each other, one including the other" (ibid). As Wortels writes, "time, space, affect, haecceity, becoming, performance and memory are folding concepts in [the] philosophy [of Deleuze and Guattari] that produce a conscious alternative to the logic of representation" (2011:7). The "logic of representation," she writes, is culturally-dominant, determining "the way we learn to approach, structure and make sense of our experiences" (ibid). An aesthetic approach orientated around affect and haecceity enables this logic to be overturned, she continues (ibid). This specifically pertains to 0D and the CCRU's attempt to capture the dark haecceity of the fin de millennium in terms of a disposition or desire orientated around the future-tense of sf. "When an artistic presentation ... is perceived through its affects, different perceptions of rhythm and movement will be made possible," writes Wortel (2011:10). Following this line of reasoning, artistic productions that attempt to capture a sense of haecceity through the medium of affect

will not turn to the 'logic of representation' in order to please an existing audience: "Instead, [they will] create new sensations for a people yet-to-come ... a practice [that] will involve the production of novel constellations of affects, away from opinion, away from habit, away from the clichés of so-called culture (the affective assemblages offered to us on a daily basis)" (2011:9). Throughout my first chapter I explore how 0D and the CCRU attempt to create such 'novel constellations' positioned around an 'inversion' of cultural norms that is apocalyptically orientated around the 'yet to come.' This is an investigation that I will continue in my final chapter when I deepen my evaluation cyberculture in terms of affect and haecceity.

- viii Michel De Certeau refers to two possible utopian interpretations of textual glossolalia. One version views the phenomenon as a manifestation of an as-yet incoherent new language that will only become stabilised and meaningful in the future. The other sees it as the realisation of an edenic state in the present moment an "involuntary eruption of intense affective processes with a corresponding weakening in the clarity of what is conscious" (1996:29). 0D's frequent allusion to the immanence of a future beyond human limitation gives credence to the first interpretation. The second understanding is equally plausible, however, due to their continual stressing of schizophrenic mind-states.
- ^{ix} These 'extreme' experiences include hallucinations, voudoun-like possessions, drug-overdoses, chemically-induced deliriums, self-mortifications, glossolalia, extremities of audio-visual stimulation and prophetic ecstasies.
- ^x The label 'hypertext,' which has been applied to *Cyberpositive* (see Reynolds, 2002:1, and Moore, 1996:1) refers to the Internet and its system of embedded links wherein documents, programs and images are pervasively interlinked. Appropriated by cybercultural theorists and writers to describe their literary projects, hypertext takes the form of literary allusion and it is used extensively in sf and theory-fiction that, as David Bell remarks, refer to other related texts by "copying signature styles," or by drawing on analogous "cultural codes and experiences," thereby creating a sense of embeddedness in the cybercultural continuum (2007:82).
- xi At the very moment when enormous questions of environmental and potential socio-economic disaster require thoughtful and strategic responses, much of theory appears to have lost all reason and hope to a commodified info-spectacle that seems to be accelerating out of control. "It is indeed unfortunate that human society should encounter such burning problems just when it has become materially impossible to object to the language of the commodity; just when power believes that it no longer needs to think and indeed can no longer think," remarks Debord in *Comments on the society of the spectacle* (1988:19). *Cyberpositive* 'surfs' this wave of pessimism in the direction of novelty, in keeping with Debords *Comments*, which appears to advocate an occult strategy of secrecy to maintain the possibility of revolution. Debord, in fact, insists on a cryptic air of mystery right from the outset, maintaining that "I must take care not to give too much information to anybody," and that only a handful "who persist" may ferret out of his text the clues by which to fight the spectacle (1988:1).
- xii The influence of shamanism and its practices of possession and ritualised or 'virtual' death on cyberdelic counterculture is all-pervasive and has been exhaustively documented by, amongst others, Rushkoff (1994) and Davis (1998). There are numerous and often disturbing scholarly accounts of the shamanic healing process, which involve the experience of symbolic death. Joan Halifax, for example, provides poignant and often harrowing testimonies from indigenous Mesoamerican, Khoisan, Aboriginal, Samoyed (Siberian) and Inuit shamans in Shamanic voices (1979). All of these accounts testify that shamanic healing takes place through a type of self-poisoning - an embodiment and distillation of putrefaction, demonic possession, contagion and death. Shamanic healing, writes anthropologist Mircea Eliade, necessitates "a difficult process ... a dangerous passage" (1989:484). According to Eliade, having "taken on" the disease or demonic possession that he or she is attempting to cure, the shaman undertakes a symbolic death, dismemberment, and a contemplation of the skeleton (ibid). Having experienced the symbolic death of the self, the shaman descends through the interior landscape of the body and ascends/descends into the supernatural realms beyond the borders of the self via a "spiral ladder" or a "bridge of swords" into the connected realms of stars, minerals, animals, plants, humans, as well as that of the invisible and abstract. This "paradoxical passage" (1989:490) brings the shaman into contact with the supernatural cause of the ailment or possession and involves direct contact with the "suprasensible world ... a total transformation into something other and alien" (1989:179). The shamanic healing process can only be executed through an embodied sublimation of death, dismemberment and panic (1989:485). Panic – if experimented with - can be a fructifying event, avers Coil - a group of artists who, like 0D and the CCRU, operate on the digital frontiers of cyberdelic counterculture. Part of the contemporary healing process, they

declare, lies in performing self-surgery and "deliberately nurturing states of mind usually regarded as dangerous and insane ... a kind of Murder in Reverse" (1988:3).

xiii As De Landa explains in *The geology of morals* (1994), autocatalysis describes the actions of "autocatalytic loops ...closed chains of chemical or other processes that involve not only self-stimulation but also self-maintenance. ... [This] involves [the] interconnection [of] a series of mutually-stimulating pairs into a structure which reproduces itself. ... A product that accumulates due to the catalytic acceleration of a chemical or physical reaction, which serves as the catalyst for yet another reaction that, in turn, generates a product that catalyses the first one. Hence ... [a] self-sustaining [loop that functions] as long as its environment contains enough 'raw materials' for the reaction to proceed" (1994:1). Autocatalysis, as well as positive feedback and self-organization, as he goes on to explain, can be used to explain the functioning of social 'reactions' via hype and speculation, the growth of crystals, the ticking over of chemical clocks, the actions of solitons, the function of "weather systems" – whether social, chemical or metereological (ibid).

thirdspace' into the traditional dialectic between history (the 'firstspace' of the 'real' material world) and the social (the 'secondspace' of perspectives, interpretations and imagined representations of the world). For Soja, the 'thirdspace' is "a space of extraordinary openness, a place of critical exchange" (1996:5) that allows previously incompatible perspectives to enter the perception of regional place, as informed by categories such as race, class and gender. Soja aims to "open up a distinctive new interpretive realm" (1996:22) in the context of emerging electronic media as well as in the context of growing environmental and social problems. Although Soja's work is largely concerned with the constructions of regionalism, his attempts to move discussion around issues of critical regionalism away from dichotomies and polarities toward a distinctly postmodern 'both/and also' analysis overlaps with Deleuze and Guattari's 'schizoanalytical' mode of analysis as well as their use of terms such as the 'line of flight,' 'assemblages' and 'abstract machines' to describe processes whereby seeming opposites or divergent concepts can be united in the search for endless new meanings and novel combinations (see 1988:70-73). OD's espousal throughout *Cyberpositive* of liminal states such as vodoun, shamanism, synaesthesia, autism and psychedelic perception that allow for sensory overlaps as well as for multiple possibilities or concepts to be entertained simultaneously also refers.

^{xv} This is a nod in the direction of J.G. Ballard's *Drowned world* (1972) where humans in a post-catastrophe future regress 'down the spine' into a pre-conscious zone of visceral unmediated experience equated by Ballard with primordial life.

xvi Edmund Burke, in part III, section 27, of his *Philosophical inquiry into the origin of the sublime and beautiful* (see endnote xviii) notes that "sublime objects are vast in their dimension," adding that it befits that they be "dark and gloomy" also (2001:1). He identifies, in Part II, section 2, "serpents and poisonous animals" and "whatever ... is terrible" as sublime, stressing the importance of fear and terror that "effectually robs the mind of all its powers of acting and reasoning too" (2001:1). These emotions are, as I will demonstrate throughout my thesis, central to sf and can be equated with that central axiom of the genre, the 'sense of wonder.' Sf is infused with a sense of the sublime, extending its narratives into the vastness of the cosmos and the destabilising spectacles of technological mediation. "This reaction," writes Mendlesohn of the genre's "sense of wonder," can be equated with "the appreciation of the sublime, whether natural, such as the rings of Saturn, or technological" (2003:3). Some instances of contemporary sf (such as the theoretical fictions of 0D and the CCRU) have also incorporated the notion of a radical emancipation or 'undomestication' of the sublime advocated by Deleuze and Guattari as well as by Land by emphasising the ominous and supernatural potential of the sublime – a theme that I continue explore in my third chapter.

xvii Deleuze locates the aesthetic foundation of the Romantic sublime in the third of Kant's monumental critiques, *The critique of the power of judgment* (1790). He observes that Kant formulates the concept of the sublime in terms of a dynamic and peculiar aesthetic encounter. The "dissonant accords" that Kant's notion of the sublime generates engages the senses in "such a manner that they struggle against each other like wrestlers," notes Deleuze, "pushing each other to new limits and new inspirations" (1998:34).

xviii All direct citations of Burke's *Philosophical inquiry into the origin of our ideas of the sublime and beautiful* are taken from an online addition published by Bartleby in 2001 (available: http://www.bartleby.com/24/2/.).

Wherever I cite Burke I will refer to the relevant 'Part' and 'Section' of his *Philosophical inquiry* where the quoted text can be found.

xix "On November 28, 1947, Artaud declares war on the organs" (Deleuze and Guattari, 1988:150). Recoiling against the "organic organization of the organism," Artaud's conception of the Body without Organs (BwO) had "done with the Judgement of God ... the Trinity ... three great strata that concern us: the organism, significance, and subjectification ... you will be organized ... you will be signifier and signified, interpreter and interpreted ... you will be a subject, a subject of the enunciation recoiled into the subject of a statement" (1988:158). "The organism", he declares, "is not at all the body, [the true body is] the BwO" (1988:159). Resisting attempts at being concretized, the true body is a shaman's body; a virtual entity – "a pure immanence ... an ongoing experiment" (1988:150).

xx In the absence of the human-centric point of view, the question of how one rethinks the world as 'unthinkable' and in terms of contingency arises. In Cyclonopedia: complicity with anonymous materials (2008), Reza Negarestani considers the fundamentally occult nature of reality or "the hiddenness [of the world] in which we as human beings play little or no part" (Thacker, 2011:52). Contemplating what Eugene Thacker terms the 'horror of philosophy,' Negarestani navigates "the horizon of the human as it struggles to comprehend the unhuman" (Negarestani, 2008:47). Like De Landa's War in the age and Cyberpositive, Cyclonopedia is a work of hyperstitional theory-fiction that hybridises scientific narratives, occultism, speculative philosophy and science-fiction. As with Cyberpositive it constitutes a work of gothic materialism, embracing the 'horror vacuii' of Gothic fiction and pushing the schizophrenic ontology of Deleuze and Guattari to new levels of intensity. The subject of Negarestani's occultic and Lovecraftian-flavoured sf is petroleum, which is described a biohazardous predator, a "Tellurian insurgency ... a convoluted plague" bubbling up from an Earth that has been "deflowered" and "drilled full of holes" by industry (Negarestani, 2008:45). Part ontological detective story and part grimoire, the novel describes the occulting ravings of Persani, a fictional Persian archaeologist and geochemist, who uncovers a petrochemical conspiracy to accelerate the Earth towards a union with the Sun in an apocalyptic and fiery conflagration. Following an internet lead to Iran, a student uncovers a Persani manuscript - part geochemical treastise, part demonic grimoire - that describes the Middle-East as a zone of oil-based hyperstition, home of a blob-like tellurian sentience that engenders and nurtures political chaos that spills and flows out (via pipelines and tankers) across the world. Here Land's directive to accelerate capitalism is given a Lovecraftian reworking as an inhuman, incomprehensible sentience, conceived of along the lines of cosmic horror, that directs the technological and capitalist activities of humanity, driving and accelerating the tendencies toward a fiery meltdown. Linking Lovecraftian madness, the apocalyptic landscapes of contemporary world politics and the War on Terror with the terrifying natural history of the Earth itself, Negarestani weaves a complex philosophical grimoire – a hypserstitional 'book of dead names' and sorcerous interventions that has its direct antecedents in works like Cyberpositive and the Catacomic.

xxi Although Anderson restricts his discussion of imagined communities to the 'fictionalised' but very real political nationalities that increasingly came to replace the 'religious community' and the 'dynastic' realms in the centuries following the Enlightenment, I will argue throughout that it is productive to investigate how such 'fictionalised' communities are created and interrogated in contemporary science-fictional narratives.

xxii Hakim Bey's identification with gnosis, rapture and ecstasy as central to a type of 'non-being' or non-philosophy that by-passes anthropocentrism corresponds with the position taken by 0D, Land, Plant and the CCRU. It is also shared by theorists such as Deleuze and Guattari as well as De Landa, theorists who – as Land puts it – "ascribe a certain type of consciousness to matter itself" (Land cited in 0D, 1995:197). "Thought," he writes, "is a function of the real ... something that matter can do" (1995:197). This is a position that Shaviro calls "panpsychism" which, broadly speaking, claims "that mind, or sentience, is in some sense ... a universally distributed quality" (2010:1). This is a position that is evident throughout *Cyberpositive* and its penchant for shamanic ecstasy, vodoun possession and drug delirium – states that celebrate the absolute synaesthetic 'aliveness' of matter whilst favouring extreme degrees of shamanic rapture. Accepting the evidence of sensual experience and consciousness as well as the findings of physical science while rejecting idealism and dualism, panpsychism has endured as an undercurrent in the history of Western thought ever since the pre-Socratics, emerging in the work of theorists such as Spinoza, Romantic natural philosophy and, more recently, in what

Jane Bennet terms the "material vitalism" of theorists such as Deleuze and Guattari (2010:x), as well as in the gothic materialism of Land, the CCRU and 0D. Panpsychism "persists as a kind of counter-tendency to the anthropocentrism, and the hierarchical ontologies, of mainstream philosophical dogmas," writes Shaviro (2010:1).

xxiii In 2009, Mer Roberts and myself wrote a paper entitled *Protocols for writing African sf* in which we expressed a hope that more African writers would take up the task of writing future-orientated sf utilising the continent's rich traditions of myth and sorcery. One reason that so few have done so, as sf author Adam Roberts notes, is the "broad [African] cultural bias in favour of 'spirits' or 'magic' as an explanatory discourse; a bias that conflicts with the materialist emphases of contemporary science" (2006a344). This, however, should not be a hindrance for African sf. The work of 0D and the CCRU evince more than a keen empathy for the liminal registers of African spirituality. In *Liquid lattice* (2007), 0D and CCRU mix together quantum physics, cybernetics, alchemy, African board games, the I-Ching, /Xam poetry and sangoma ritual in the science fictional creation of an 'Atlantean' Tarot deck. Systematised using a language of spiritual frequencies that ignores cultural boundaries and the lines between physics and metaphysics, such a project may be inimical to contemporary scientific materialism, but it is not inimical to sf as a genre and, more importantly, it is suggestive of lines of flight along which an African sf might situate itself. As Adam Roberts notes, it was precisely such a "dialectic between new materialist-scientific discourses on the one hand, and magical-spiritual discourses on the other" – the same dialectic that inspired Gothic fiction – that gave rise to the genre of sf in the first place (2006a:345).

Chapter 2 - The terror of history

As one contemplates the bloody ebb and flow of human events, the appalling historical record of mass killing and meaningless bloodshed, one may begin to recognize intimations of a blind, oppressive, random yet deterministic mechanism. One experiences the terror of history. ... In terms of modern historicism, humanity attempts to define itself and thereby creates history but history always, in the end, betrays those who make it. (David Cowart, 1989:84)

In Sense of an ending (1967) Frank Kermode claims that apocalypse serves as an archetypal model of narrative closure, arguing that the wholeness of the apocalyptic vision is a model of the order created by fictional narration. "We project ourselves past the end," he posited, in order "to see the structure [of history] whole" (1967:8). This projection 'past the end,' writes theologian Jonathan Kirsch, constitutes one way of integrating the experience of actual historical crisis and it indicates the traditional role of apocalyptic narratives as a "soothing balm" for troubled times – a "comforting theological innovation" that conflates the scripted (or rather, the 'scriptural') end of history with the present moment of crisis (2006:191). Today, I suggest, the phantom of inevitable and 'scripted' crisis appears to remain, but not always with its corollary of rejuvenation, nor with Kermode's sense of "a deep need for intelligible ends" (1967:7). This spectre denotes a thoroughly ruinous and catastrophic aspect of the fin de millénnium's dark haecceity. It is what Cowart, after Eliade, terms the 'terror of history' (1989:83-84). The texts I considered in my first chapter attempt to invert this perceived crisis of an ending without purpose or new beginning by reimagining the traditional apocalyptic motifs of consummation and transformation. After all, as Kermode writes (1967:7), the task of the apocalypticist is to "make sense" of historical crisis by positing some form of continuity beyond catastrophe. The texts I will now consider, however, suggest an altogether different apocalyptic sensibility at work. This sensibility, I argue, is hyperstitional in the catastrophic sense, refusing the inverted or 'anastrophic' gesture enacted by 0D and the CCRU to breathe new life into the perceived crisis of postmodernity. The texts I have chosen to analyze are Russell Hoban's Riddley Walker (1980, republished 2002), Michael Swanwick's Jack Faust (1997) and Brian Stableford's Decadent-inspired fin de siècle trilogy, The werewolves of London, The angel of pain, and The carnival of destruction (1990, 1992) and 1994 respectively). I have selected these texts because I consider them to be steeped in Cowart's conception of the terror of history; namely, "the suspicion or conviction that history answers to no transcendent rationale" (Cowart, 1986:83). Emblematic of a specific brand of postmodern anti-utopian narratives that are focused on ruinous entropy - what Jameson (2007:199) has paradoxically termed 'apocalyptic sf' (see endnote vii) – these texts reflect catastrophic *fin de millénnium* attitudes toward history and historical time that reject the usual apocalyptic correlate of renewal after calamity.

The dialectic and continuity of rupture cannot be arrested and solved in and for itself, but generates ever new forms and categories. (Jameson, 2002:23)

Hyperstition is an intentionally ambiguous apocalyptic aesthetic – a fin de millénnium form of Jameson's 'ongoing continuity of rupture' - that works, as I have already noted, through selffulfilling prophecies, time-travelling fictions, the intensifying of coincidences and invocations to supernatural agencies or Old Ones. The presence of supernatural agencies, in particular, is what sets hyperstitional sf apart from other examples of contemporary sf. This not only offers a way of classifying hyperstitional examples of sf (as well as hyperstitional examples of theoretical sf), but also a way of reading or analysing these kinds of fictions. The sciencefictional 'sense of wonder' that is typically conveyed through scientific marvel is in hyperstitional sf conveyed by evocations of supernatural horror. Although scientific speculation or conjecture may be present in hyperstitional sf (it dominates, as I will show, the examples of cybergothic sf that I will consider in my next chapter), this, along with the spacetime displacements, which are similarly conventional sf tropes, are executed and explained in relation to inhuman paranormal forces instead of via rational scientific conjecture (as is typical in standard sf). As with Cyberpositive and the Catacacomic, the presence of supernatural agencies in Riddley Walker, Jack Faust and the Werewolves trilogy indicates an affinity with Gothic fiction, although without the redemptive function and "symbolic healing" that Botting associates with traditional Gothic narratives (2008:35). This recuperative function, as I have already shown, can be located in 0D and the CCRU's theoretical sf. It can also be found in other forms of hyperstional sf, such as the cybergothic and biopunk modes I will investigate in my third and final chapters. All hyperstitional texts, unlike standard sf, are characterized by a radical departure from Enlightenment reason, a certain anti-human resonance and identification with estrangement and disaffection. Hyperstitional sf, as I argue, is executed in a thoroughly ambivalent mode that reflects on the ontological instability of the fin de millénnium. Although the presence, in these types of sf, of self-fulfilling prophecies underline an apocalyptic aspect of inevitability (the certainty of catastrophe), the presence of other elements, in particular that of the supernatural, can be made to work in an anastrophic or inverted fashion and thereby used to renew that which has been shattered. While 0D and the CCRU unmake the category of the human only to refashion it via a type supernatural science, authors of the kind of apocalyptic sf I will now consider refuse any kind of redemptive gesture despite their supernatural focus. Part of this refusal is executed in the sf of Hoban, Swanwick and Stableford via their peculiar employment of hyperstitional time-travelling

devices. These authors are significant in this regard because their narratives are set in a version of the historical past rather than in the customary sf setting of the future.

Hoban's text is situated in a distant future that exactly resembles the early iron-age, Swanwick's text is set in a version of the Renaissance, and Stableford's in the late 19th and early 20th centuries. For these authors the past, usually occupied (in Gothic fiction as well as in other 'standard' types of apocalyptic fiction, such as García Márquez' One hundred years of solitude) for nostalgic or redemptive purposes, offers no possibility of restoration or even recuperation. In apocalyptic sf, as I argue, the past has been irretrievably infected with symptoms of decay, along with the entire historical narrative. The past is therefore deemed as undesirable and uncertain as the future and both are dismantled with equal force. Apocalyptic sf, as historian and sociologist Krishan Kumar sees it, is a response to postmodernity's denial of utopian possibility and its denunciation of progress (1995:211). Postmodernity, writes Kumar, is characterized by the "faltering of its confidence in the future" (1995:211). It is noteworthy that the early iron-age, Renaissance, modernist and late Victorian/Edwardian periods in which Hoban, Swanwick and Stableford have set their sf each represent periods of major historical, social and economic transformations in western history during which the terror or 'hurt' of history was acutely perceived. In this manner, these apocalyptic authors hold mirrors up to the past in order to catch the shadowy reflections of the present moment of historical crisis as well as that of an anticipated future calamity. Simultaneously their efforts to scour the literary past evince a kind of 'poisonous nostalgia' for a lost future that is annulled by catastrophe. "Nostalgic reconstructions are based on mimicry; the past is remade in the image of the present or a desired future," writes Svetlana Boym in The future of nostalgia (2001:354). Arguably, the opposite may also be true when, as is the case with Riddley Walker, Jack Faust and the Werewolves trilogy, the future is remade in the image of the past – whether feudal Britain, Renaissance Europe or Edwardian London. There is something dangerous and "poisonous" about these types of literary nostalgias, writes Boym; "they are dreams that denounce the present" historical moment (2001:354). Whereas ordinary nostalgic fiction represents a historical desire to erase the present and return to a simpler and less complicated time (2001:7), apocalyptic nostalgia – of the kind identified by Jameson (see endnote vii) - represents something far deadlier; the desire to annihilate the future, which is premised on fear, exhilaration and the Freudian death-drive. These, as I will consider particularly in my discussion of the Werewolves trilogy - are all elements of fin de siècle culture, which celebrates a dark Romantic or Decadent sensibility of wilful decay.

Symptomatic of a type of cultural illness induced by future shock, the hyperstitional infection brings about that which is most feared; a world spiraling out of control in which catastrophe

seems closer than ever. In response to the terror of history, Hoban, Swanwick and Stableford turn to the past but find it contaminated by the shadows of a future calamity. Writing about history in the futuristic mode of sf, they attempt to juxtapose the past and future and constitute a dialectic whereby the terror of history may be examined in a hyperstitional manner utilising a type of time-travelling fiction that imagines history in retrochronal terms as driven by occult significances, acceleratory mechanisms and coincidence intensifiers.

There are other related refusals that are present in their sf. Hoban, for example, re-imagines the Homeric motif of *nostos* (the return 'home' after calamity) as well as the motif of the wasteland as utilized by Shakespeare in *King Lear* and the modernist poet TS Eliot without granting these apocalyptic motifs their restorative associations. Swanwick re-imagines Marlowe, Goethe and Mann's characterization of Faustus while emptying this Promethean character of any redeeming and humane associations. Stableford restages a Decadent 19th century *fin de siècle* fascination with cultural putrefaction and replays the sf genre history of literary utopias while refuting their redemptive visions. In separate subsections of this chapter – in which I will discuss *Riddley Walker*, *Jack Faust* and the *Werewolves* trilogy individually – I will examine these elements while situating these texts in relation to the genre of sf as a whole, the apocalyptic subgenre and the *fin de siècle/fin de millénnium* context of my thesis. I will also, where appropriate, consider them in relation to a wider literary context of disaster-related fiction. Before doing so, however, I will review the broader *fin de millénnium* context of apocalyptic sf.

Apocalyptic sf: capitalism, the collapse of utopia & the crisis of postmodernity

It is precisely because history has made no sense that we have learnt from it, and the lesson remains a brutal one (Land, 1992:155).

The 'terror of history' is a term used by anthropologist and religious scholar Mircea Eliade to describe the desire to escape the terrible forward march of linear events. In a society that has repudiated the idea of sacred time and mythical causality, writes Eliade, there is no escape from the profanities, anxieties and blind catastrophes of linear history (1971:151). Throughout western history, the apocalyptic utopian imagination has always acted as a type of panacea for the terror of history by offering a type of transcendent rationale for catastrophe. Writing of South American oral and literary traditions, Lois Parkinson Zamora notes that "despite otherwise vast differences of temporal movement," there are "points of congruence in the apocalyptic expectations" of European and indigenous civilizations (1989:3). The apocalyptic vision, writes Zamora, "promises that the corrupt world of the present will be supplanted by a new transcendent vision" (1989:3). A wholly different kind of

apocalyptic view, however, seems to characterize the current crisis of postmodernity. "What we seem to have to today," writes Kumar "is the apocalyptic imagination without hope [for a new beginning]" (1995:205). The roots of this apocalyptic despair appear to lie both in the discourse of postmodernism that has served to undermine the notion of utopian renewal as well as in the historical realities of the present, where a new 'disorder' seems to characterize a world more unstable, dangerous and uncertain than at any time during the past half-century. "Deeper-lying problems, the result of centuries of development seem to be coming to a head," writes Kumar, identifying these problems as including globally mounting ethnic hostilities, escalating trade wars, worsening economic recessions, endemic civil wars, virulent natural disasters and the peril of ecological devastation (1995:205). From the historical perspective, these problems have been exacerbated worldwide by the perceived failure of political, economic and socialist utopias – particularly in the former Soviet bloc – during the contemporary *fin de siècle* period.

Capitalism only works in precise social conditions: it implies trust in the market's 'invisible hand' which, as a kind of Cunning of Reason, guarantees that the competition of individual egotisms works out for the common good. However, we are now in the midst of a radical change: what looms on the horizon today is the unheard-of possibility that human intervention will catastrophically disturb the run of things by triggering an ecological disaster, a fateful biogenetic mutation, a nuclear or similar military-social calamity, and so on. No longer can we rely on the limited scope of our acts. (Slavoj Žižek, 2011:429)

Kumar writes that the breakup of communism and its apocalyptic utopian socialist models^{iv} after the ideological tumult of the 20th century have led some political thinkers, such as Francis Fukuyama, to posit that humanity has reached the millennial "end of history" in the sense that liberal democracy, underpinned by a market economy (the locus of capitalist utopianism) now appears to be the clear choice of the vast majority of the world's nations (1995:205). Although regional power-houses such as China and Saudi-Arabia have proven that liberal democracy is not a prerequisite for capitalist economics, the ubiquity of globalized market-driven economics does appear to signal the death-knell of the alternative socialist utopian ideal. "With the collapse of the Communist states" writes Žižek, "humanity abandoned the old millenarian utopian dreams" (2011:419). While Žižek clearly prefers the Marxist version of the socialist utopia to the individualistically-orientated capitalist ideal, he is more concerned that the capitalist socio-economic model is, for all intents and purposes, "the only hegemonic ideology" left standing (2011:419). In a 2006 documentary directed by Astra Taylor, he remarks that it seems much easier today to imagine an end to all life (and thereby history) than it is to imagine a radical change in the nature of the global capitalist economic status quo that is producing apocalypse. Žižek equates postmodernism with the total victory of late capitalism, stating that postmodernism is an ideology complicit with the

trade in commodity fetishism, fantasies of unfettered market freedoms and unlimited horizons for liberal subjects. Postmodernism, as Kumar notes, is a discourse that refutes the possibility of historical renewal or "expectations of a new beginning ... it is, Jacques Derrida has said approvingly, [a discourse] 'without vision,' without redemptive hope ... an apocalyptic vision of an 'end without an end'" (1995:206). In *Living in end times* (2011) Žižek outlines the possibility of radical change by promoting the inversion and subversion of the 'capitalist real.' Like the Situationist perversities endorsed by 0D and the CCRU, he recommends the "crazy act which changes the basic 'transcendental' coordinates of the [capitalist] social field ... an act that is more than an intervention into the domain of the possible ... an act that changes the very coordinates of what is possible and thus retroactively creates its own conditions of possibility" (2011:490). According to Žižek, we need to overturn the 'ideology of capitalism' which maintains that nothing outside of capitalism is possible. It is unclear, however, from *Living in end times*, what exactly would constitute the 'crazy act' needed to overturn the capitalist mode, nor what realisable or plausible alternatives are realistically available.^{vi}

If [apocalyptic] revelation of the end of history includes – indeed, catalogues – disasters, it also envisions a millennial order which represents the potential antithesis to the undeniable abuses of history. While it is true that an acute sense of temporal disruption and disequilibrium is the source of, and is always integral to, apocalyptic thinking and narration, so is the conviction that historical crisis will have the cleansing effect of radical renewal. (Zamora, 1989:11)

"If it is so, as has been observed, that it is easier to imagine the end of the world than the end of capitalism," writes Jameson in Archaeologies of the future (2007), "we probably need another term to characterize the increasingly popular visions of total destruction and of the extinction of life on earth which seem more plausible than the utopian vision of the new Jerusalem" (2007:199). Jameson proposes the phrase "apocalyptic sf" to characterize narratives of ends without new beginnings that are neither utopian nor dystopian. With such a formulation he suggests a deliberate antithesis of the standard meaning of the word "apocalyptic," with its "cleansing" corollary of "radical renewal" and attendant promises, as Zamora explains, of redemption for the faithful and punishment for the "unjust" (1989:3). For Noys, Jameson's conception of 'apocalyptic sf' is in keeping with a postmodern climate in both theory and popular media culture that feeds on the "overlapping of the financial crisis, ecological crisis and the crisis of movements of resistance" to "produce dreams or nightmares" of a world caught in an entropic spectacle of wilful degeneration or "thoroughly 'cleansed' of humanity" by techno-scientifically induced catastrophe (2010:1). For authors writing apocalyptic sf in the mode suggested by Jameson there is no remedy for the terror of history which is producing a potential end without humans. This is the catastrophic

hyperstitional sensibility that I will consider when reading the work of Hoban, Swanwick and Stableford.

Jameson posits that postmodern and late modernist apocalyptic sf may function as a psychological expression of the trauma or even the morbid ecstasy that arises from "historical experiences of defeat" (2007:199). As an example he notes that the apocalyptic oeuvre of writer J.G. Ballard can, in part, be seen as a literary response to the collapse of the British empire – a downfall that seems to be depicted in Ballard's fiction with a morbid "jouissance" (2007:199). This is corroborated by Kermode's claim that "the mythology of Empire and Apocalypse are very closely related" (1967:10). The sense of defeat that haunts the current fin de siècle is broader, however, than that which has resulted from the collapse of individual empires, cultures and social orders during the historical tumult of the 20th century. Transmillennial authors writing 'apocalyptic sf' transcend these individual defeats by describing the defeat and entropic degeneration of humanity as a whole. These catastrophic visions reflect the globalised and interlinked world of the present when "at any minute," as Land remarks in an intentionally satirical overstatement, which is typical of his oeuvre, "economic or environmental failures could rip bloody gashes in the social fabric [engendering] planetscale skidding to capital closedown" (1998:81). In a global socio-economic climate driven by sensationalism, the process of hyperstition is continuously intensified as consumers buy into the hype-cycles that drive "phase out" or "meltdown" culture (1998:82). Apocalyptic sf, in this regard, describes a hyperstitional positive feedback circuitviii that is actualising the apocalypse. Hyperstitions are uniquely powerful in the media-saturated world of the present. Apocalyptic elements of literary history (both western and global, including even elements of extinct civilizations such as those of the Mayans) have today been downloaded into the media-scape where, freed from their original socio-cultural contexts, they are endlessly rehashed and given catastrophic potency in books, television documentaries, magazines and Hollywood movies.

History is what hurts, it is what refuses desire and sets inexorable limits to individual as well as collective praxis, which its 'ruses' turn into grisly ... reversals of their overt intention. But this History can be apprehended only through its effects, and never directly as some reified force. This is indeed the ultimate sense in which History as ground and untranscendable horizon needs no particular theoretical justification: we may be sure that its alienating necessities will not forget us, however much we might prefer to ignore them. (Jameson, 2002:102)

The wavering self-assurance that characterizes both Jameson and Kumar's sense of the historical crisis of postmodernity has been exacerbated by the ubiquitous presence of information-age technologies and the rapid socio-economic, cultural and historical changes

they have heralded. "The pace of technological change [today] is so continuous and fast," notes of author Neal Stephenson, that "there's no longer any clear barrier separating us from the future" (cited in Hamilton, 2003:271). Ideas and technologies proliferate at unprecedented rates and speed through modern communications networks and marketplaces, heightening a climate of global uncertainty and future shock. The sense of hurtling beyond control at breakneck speeds – a sense that has been described as future shock – is part of capitalism's seductive appeal, writes Virilio. "The accident has [today] become the ordinary", he opines, speculating that contemporary history is "a spectacle of velocity in ruins" (cited in Kroker, 1992:33). As the perceived future begins to leak through it appears to be contaminating the present with a restless gloom. The exponential spread of global mass media in the "informational age" has spawned what Fernández-Armesto refers to in Civilizations (2001) as "the triumph of bad news" and the widely perceived "failure of progress" - an "erosion of confidence in the future" amongst academics and intellectuals (2001:543-544). Economic chaos lingers on beyond the millennial cusp as the costs (and side-effects) of industrial production and consumerism continue to climb exponentially - both environmentally and socially. This, in any event, is the future that is broadcast through global entertainments networks where catastrophe and acts of meaningless violence are standard fare. Seen from this perspective, "the end of history smells like an abattoir," remarks Land (1998:81). In Riddley Walker, Hoban describes the 'end' of contemporary history in similarly bleak terms as a time when "everything gone black [and] playgs kilt people off and naminals nor there wernt nothing growit in the groun" (2002:19).

The postmodern world has been turned on its head reasons Virilio, citing increasingly destabilising social, ecological, and technological side-effects as symptoms underlying the postmodern "implosion of history" (1992:33). Hoban, writing from this present sense of collapse, invents the protagonist Riddley – a 'riddler' of catastrophic history and a prophet of future calamity. In the central vision of Riddley Walker, Riddley dreams of the sudden and cataclysmic termination, not only of individual lives, but also of the human story itself. His dark vision of "Greanvine," a man with vines bursting out of his mouth (Hoban, 2002:165-170), overturns the standard interpretation of the 'Green man' mythos. Instead of representing confidence in nature as endlessly regenerative, cyclical and self-repairing, 'Greanvine' is styled by Hoban as a terrifying representative of natural calamity. In the era of postmodernity, natural calamity, as Žižek suggests, "can no longer be rendered meaningful as part of a larger natural cycle or as an expression of divine wrath" (2011:430). Instead, we experience, along with Hoban's protagonist Riddley, the perplexing intermingling of human and natural causes in the motif of the wasteland. This, writes Žižek, is the contemporary experience of natural calamity; a sense of "meaningless intrusion [by] a destructive rage

which has no clear cause" (2011:430). For Hoban, however, Greanvine represents something more. He interprets this figure as a negative Dionysus – a catastrophic hyperstitional force of incomprehensible and total annihilation that comes not only from the past (the bloody ebb and flow of history), but from the future (the spectre of a world emptied of humans) as well.

Riddley Walker: apocalypse without redemption

Originally published in 1980 at the onset of the information age, Riddley Walker describes an impoverished post-historical future time. Human action has resulted in a massive disruption of the biosphere, alluded to in Hoban's text by the endless references to a bleak and blighted landscape plagued by endless rainfall. With the novel's vision of anomie, spiritual paralysis, and cultural blight, Hoban alludes not only to sf explorations of post-apocalyptic settings written by M. John Harrison and Keith Roberts during the 1970's (which will be discussed below), but to older literary explorations of cultural and environmental crises. The prevailing theme of the wasteland, for example, appears to gesture in the direction of Shakespeare's King Lear. Renaissance scholar Anthony Parr remarks that Lear was written at a time when freak weather events, bad harvests, famines and plagues "intensified a widespread feeling that the earth, and the human cultures that occupied it, were faced with immanent breakdown ... [and] that there was a link between abnormalities in the natural world and accelerated change in the socio-political sphere" (2011:120). The wasteland, as such, represents the "terror" of nature's "swarming subterranean forces that rush in" when historical order is undermined (2011:123). Shakespeare represents the wasteland as the "howling wilderness" into which history may be cast by the misdeeds of nations and kings whilst simultaneously representing the "pristine state [of nature] from which the failings and inequities of civilization can be observed" (2011:122). Lear, ultimately, finds sustenance and refuge in the wasteland. Nature, however, is no refuge for Riddley, and although he gains insight into the deficiencies and disparities of civilization from his wandering in the wasteland, these insights do not help him restore order. The redemptive wisdom of mythical nature that Renaissance writers like Shakespeare sought (and that Riddley frequently petitions for in vain) seems to be unattainable. Nature's withdrawal in Riddley's world seems unsurprising. Everywhere "wite shudders" (radioactivity) still linger and the endless rain that falls, according to Cowart, "hints at some terrible [human-induced] meteorological calamity" (1989:100). Comparable to TS Eliot's modernist poem of existential dilemma, The wasteland, Hoban seeks to shore up fragments against his own, and humanity's, ruin. Unlike Eliot, however, he fails to find peace.^{ix} Riddley's people have lost all but the vaguest of oral transmissions gathered by the peoples of the 'old times.'

Like Anthony Burgess's Clockwork orange (1963) Hoban's book is set in a future world whose dystopian nature is articulated through a corroded language. Where Burgess's curious but legible argot occasionally reads as forced and artificial, however, Hoban's reads as genuinely uncanny. As author and sf historian Adam Roberts remarks, Hoban's "style succeeds in simultaneously making strange (as nonstandard English) and making familiar (as a childlike idiom of misspelling and phonetic transliteration)" (2006a:306). Consisting of odd and variant spellings of familiar words conveyed in a childlike timeless present tense, Hoban's vocabulary is simultaneously steeped in adult pathos and shame that seems at odds with its childlike qualities. Enunciated in this manner, Riddley's groping progress towards an understanding of the 'old times' seems as if it is being told for the first time while simultaneously evoking a sense that this has all happened before and will do so again. Here Hoban appears to anticipate one of the conditions of "hyperreal postmodernity" that, as Nigel Clark observes, involves a "fascination with catastrophe" - an apocalyptic captivation with disaster that is "triggered" by an "immersion in a stream of mediated events" (1997:80). We are "prompted by the media," he writes, to want something other than "security or comfort ... something that continually exceeds the nature with which we have become so familiar" (1997:80). Baudrillard, writing of this compulsion in *The transparency of evil*, compares the postmodern subject to "the gambler who, caught up in raising the stakes, is drawn into playing 'double or nothing' with nature" (1993:104). The people of "Inland," like Riddley, understand, like Baudrillard's gambler, that technological materialism has led to the fallen environmental and cultural state that characterises their time. Their self-fulfilling myths and their idioms affirm the cleansing powers of the "Littl 1" (gunpowder) and the "Big 1" (atomic energy) that brought about the end of the "old times" (2002:53). Although the terrible destructive excesses of the ancients (ourselves) lie "hevvy on [their] back for ever" (2002:53) they can't help but shamefully yearn to repeat them.

Hoban, as I will consider presently, builds up an entire mythology (the Eusa myth) around what Roy Swanson, after George Orwell, terms "doublethink" – a state of "double-mindedness" in which two contradictory positions can be simultaneously entertained and even accepted; a state that in psychological terms may result in "neurosis and psychosis" (1984:203). This negative and catastrophic reading of schizophrenia is at odds with that cultivated by Deleuze and Guattari because it refuses the inverted gesture or the overturning of conventional wisdom that they, along with 0D and the CCRU espouse. Likewise, Hoban's refusal is reflected in the attitude of Riddley's people whom, while deeply aware of the

mistakes of the 'ancients' and their callous disregard for the environmental consequences of their actions, actively work to replicate their fatal errors. The 'hevvy' burden of guilt that plagues Hoban's future people is the result of their 'doublethink' – echoing the postmodern condition in which, as Clark and Baudrillard observe, a desire for survival and continuity seems to coexist with a desire to unmake history. Both in Hoban's blighted future as well as in the present, writes Swanson (1984:208), the "unmastered past" of history casts an ominous shadow of inevitability and repeatability as humanity fails to confront the "fatal contradictions" of its own bloody past and paradoxical present.

George McKay (1994:1) uses the term metapropaganda to denote a literary form that attempts to draw analogies between the "text, subject, and the social context of the reader." The purpose, writes McKay is to "destabilise and reconstruct subjectivity" via an interrogation of the reader's historical context and the "semantic field of social and ideological institutions and formations" that can be associated with the reader's milieu (1994:1). McKay uses Orwell's Nineteen eighty-four (1949) as an example and Riddley Walker as a counter-example. In Nineteen eighty-four Orwell engages his reader with the spectre of a despotic state that replicates itself in the minds of its subjects by exploiting psychosis-inducing 'doublethink.' His intent is to engage the reader, enabling him or her to "partially construct and resituate" his or her own "subjectivity" - a narratively-structured "healing activity" which is "barely imaginable" within the ambit of Orwell's story, and which comments directly on the historical situation from which Orwell himself writes; one which is overshadowed by the "propagandist apparition of Fascism and Stalinism" (1994:1). McKay goes on to juxtapose Nineteen eighty-four with Riddley Walker, noting that Hoban intentionally problematises the reconstructive potential of Orwell's textual manoeuvre. While Riddley constantly puzzles over the "terpitation" (interpretation) of the past (Hoban, 2002:42), inviting the reader to attempt make sense of the post-holocaust world, the novel, as McKay writes, is not a "socio-political dystopia" like Orwell's text that actually wants the reader to make sense of history, but "an extrapolated and exaggerated nightmare ... predicated on absence rather than on critical extrapolation or satirical exaggeration" (1994:1). As critical theorist Carl Freedman notes, the restorative function of the socio-political dystopia can be located in the "rational grounding" it facilitates for "historical interrogation" - one that enables the reader to formulate a "rigorously critical" engagement with a sociopolitical question and "theorise" a necessary "transformation" (2000:84). As I have already noted, Hoban is not concerned with recuperation or revolution. His tactic is manifestly to draw attention to the nightmare of history and to emphasise the dread of inevitable catastrophe. That said, Hoban's hyperstitional reliance on myth and supernatural agency as a tool for undermining the 'rational grounding' of standard sf and utopian/dystopian narration is

generally overlooked or sidestepped. McKay merely states that Hoban's "postmodern plurality of signification overtly problematises" any "standard literary method," such as the "metapropagandist approach" he favours (1994:1). Hoban's comment on the postmodern condition runs deeper than this, however. Through the inhuman resonances of the supernatural agencies he evokes - agencies whose interventions are cold, indifferent and merciless - Hoban reflects on the shadowy, sinister and despondent aspects of fin de millénnium culture. In this regard, I have found Smith's superb introduction to the 2002 edition of Riddley Walker and Cowart's insightful discussion in History and the contemporary novel (1989) to be most succinct and relevant to my investigation into hyperstition as an ambiguously millennial aesthetic response. While Smith neatly sidesteps the pitfalls of postmodern theory, he nonetheless succeeds in vividly capturing the postmodern ennui that flavours Hoban's text. Cowart focuses on Hoban's use of supernatural and mythological elements and their relation to Hoban's intent to depict the present moment in terms of a catastrophic sensibility that Cowart terms the 'terror of history.' Before discussing some of Smith, Cowart's and my own insights in greater detail, it would be useful to position Hoban's text in relation to other examples of apocalyptic sf to understand the context of Hoban's hyperstitional response.

Riddley Walker, as I noted earlier, can productively be situated in relation to the generation of British sf writers of apocalyptic sf ('apocalyptic' in the sense described by Jameson) such as Keith Roberts and M. John Harrison who, beginning in the 1970's, responded to the spectre of nuclear annihilation through fragmented narratives that challenged the cultural valuesystem that had created the weapon of potential Armageddon. In *The chalk giants* (1974), for example, Roberts portrays the future as a repetition of a primitive and destitute past, littering his vision of post-holocaust England with the enigmatic, occulted and surreal remains and cultural symbols of the 20th century. Harrison's first book, *The committed men* (1971) covers similar catastrophic territory but without the recursive gaze. Set in the urban ruins of a postnuclear holocaust England, Harrison sets the stage for the final abolition of the human species, leaving the business of survival to an ambiguous new race of reptilian radiation mutants. In The centuari device (1974) Harrison ventures into outlandish and ontologically destabilising cosmic 'outer' spaces, only to return to Earth to witness its annihilation by an entropic nuclear device. Harrison's Viriconium sequence of novels and novellas, written between 1971 and 1986, are more recursive. Set in a distant future that resembles a distant feudal past, they paint a landscape of incomprehensible radioactive ruins, mutants and cryptic half-operational technologies left from the enigmatic 'Afternoon' and 'Evening' cultures whose baleful remains and cryptic myths continue to inspire smaller scale repetitions of the catastrophes that ended their reigns. History, as it is conceived in Riddley Walker, is figured in a similar manner as a process of degenerative decline, random lurches and fated repetitions, emphasised not only through forgetfulness, but also via a type of fatal attraction to catastrophe; an attraction highlighted in the work of Harrison and Robert via elements of horror and supernatural terror. "The terminal moraines, vermilion sands and timeless fugues" of Ballard are "perhaps the closest in spirit" to the world conjured by Hoban, writes Will Smith (2002:ix). Hoban, however, succeeds in venturing even further than Ballard into the ontological volatility of the postmodern present, viscerally confronting readers with the shattered nature of decline in the very contours of his invented language. "O what we ben! And what we come to," declares a shame-filled Riddley as he nostalgically gazes over the time scoured remnants of industrial ruin and invokes the spectre of repetition and catastrophe without end (2002:100). "How cud any 1 not want get that shyning Power back from time back way back? How cud any 1 not want to be like them what had boats in the air and picters on the wind?" (2002:100).

Writing, in Hoban's imagined future age, has only just been re-invented and Riddley is its first writer. History begins again in the malignant afterglow of apocalypse and Riddley describes the mechanisms that will lead it there again. As the first author after a dark time, Riddley echoes the legend of Homer, a semi-mythical early iron-age figure who is ostensibly the first western 'author' after the illiterate dark ages that followed the collapse of bronze-age Mycenaean culture (Boym, 2001:7). Like Homer, Hoban refers constantly to the heroic culture of the past but without qualifying, in Homeric fashion, the present or serving to presage a new beginning. After the cataclysmic fall of the fabled civilization of the past (represented by the mythical city of Troy) described in the *Iliad*, Homer develops the motif of nostos (return) in The Odyssey whereby Odysseus, the Promethean 'man of cunning,' is able to return home after the cataclysm and civilization is able to flourish once again, richer for its knowledge of the past. As Boym explains, "the Greek nostos is connected to the Indo-European root nes, meaning return to light and life ... nostos is part of a mythical ritual ... Odysseus's is a representative homecoming, a ritual event that neither begins nor ends with him" (2001:7-8). The Odyssey, thereby, acts as a ritual of redemption for the community and for its history. After the chaos of war and collapse, order is restored, the human family is reconstituted and the story of the journey (history) is remembered so as to act as a guiding light for the future. While Riddley Walker describes an epic journey that is overshadowed, like Odysseus' heroic voyage, by supernatural agencies, the path home for Riddley is blocked, the divinities are uniformly antagonistic and all that remains is nostalgia for what has been irretrievably lost. "Modern nostalgia," writes Boym, "is a mourning for the impossibility of mythical return, for the loss of an enchanted world with clear borders and values; it could be the secular expression of a spiritual longing, a nostalgia for an absolute, a home that is both

physical and spiritual, the edenic unity of time and space" (2001:8). This noxious nostalgia is one of the "postmodern gestures" that Damien Broderick associates with sf written "beyond the end of the 1970's" when the "prescient spirit" of writers such as Ballard, Roberts, Harrison, Burroughs and Dick had "invited a new generation of sf innovators" toward narrative explorations of "deep ontological doubt ... and the profound questioning of reality claims" (2003:62). Hoban expresses this postmodern ennui powerfully through his narrator, Riddley, whose words burn with nostalgia for an impossibly distant past, an unrealisable future and an enchanted and impossible sense of wholeness. "Creative nostalgia reveals the fantasies of the age, and it is in those fantasies and potentialities that the future is born," writes Boym (2001:351). If this is the case then the future in *Riddley Walker* is stillborn. Nostalgia for the future is one of the elements that I have already identified as an element of hyperstition. This yearning – a strangely inverted longing for 'enchanted' unity – is present in the element of the supernatural and occulted Old Ones that repeatedly intrude into the narrative of *Riddley Walker*.

The world in which Riddley Walker is set has seemingly fulfilled Winston Churchill's forewarning at the close of WWII that "the stone age may [one day] return on the gleaming wings of science" (cited in Cowart, 1989:83). Riddley gropes for the truth behind the cataclysm that created his destitute world. Like Odysseus he riddles his way through a postcatastrophe realm yet, unlike Odysseus, who has his memory as well as the protection and promises of the gods to guide him, the orphaned Riddley has no assurances and no home to return to. There are gods indeed but, as I will consider, their message is not one of comfort and promised renewal. The corroded state of language in Riddley's time reflects the sheer scale of the disaster that has afflicted it. With words and phrases like 'input,' 'techernogical progers' and 'doing the chaynjis' Riddley's language, awash with referents to the world of the 1980's, reflects the blasted post-apocalyptic world that materialism has conjured into being. "The sensation of groping in the dark that [readers] have while deciphering this text is exactly what it is all about," writes Smith (2002:ix). "This is a book about the delusion of progress, a book about the confused collective dream that humanity terms 'history,' a book about what consciousness may be" (2002:vii). The nature of that consciousness, as Hoban depicts it through Riddley's quest, is one of forgetfulness, loss, poisonous nostalgia and a terrible sense of powerlessness. Despite the apocalypse engendered by the terrible technological powers of the "ancients," the people of Riddley's world are again attempting to recreate them. The possessed and shamanic nature of Hoban's language - with its frequent references to intuition, coincidence, fate and trance-like pattern-recognition – reflects a quest to decipher the occulted meaning of apocalypse; a pursuit that is as central to Riddley Walker as it is to texts such as Cyberpositive and the Catacomic. "What is concealed (occulted) by apocalypse

is an alien order of time, which betrays itself through 'coincidences', 'synchronicities' and similar indications of an intelligent arrangement of fate," explains Land (2009:1). Groping in the dark, Riddley's quest is illuminated by his riddling of the secrets of the ancients and his uncovering of the mechanisms of a fate chillingly indifferent to humanity. The narrative reflects constantly on the presence of an 'alien order of time,' which is at once the unfathomable and never to be repeated mythical time of the heroic ancients as well as the immeasurable no-time of extinction – the inevitable "arga warga" ('gobbling up') at the hands of "Aunty" (a personification of the destructive powers of nature and death).

Hoban's text can be read as a reflection on the materialism of the 1980's^x when a breed of new sciences, based on chaos and flux, began opening up new universes of possibility while at the same time underscoring capitalist excesses and creating new opportunities for material exuberance.^{xi} Futurologist Kevin Kelly explains the implications of going 'out of control' for technological development, particularly in the areas of molecular biology and nanotechnology:

As we unleash living forces into our created machines, we lose control of them. They acquire some of the surprises that the wild entails. ... The world of the made will soon be like the world of the born: autonomous, adaptable, and creative but, consequently, out of control. (Kelly, 1994:4)

This apparent tipping of the proverbial hat in nature's direction is not, however, an innocent gesture. There is no return here to a greener world. Rather there is a gesturing toward the evolution of new generations of inappropriate technologies even more destructive and dangerous than before. As Frederick Buell explains, "new-era discourse swallowed the analyses of environmental alarmists even as it alchemised, often exuberantly, those analyses and actually envisioned environmental apocalypse as the dawn of a new age" (2003:214). Not only does going out of control justify the degradation of the biosphere or, as Naomi Klein describes in *The shock doctrine* (2005:6), the turning of disaster scenarios into money-making opportunities, but it also engenders a way of achieving unprecedented rates of material progress. Chaos and apocalypse, according to this interpretation, are apparently good for us. Hoban is not so sure, however, and he describes the events of the "Bad Time" as "berning out the clevverness" that had attempted to hijack "Aunty." According to Riddley, things had "gone randem and [their] program come unstuck" (2002:91). Buell refers to the glitch that could undo history (the 'program' of humanity) as the contemporary celebration of chaotic unpredictability and the culture of "hyperexuberance" (2003:216).

Set in an uncertain future time some two millennia after an imagined 3rd World War, Hoban's text may be seen as a kind of warning, writes Smith, alerting humanity to the follies of ardent

materialism (2002:x). Although the events of Riddley Walker take place two millennia in the future they are set in "Inland," a feudal society resembling early iron-age Britain (c. 500 BCE) that is devoid of anything resembling the material culture celebrated by Kelly or cautioned against by Buell. Lacking formal education, international trade, central government or technological industry (save for a primitive iron-smelting based on the excavation and resmelting of the bewildering artifacts of the "ancients"), Hoban's imagined future society possesses only a wretched material and spiritual culture. The text is dedicated "to Wieland" – a reference to the Germanic god of iron-mongering who features in an Anglo Saxon poem of the 9th century, *Deor*, written by an obscure poet who was himself a landless and lordless wanderer (Treharn, 2004:60). *Deor* is "riddlic in nature" and describes the misfortunes of various characters, including those of the Germanic god of iron-smelting himself, Wieland (2004:60). His lament – that of a dispossessed riddling wanderer – seems similar to that of Riddley:

Wieland tasted misery among snakes. The stout-hearted hero endured troubles had sorrow and longing as his companions cruelty cold as winter – he often found woe (Treharn, 2004:60)

Hoban's dedication to Wieland is telling as is the setting of *Riddley Walker* which resembles the early iron-age. In the folklore traditions of Europe writes Eliade there are many negative tales of adventure laced with sorrow, hardship and expulsion surrounding mythical figures of 'metallurgists' such as Wieland, in whose representations "we see a negative re-evaluation of the magical power over fire" (1989:474). By abusing the "dangerous secrets" of metallurgy, writes Eliade (1989:471), mythical "shaman-smiths" such as Wieland were seen to be complicit in the onset of historical time and human expulsion from the state of primordial innocence. According to De Landa, modern history can be said to begin with "the smelting of iron" and the onset of the iron-age (1991:18). Simultaneously, writes De Landa, history may draw to a close in the "pandemonium" and demonic "nuclear turbulence" engendered by the manipulation of heavy metals such as uranium and plutonium (1991:19). Wieland, who "abused the secrets of metallurgy taught to him by the earth's tutelary spirits" (Eliade, 1989:471) is condemned to wander and suffer. This recalls the Greek myth of Prometheus, who was condemned to an eternity of suffering for gifting fire and metallurgy to humans. Wieland hopes that this fate (a metaphor for the human condition) may change for the better. Deor contains the frequently repeated refrain, "as that passed over, so can this" (Treharn, 2004:60). Riddley, however, is not so hopeful. His own riddling expresses only the frequently repeated "hoap of a tree" - a refrain with direct references to the biblical Book of Job (C14, v.7): "for there is hope of a tree, if it be cut down, that it will sprout again, and that

the tender branch thereof will not cease."xii This image of a tree links with Riddley's oft repeated references to Greanvine – the figure of the 'Green man' that Riddley interprets as calamitous and threatening because he understands that humans, by bringing about pandemonium, or the 'Bad Time,' have finally irretrievably broken what remained of their pact with nature. The roots of the tree of humanity are hopelessly rotten and 'Aunty,' the closest thing Riddley's people have to a redemptive 'earth-mother,' is represented as icily indifferent.

The world of *Riddley Walker* is one in which the pre-capitalist roots of materialism are again starting to manifest in a type of cyclical returning. Humanity again yearns for the twilight days of history when it seemed that humans had mastered chaotic nature, harnessed the supreme power of fire and "programmit the girt dants of the every thing [by] run[ning] the many cools of the Addom and the party cools" (2002:95). Fueled by such dreams of mastery, the ideology of progress has again taken hold of Hoban's benighted future. Once again, the tree of civilization has sprouted, but as before it is contaminated.xiii Civilization again flutters into a tenuous half-life, animated by destructive knowledge and driven by apocalyptic cults like that of Eusa. By the novel's close the reader is left with a sense of inevitability that Hoban's imagined society is once more about to manifest apocalypse. This catastrophic sense of inexorable doom represents the disconsolate side of the hyperstitional aesthetic. Whereas 0D and the CCRU invert and subvert the notion of catastrophic inevitability and attempt to push it in the direction of novelty, for authors working in postmodern 'apocalyptic' vein of sf identified by Jameson there can be no such redemptive or restorative gesture. By emphasizing the repeatability of familiar historical patterns, Hoban constantly reinforces the sense of catastrophe as self-fulfilling prophecy without the correlate of renewal that is standard fare for apocalyptic narratives. This catastrophic sensibility is one of the characteristics of the postmodern condition that Cowart identifies as the 'terror of history.' Throughout Hoban's novel, the nomadic band of nature-worshipers to which Riddley belongs is slowly in the process of being usurped and absorbed by a central government or feudal bureaucracy called "the Ram" – represented by the characters of Goodparley and Orfing – which is attempting to control production and trade while uncovering (and endeavoring to monopolise) the technological secrets of the advanced society that preceded it. Riddley's nightmarish treks across the chilling landscapes of a shattered future serves as a constant reminder of where this historical process has led to in the past and where it might lead to again, emphasizing the hyperstitional intensification of historical coincidences and revealing the outlines of a ruinous pattern of catastrophic repeatability.

Hoban depicts Riddley, as a type of 'shaman-smith' in the manner of Wieland who not only seeks (as a shaman would) to make sense of coincidences, predict the outcome of events and draw analogies between disparate happenings, but who also seeks to intuit (as an apocalyptic metallurgist or physicist might) the destructive secrets of 'pandemonium' (represented by the "Littl 1" and the "Big 1") that brought catastrophe to the 'ancients.' Secondary to Riddley is Lissener, the mutant 'ardship of Cambry' – a combination of priest, sorcerer and protoscientist who comes from a special caste of radiation mutants, the 'Eusa folk.' Lissener is described as Riddley's 'moon brother' and Riddley acknowledges that "I wer some kind of lissener as wel," infected by the same degree of poisonous nostalgia that plagues Lissener (2002:101). Together, they undertake a journey to the heart of their world, the mysterious "Power Circle" of "Cambry," to uncover the arcane and sorcerous secrets of the "Addom" (the atom) that gave the ancients their destructive power. Steered toward Cambry by dreams, intuitions and coincidences Riddley, on arrival at this mysterious nexus point of ancient power, finds himself possessed by a shadowy demonic force called 'the Power:'

Stanning on them old broakin stoans I fealt like it wer coming into me then and taking me strong. Fealt like it wer the han of Power clampt on the back of my neck [it] spread me and take me. Fealt the Power in me I fealt Strong with it and weak with it boath. (2002:159)

The ecstatic state evinced by Riddley in the passage above is typical of Hoban's language which, like that of 0D and the CCRU, contains numerous allusions to spiritual possession. At moments of intense possession in Hoban's narrative, Riddley finds his actions and thoughts directed by mythologised forces outside of historical time (such as 'Aunty,' 'the Power' and 'Greanvine'). In attempting to find guidance and glean visions of the future of his people in the ruins of the past, Riddley connects with forces that can be read as a type of hyperstitional device at work in Hoban's fiction.xiv Riddley is both compulsive and impulsive; he acts on whims, intuitions and 'trants missions' and finds himself literally steered by 'the han of Power.' Lissener experiences similar possessions as he guides Riddley towards his terrible intuition in the crypt of Cambry. When Riddley asks Goodparley to explain possessed vision or "trants mission" he explains: "receiving is what you do with a trants mission you read it you take it in" (2002:145). What Riddley is 'taking in,' as Goodparley explains, are voices of 'powers' outside of history that exists in a type of "heaven ... where the hevvyness comes from" (2002:145). This is no redemptive 'heaven,' however, as the allusion to shame makes clear. These 'powers,' then, can be interpreted as avatars of the guilt ('hevvyness') and psychosis that permeates Hoban's narrative. They are indicative of the compulsions and sense of inevitability that drives Hoban's narrative of catastrophic repeatability. Hoban depicts the experiments to recreate the "Littl 1" (gunpowder) and the "Big 1" (atomic power) conducted by Goodparley, the 'Eusa folk' and Riddley, as being carried out under the guidance via

'trants mission' of these supernatural entities or 'Old ones' that are, in effect, representations of the 'hevvyness' that the people of 'Inland' carry inside them (see, for example, 2002:144-145).

In Hoban's text, the 'Old Ones' are figures such as 'Aunty' and 'Greanvine' who, represent – like the Lwa of vodoun, or the hyperstitional demons of the *Catacomic* – that which is most uncontainable. In Hoban's case this is the inevitable annihilation that awaits all things when their time runs out – the 'terbel' knowing that had gotten inside Lissener and led him to his inevitable date with a 'hed on a poal.' When Riddley finds a sculpture of Greanvine in the Crypt of Cambry – a human face with vines growing from its mouth – he recognises something which resembles these unknowable and terrible forces that have been guiding his insights. Here Carl Jung's psychological interpretation of mythological symbolism, which has informed much of Hoban's fiction, xv may offer some clues. Jung has the following to say about the myth of Dionysus, who is the more ancient counterpart of the vine-entwined medieval 'Green man' that Riddley spies carved in Cambry's crypt:

There lurks behind the Dionysian mystery of antiquity ... [behind] the feebleness of Europe's schoolboy attitude to the ancient myth ... the bloody dismemberment of the god who has become animal. ... Dionysus is the abyss of impassioned dissolution, where all human distinctions are merged in the animalistic/vegetative divinity of the primordial psyche – a blissful and terrible experience. Humanity huddling behind the walls of its culture, believes it has escaped this experience, until it succeeds in letting loose another orgy of bloodshed. (1989:90)

Greanvine seems to resemble this sort of Dionysian figure, who is at once an image of fertility and a reminder of the inevitability of destruction. Hoban appears to have connected with Jung's observation that the very image of life and fertility conceals an uncanny doppelgänger that points toward a time beyond human history. The vision Riddley experiences in the crypt is one of 'impassioned dissolution' - of history's circuit closed and humanity reunited with Aunty in a final blind orgy of destruction. When Riddley sees Greanvine he perceives only the darkness of death: "Vines and leaves growing out of the nose hoals and the eyes then breaking the mans face a part ... back in to earf agen" (2002:164). He attempts to veer away from this "terbel knowing," endeavouring to find a more redemptive vision. When he later finds graffiti depicting Goodparley as Greanvine with the slogan "hoap of a tree," he expands it so that Greanvine stands perched amongst the antlers of a stag - the "hart of the wood" (2002:170). While the 'hart of the wood' can be interpreted as a sign of redemptive nature, one of the disturbing aspects of Hoban's text is that the signs are so difficult to interpret. Riddley struggles to riddle them, and we grapple alongside him even though these symbols and signs appear to resemble certain recognisable elements from our own cultural milieu. Nevertheless, although the original graffiti undoubtedly consigns Goodparley (and his

schemes) to the clutches of Aunty, Riddley's artistic gesture can be read as an attempt to free humanity from the deathlike grip of this Old One and to express a wish that the human antecedent be a merciful and redemptive God rather than the impersonal and impassioned Greanvine or Aunty. Riddley, however, is unable to conceive of the inverted gesture, the "intervention" or "act" that could, as Žižek has suggested, "change the very coordinates of what is possible" (2011:490). This inability is what condemns him to the terror of history. Depicting Greanvine thus, Riddley also alludes to the 'Littl Shyning Man the Addom' who, according the central apocalypse myth of his people, was rent apart by the mythical anti-hero Eusa in his quest for knowledge. Addom can be taken to refer not only to the indivisible primordial entity, the atom, but also to the primordial Adam of biblical provenance. Riddley does not know the 'Adam' or 'Atom' stories, or rather, has gotten the surviving garbled oral fragments of the two stories mixed up. Sharing some symbolism with the crucified Christian saviour, the Littl Shyning Man, however, shares none of the Adam story's redemptive qualities. Without the benefit of recorded history, Riddley gropes in the dark to express what he intuits. Cowart explains the symbolism in this way:

The hoped for tree, though Riddley cannot put all these ideas together, is at once the Tree of Life and the Cross, emblems of a hope [for redemption] still at least dimly familiar to Hoban's twentieth century audience. But as Hoban sees its dilemma, humanity remains crucified between being cut off from revelation in the future and being obliged to admit its falseness in the present. (1989:100)

Riddley sees "wrongness hung there in the branches" and intuits that "wrongness been the 1st frute of the tree" – a tree that is irredeemably "grean wiv rot" (2002:262). Cowart postulates that Riddley in his artistry attempts to craft a "second Eusa" who corresponds to the New Testament Adam (namely, Jesus), the saviour who redeems the Old Testament Adam and his human progeny, the children of history (1989:101). There are even echoes of the 'USA' in the Eusa story, since this is where 'the addom' was first split. Traces of the USA's federal model of government and their brazen attempt at world mastery can even be located in the feudal confederacy of the Ram and their attempts to reinstate the powers of the ancients. Yet even in Hoban's own time (which is our own), these myths of material mastery, historical progress and spiritual renovation have ceased to inspire faith and so Riddley's gesture is made to fail. Hoban's future world is completely emptied of any redemptive myth, ritual or even confidence in some kind of future continuity; even nature, the Shakespearean mythical refuge from the vicissitudes of history, is indifferent, if not altogether malicious. Aunty, the goddess of night, death and birth (which, in Riddley's time is often fatal) offers only 'arga warga.' Riddley's 'Punch show' – which he has reconstituted, via 'trants mission,' from a time-worn and radiation-blackened puppet - represents an attempt by Riddley to craft an alternative and more humane mythos. To Riddley's great horror, his Punch show, which he performs ad hoc

while in a state of shamanic possession, turns out to be even more brutal and savage than the Eusa story. Riddley wonders at the close of the novel, "why is Punch crookit? Why wil he all ways kil the babby if he can?" (2002:220). For Riddley, Punch comes to represent the fatally flawed nature of humanity that forever condemns history. Like Punch, humanity 'kils the babby' over and over again, failing to comprehend the appetite for such meaningless cruelty. The Eusa myth offers no comfort here either. Presenting a vision of the radical deterioration at the heart of things, it tells of how Eusa discovers the secret power that comes from division by cutting the Littl Shyning Man in two. The power unleashed by this division is simultaneously a blessing and a cataclysm: "you could do anything at all you cud make boats in the air or you cud blow the worl a part" (2002:50). The consequence of this division, as Riddley intuits, is catastrophe and eternal damnation. Having unleashed the creative and awesomely destructive power of the atom, Eusa is unable to put the two halves of the Shyning Man back together again. When Riddley asks why humans are fated to carry the terrible burden or 'hevvyness' of this split (between mind and matter, culture and nature, apocalypse and redemption), the answer that Aunty speaks through him is brutally simple: "Iwl tel you why its part of the game thats why" (2002:53). Power, for Riddley, carries the invariable taint of entropy and there is no second coming, new Jerusalem or utopia at the end of history's rainbow. The Old Ones of fate and myth are unsympathetic and cold, promising no wholeness or redemption. In the end, Riddley accepts this state of affairs and there is only the spectre of inevitable apocalypse as Riddley's people 'roadits' once more towards catastrophe, armed with the rediscovered power of the 'Littl 1.' Unsparingly honest, the author of Riddley Walker invokes Christian redemptive symbols and Old Testament guilt but does so with a full recognition of their increasingly negative and fruitless application to human history and its brutal realities. Admittedly inadequate to restoring the wasteland, they come to represent only what humanity has lost and is unable to regain. Riddley discovers no remedy for the terrible human condition, merely the 'hoap' of a rotten tree. Hoban, at the very end, refuses to soften blow or offer a panacea for the terror of history. The pervasive sense of shame that dominates Riddley's heartfelt narration adds to this horror.

It is Hoban's great insight to have understood that the opposite of hubris is shame (or rather, shame is its aftermath, its hangover, its swollen head in the grey dawn of cultural capitulation). By seeding the Judeo-Christian shame myth with the hubris of Promethean humanitarianism, Hoban has engendered a timeless portrayal of the human condition. We are doomed ever to feel shameful about our detachment from nature – consciousness depends on dualism – and yet the destruction of that consciousness (both symbolised and potentially actualised by nuclear fission) will only result in still more shame. (Smith, 2002:viii)

Humanity in *Riddley Walker* attempts to replicate the more civilized order of the past, which its own arcane records renders ambivalent. Hoban's post-apocalyptic humans appear, largely,

to evince all the qualities (such as greed, exploitation and hunger for power) that brought about cataclysm in the first place. The reader is left to imagine for him or herself the much-diminished repetition of historical 'progress' that is about to ensue. This echoes Walter Benjamin, who in 1939 noted that "the concept of progress is grounded in the idea of catastrophe," adding a rejoinder: "that things 'just go on' *is* the catastrophe" (1985:50).

Contemporary historical speculation by authors such as Jared Diamond in Collapse (2004) and Clive Ponting in A new green history of the world (2005) have begun to reveal a past littered with the ruins of civilizations that exhausted the carrying capacity of their environments. In many instances, such as that of the contemporary Maya (described by Diamond in Collapse) or Riddley's imagined iron-age tribesmen, their survivors can still be found, eking out a much-diminished existence amongst the ruins of a forgotten and mythical past. "Riddley Walker could be set in the ashes of any civilization, that of the Romans or the Sumerians, the Mayans or the Harappans," writes Smith. xvi The environmental excesses that marked the twilights of ancient peoples are mirrored, but on a far grander and global scale, by those of the 1980's that are materially producing apocalypse. Alongside the gung-ho economic policies of the Regeanites and Thatcherites of Hoban's era (and of their more recent descendants, the neo-conservatives) has come sobering evidence from science that the Earth has experienced several major extinctions of life in the past and may, in the near future, experience yet another one.xvii Riddley, like the Sumerian author of the Dialogue of pessimism, xviii contemplates the extinction of the culture that preceded his age and the ultimate repeatability of catastrophe, over and over again. This manner of hopelessness is exemplary of apocalyptic sf at its most anxious. Stripped of sf's usual heroics and brazen futurism, Riddley is a post-industrial 'everyman' whose tale can be likened to a medieval morality fable. Although morality fables, even at their most grim, at least offer the possibility of redemption, Hoban himself appears to offer none. The only hope lies in the genre form of sf that Hoban has employed. As sf critic Aris Mousoutzanis wryly observes, "the continued imagination of the apocalypse [in sf] suggests that it might not have happened yet!" (2009:461). Hoban reflects on this in an interview with Edward Meyers on the topic of Riddley Walker: "I suppose I'm rather wistfully thinking that perhaps if we look at possible projections, we can back away before they actually happen. But, there's not a great deal I can say about that. If you ask me what the probabilities [of catastrophe] are now, all I can say is that the dangers of it are proliferating" (1984:1). In a final reading, Hoban's emphasis is on the cause and effect relationship that leads to apocalypse. As Riddley discovers, civilization thrives with knowledge that in the end proves devastating. Cowart explains:

The reader knows, with Riddley and certain of the other characters, that in time the 'Littl 1' will lead to the 'Big 1,' as humanity plays its own version of 'Fools Circel

Ninewise,' a children's game based on a benighted ritual. An image of the foolish aspirations of Goodparley and his lieutenants, the game comes at last to represent history itself. (1989:86)

When Riddley petitions Aunty for a 'trants mission' of the way forward he receives a bleak vision and laments: "onlyes thing youwl ever fynd is the end of things. ... Whats so terbel is jus that knowing of the horrer in every thing" (2002:153). For Riddley, the wisdom of the unknowable forces of the Old Ones – whether in the form of Aunty, Greanvine, Eusa, the Power or the occult forces behind history itself – can be expressed in a simple phrase: "the horrer waiting" (2002:153). In Riddley's 'terbel' knowing we sense the operation of a mythic self-fulfilling prophecy and the hand of a malevolent destiny. Humanity, in Hoban's hyperstitional vision has fallen prey to its own destructive fictions as well as the despair that comes in the wake of realising the incommensurability between myths of redemption and the fatal flaws of human nature that condemn the human species to calamity. The unknowable forces which Riddley appeals to via his numerous 'trants missions' offer only annihilation without redemption. In Hoban's vision, they represent the pall of inevitable extinction that hangs over all life forms; especially those whose scripted time has run out. By invoking them, Riddley has re-affirmed the destructive and hyperstitional myths that bind his people (as they do the people of the present).

Jack Faust: the burning wheel of cause & effect

In contrast to Hoban, whose work is set in a post-apocalyptic future that resembles a distant and shadowy past, Swanwick's *Jack Faust* (1994) is squarely situated in what historian Peter Watson calls "the single most familiar period in history ... a period that was of transcendent importance in the development of the modern world" (2005:526). This period is the Renaissance, a period that Watson associates with various technological, cultural and economic developments that resulted in the birth of capitalism and the concept of historical progress (2005:527). The dawn of capitalism is the period that Swanwick has chosen as a setting for his retrochronal hyperstitional figuring of capitalist acceleration. Like *Riddley Walker*, *Jack Faust* is a science-fictional reflection on the historical process of cause and effect involved in the contemporary production of apocalypse. Swanwick satirises the seductive appeal of apocalypse, borrowing the literary figure of Faust (used, for example, by Marlowe, Goethe and Thomas Mann). As I will argue, Swanwick draws on aspects of Marlowe, Goethe and Mann for his own retelling of the Faustus myth. In his version, which condenses global history from the Renaissance to the present into a fast-tracked arc of cause

and effect, Swanwick satirizes not only the accelerated impact of capitalism and the notion of progress, but its deadly confluence with human greed and hubris.

In accordance with the Faust legend, Swanwick depicts this well-known sorcerer as a Renaissance scholar in early 16th century Germany who finds the limited academic knowledge of his time superstitious, spurious and restrictive. His characterization of Faust gives a nod to Marlowe whose Tragical history of doctor Faustus, writes Jerry Brotton, coincides with the birth in literature of individualistic characters who no longer take their lot for granted and who "begin to self-consciously reflect on and shape their own identities" (2002:29). Marlowe's selfish and arrogant Faustus, who makes a pact with the devil to gain forbidden power and knowledge, flies in the face of Renaissance humanism and its "cool methodology of inspection," writes Paul Newman (2002:91). While Marlowe's protagonist dreams of infinite power all he actually accomplishes are practical jokes on the Pope and sex with a facsimile of Helen of Troy. Nonetheless, he embodies an overreaching "spirit of restless rebellion" that anticipates Goethe's more Promethean characterization of Faust (Wilson, 1998:31). Goethe's version of the legend, conceived of 200 years after Marlowe's, is closer in spirit to the type of Promethean megalomania that Swanwick associates with Faust. In contradistinction to Marlowe's ultimately pathetic trickster, Faust, in the second part of Goethe's tragedy, undertakes mammoth construction and land reclamation projects "pruning the power of the waves" and "offering men a new existence" (1963:433-434). This is the attitude of Promethean overachievement with which Swanwick colours his version of Faust. While Marlowe's Faust is carried off to hell alone to pay for his arrogance, Goethe's Faust, despite his pact with Satan, is permitted redemption at the end. As Phillip Ball writes, this ending somewhat complicates the "simple moral about the dangers of Promethean ambition that was central to the original Faust legend" (2011:52). Swanwick, like Marlowe, refuses the recuperative gesture in order to dispense a moral fable about the cost of ambition and progress, but his message is far more devastating, appalling and cataclysmic.

Comedy is another attribute that Swanwick borrows from both Marlowe and Goethe. The quality most associated with Goethe's *Faust* is "its overflowing humour, which runs the scale from the benign to the sardonic, including in between the raw, the witty, the subtle, and Olympian malice," writes Walter Kaufmann (1963:4). Marlowe's Faustus is even bawdier, with its endless farcical scenes, tiresome practical jokes and cross-talk routines serving to counterbalance the unimaginable horror of Faustus selling his soul to Satan and being torn into bloody pieces by demons at the close. Swanwick borrows a sardonic sense of humour from both these writers, but his claustrophobic, oppressive and dark atmosphere is closer to that of Thomas Mann's *Doktor Faustus* (1947) in which the spiritual, mental, and physical

collapse of Mann's Faustian character Adrian Leverkühn mirrors the degradation of Germany under the Nazis. As Evelyn Cobley remarks, Mann was commenting on "the moral and psychological lessons to be learnt from the appalling failure of the civilizing process" and the dark specter of the holocaust that haunted mid-20th century conceptions of progress (2002:13). Swanwick has a similar, albeit more scornful intent. His comic action is always immediately countered by stark reminders of depravity, mental collapse and the "greasy-handed business" of corrupt "politics and mass production" (1997:100). Swanwick's Faust, like the Goethe's, naively believes that material progress will suffice to iron out the dangerous kinks in human nature and human history. Wishing to cut the world loose from its past and drive the engine of history forward, Swanwick's Faust, like Goethe's, is fatally flawed by a restless impulsive energy. Although his comical hubris, conjuring and sorcerous tricks are often hilariously and absurdly Marlowesque, they get progressively less so as the novel advances toward its chilling apocalyptic and genocidal finale. Without consideration and wise temperance, Swanwick's Jack Faust desires nothing short of a cultural revolution; something that would "raise Mankind from the muck of superstition, disease, and ignorance, easing human misery and undoing the curse of toil, filling the nations with clean white cities and joining all in a single commonwealth" (1997:4). In his belief that knowledge and mechanism alone will improve the lot of humankind, Swanwick's Faust seems to embody what Wilson describes as "the utopian dream of Enlightenment rationality" that saw history as "perfectible" through the agency of scientific progress (1998:30).

Land notes how hyperstionally sensitive systems such as capitalism and the Enlightenment myth of progress enact a subversive influence in the cultural arena, becoming transmuted into perceived 'truths' that influence the outcome of history (2009:1). The "ideology of progress," he writes, is a powerful incubator of hyperstition, acting as a catalyst for unchecked exponential development and the unconscious desire to "close the circuit of history" (2009:1). This dark desire is a product of relentless progress – the result of a type of future shock. "In our day," writes Eliade, "when historical progress no longer allows any escape, how can man tolerate the catastrophes and horrors of history – from collective deportations and massacres to atomic bombings – if beyond them he can glimpse no sign, no trans-historical meaning; if they are only the blind play of economic, social, or political forces, or, even worse, only the result of the 'liberties' that a minority takes and exercises directly on the stage of universal history?" (1971:151). Even in Marlowe's day "an ever increasing velocity of cultural change," had already begun to create a feeling of existential angst, writes Lynn White, noting that the secular shift from faith to reason, the abrupt procurement of new knowledge, and religious reformation had created a period of "abnormal anxiety" with its origins in bloodshed, revolt and agitation (1974:26). "The vast creativity of the Renaissance," she

writes, "are glorious blossoms rooted in a slime stinking far worse than anything that can be identified in the earlier centuries of the Middle Ages" (1974:25). While Marlowe's retelling of Faust appears to be held in check by humanist and Protestant concerns (see endnote xxi), Swanwick's version is closer in spirit to White's disconcerting vision of a "psychically disturbed era" (1974:26). An attitude of "restless anxiety" and an "inability to apprehend change in a relaxed manner," she writes, characterises the querulous atmosphere of the Renaissance, as much as it does contemporary industrial society which, like the Renaissance, is built on blood-stained turmoil and socio-economic turbulence (1974:26). In the Renaissance Faust legend, in late 18th Gothic narratives, in urban Gothic horror as well as in contemporary hyperstitional sf this restless anxiety – the result of future-shock – is dramatized as a supernatural intrusion.

In his desperation for answers to an existential dilemma – a desire for knowledge and power beyond the limits of his time – Jack Faust attempts to locate "answers and signs" by appealing to higher "unnameable powers" (Swanwick, 1997:16). By offering up his soul (the "quintessence of his 'being") to demons, he appears to seek the "transhistorical meaning" that Eliade saw inhering in myths and related figments of transcendental significance (Eliade, 1971:139). Here Swanwick borrows from Lovecraftian cosmic horror in a manner similar to that of the CCRU and 0D in the Catacomic. In an attitude of total surrender, "afloat and lost in grey smoke and ruin," Swanwick depicts Faust appealing "to monsters unspeakable" (1997:16), invoking something that resembles the Old Ones Lovecraft describes in *The call of* Cthulhu (1928, republished 1999) – variable beings in whose presence "acute angles behave as if they were obtuse" (1999:167). Swanwick describes the demon Mephistopheles who answers Faust's call as a protean cosmic monstrosity "whose surfaces come together disturbingly, as if comprised of too many dimensions and those dimensions failing to come together in any sane fashion" (1997:10). This demon is not a devil but, in true Lovecraftian fashion, the emissary of a meddlesome race of ancient aliens from an adjacent universe. He even presents, in a florid passage of dense and sublime extrapolation, Mephistopheles' name as the glyph of a "secret algebra" in which each letter of demon's name stands for symbols in a complex equation involving functions such as "the rest mass of an electron ... the wave function of the universe, [and] the permeability of the universe to information" (1997:24). Like the Old Ones described by Lovecraft, Swanwick's Mephistopheles is unmistakably malevolent. By feeding Faust knowledge beyond the emotional competence of Renaissance humanity, this demonic construct tells Faust that 'he' hopes thereby to close the circuit of history, engendering "a symphony of horrors" so great that humans "surrender themselves to their own atrocity machines" (1997:30). Indeed, it is through the unlimited scientific understanding granted by demonic knowledge that Swanwick's Faust catalyses a premature

scientific Enlightenment and a simultaneous industrial revolution, thereby accelerating history in the direction of supernatural horror.

Modern bourgeois society [which] has conjured up such gigantic means of production and of exchange, is like the sorcerer who is no longer able to control the powers of the nether world whom he has called up by his spells. (Marx & Engels, 1969: 114)

Describing capitalism as a devil's bargain, Marx and Engels invoke the metaphor of the Faustian pact – one that implicates an entire social class, not simply individual capitalist 'sorcerers' (like Faust) and their reprehensible schemes. According to Marshall Berman, the Faustian pact supplied Marx and Engels with a perfect metaphor for the processes of capitalism as described in the Communist manifesto. For them, writes Berman, the demon Mephistopheles represents the "destructive powers that Faust must work with and through before he is able to create anything new in the world" (1982:115).xix Thus, as Berman writes citing the Communist manifesto, capitalism works through a "constant revolutionizing of production, uninterrupted disturbance of all social relations [and] everlasting uncertainty and agitation" (1982:115). Swanwick's Faust is inextricably caught up in this unstoppable mechanised scheme of runaway and deadly effects. His inventions are continuously "perverted and put to unintended uses," turning their inventor into a slave of an unstoppable and horrific mechanism (Swanwick, 1997:114). Swanwick even has Mephistopheles gleefully plagiarise The communist manifesto: "The entire world you [Faust] have created has become a machine by which the needs of production regulate the conditions of life," 'he' tells a baffled Faust, referring to the relations of capitalist production outlined by Marx and Engels (1997:193).xx

Summoned forth, the abstract dynamics of capital invoked by Faust correspond to the old folk tales of the magic mill or loom that works by itself, churning out perilously increasing heaps of cloth, porridge, salt or other commodities. As Margaret Atwood explains, mechanical devices, like mills, and the social changes they represented were imparted with uncanny "otherworldly" qualities in folktales, which depicted them as objects of envy, mistrust and fear (2008:108). Whenever these devices appear, she notes, they are invariably accompanied by an ominous stranger and a contract of the "almost-free-lunch" kind (2008:113). The moral, explains Atwood, is that any promise of a "free lunch" amounts to a detrimentally diabolical deception (2008:113). The mechanical/magical "device" with its sorcerous powers (which in the case of Jack Faust is the entire mechanism of industrial capitalism) exacts a terrible debt, often of the "hard variety," she continues (2008:120). In the worst case scenario of the "magical device" tale, "the stakes are high, the play is dirty, and the outcome may well be a puddle of gore on the floor" (2008:121). This, in fact, is precisely what happens to Marlowe's Faust. When the devil comes to collect, his body is rent to pieces and his soul carried off to

hell.^{xxi} In Swanwick's unremittingly dark portrayal of the Faust legend, it is not only Faust who pays, or the bourgeois social class to which he belongs, but the entire human race.

By envisioning the intrusion of an alien 'other' into our past, Swanwick has crafted a type of "nexus point" from which the known history of our world diverges – a typical stratagem used in the 'alternate history' subgenre of sf. The idea behind the kind of extrapolation undertaken in this type of sf, as critic Karen Hellekson explains, is to investigate the importance of historical cause and effect, and consequently of human agency (2001:77). Although Swanwick's supernatural demon proffers alien wisdom, it is ultimately human agency that will determine the final outcome of events. As Swanwick's Mephistopheles smugly tells Faust: "We will give you all the knowledge and progress you desire. So much indeed that your race will choke upon it. ... Through you we will give them power without limit and they will invariably use it to destroy themselves" (1997:30). The CCRU suggests that a hyperstitional idea functions in a manner similar to the "nexus" historical event conceived of in 'alternate history' sf, instigating a process of historical change or subversion in which humans are complicit automatons (CCRU 1999:1). In this case the nexus event is the early onset of the scientific Enlightenment brought on by the demonic intervention of Mephistopheles. This hyperstitional intrusion – the scientific knowledge needed to spark an early industrial revolution and the ideal of progress as proffered to Faust by Mephistopheles – allows history to be prematurely altered and accelerated. Through its examination of the ramifications of that change, Swanwick's sf fable comments on the spectral underbelly of contemporary 'progress' and its corollary of entropic destruction.

With the Mephistopheles construct bestowing Promethean gifts of wisdom to Jack Faust, the Renaissance is soon left behind. New machines and factories tear up the sleepy hamlets of Europe and iron-clad warships take the revolution on a world tour. Even as the cultural imagination conceived by Hoban in *Riddley Walker* sets the scene for a historical repetition of another sequence of events culminating in apocalypse, the Renaissance zeitgeist conceived of by Swanwick is already pregnant with the spark of catastrophic hyperstition. Swanwick emphasizes the relation between an apocalyptic mood or sensibility and the specter of catastrophic inevitability, illustrating not only how hyperstition functions at the level of plot but also how it reflects on the terror of history and its dark promise. Before Jack Faust even burns his books and summons Mephistopheles, the citizens of his native Wittenburg – animated and agitated by the querulous future shock described by White – are depicted as summoning the beast of apocalypse, "caught in a pleasant suicidal fantasy of the spark that would come ... yearning for the broom of flame that would sweep clean the fetid streets of the garbage and the accumulated obligations of the past" (1997:3). History itself "dreamed of

holocaust" that would wipe away the taint of what went before (1997:3) and Jack Faust, the cynical anti-hero, is depicted as rising to do its bidding. At the novel's close, as Clute remarks, history burns in a delirium of absolute war as "saturnalia strips off its masque of reason" (Clute, 1997:1). Five centuries of the history of capitalism are condensed by Swanwick into what Clute describes as "a kind of Rake's Progress reminiscent of Hogarth" (1997:1). Faust's transformation of the world, like Hogarth's narrative cartoon etchings, are framed by exemplary chapter headings such as 'Apes' or 'Tabloids' and, as Clute explains "each chapter – after an initial crowd scene that could almost be a paraphrase out of Hogarth – works out the exemplum or 'stage' in detail" (1997:1). The final exemplum – the sum total of Faust's progress – is apocalypse. At the novel's close, Jack Faust finds himself in an Orwellian version of the present – an intensely paranoid surveillance state, animated by 'doublethink,' and bristling with weapons of mass destruction - enthusiastically facing the final annihilation of history in an orgy of destruction that "all wanted ... and none dared admit to thinking" (Swanwick, 1997:324). With the end in sight, Jack Faust is raring to go, "eager" to "set forth upon the final road. ... It would be as simple as setting off a nuclear reaction - once critical mass was achieved, all else followed as a matter of course" (1997:324).

Swanwick replays the history of our own industrial civilization as a type of black hyperstitional comedy – a sped-up satire of conventional history set in an alternate world that's uncannily similar to our own. Swanwick's relentlessly dark representation of flawed humanity as well as his jaded narrative voice echoes Thackeray in Vanity fair (1848). This point of view, as describes it, "is the drawl of a jaded and savvy worldling recording the way things are" (2008:104). While we are given insight, through a detached and often comically jaundiced third-person narrator, into the minds of characters such as Faust and his doomed paramour Gretchen, the reader, as sf critic Nick Gevers observes, is allowed just enough critical distance to develop a sense of disconnected horror as the characters wing their way towards unavoidable doom (1998:1). The all-too-familiar spectres of nuclear Armageddon, environmental degradation, social collapse and Auschwitz-style death-camps invariably loom at the end of Swanwick's brutally apocalyptic and tongue-in-cheek sf 'shilling shocker' (1998:1). In Riddley Walker, Hoban utilises the vicious, unforgivable and savage Punch & Judy puppet show to exemplify the bloody tide of history. Swanwick, in a similar fashion, presents the exploits of the misogynistic Jack Faust, his tragically doomed bride, Gretchen, his comic assistant Wagner and the ever-cynical hater of humanity, Mephistopheles, as a brutal cartoon of historical progress.

In the end, Jack Faust's wish to remake the world is granted but there's an irrefutable price to pay for his arrogance. As he discovers (and as post-Enlightenment history has proven), progress does not necessarily eliminate the foibles of human nature such as greed, ecological plundering, intolerance and social inequality – faults that are bringing contemporary global civilization close to a very real apocalyptic impasse. The perceived failure of progress identified by Fernández-Armesto in Civilizations (2001) as symptomatic of late 20th century thought finds expression in Swanwick's text through the use of the "discursive loops of cause and effect" that Hellekson identifies as fundamental to sf explorations of "alternate history" (2004:77). As sf critic Keith Brooke explains: "as a direct result of Faust's revelations, the history of our own industrial civilization is replayed at a furious pace. The [all too] familiar results are pollution, poverty, greed and corruption, plus radios, motor cars and a few other nice techno-trinkets" (1998:1). Mephistopheles, with his contemptuous appraisal of human nature, has the last laugh as Faust's ambition derails into a grim apocalyptic fantasy. As Gevers observes, Jack Faust is about the cost of getting what you want (1998:1). Writing at the close of the 20th century, Swanwick's commentary is undoubtedly about the historical cost of progress - whether in its guise as democratic free-market consumerism or industrialised totalitarianism. Like Faust (or like Riddley's fabled technocratic ancestors) our whims and desires drive the 'shyning' wheels of progress in a vicious cycle of consumer-driven supply and demand. Jack Faust, despite his lofty disdain of humanity is, like Riddley Walker, an everyman. In the end, he is more 'Jack' than 'Faust' and the fate that awaits him, unlike Goethe's Faust who is granted miraculous respite at the end, is the same that may await all of humanity – annihilation on the burning wheel of historical cause and effect.

Even Hoban's Riddley cannot help but dream of the conspicuous consumption that drove the ruinous civilization of his past. The technological prowess and mastery of a half mythical past seem to him like a golden age. But while Riddley, as a post-Faustian bleak survivor of apocalypse, is denied even a glimpse of the luxurious technologically-mediated life of contemporary humanity, Jack Faust is given his fill. Like the never-sated consumers of today, he is always left wanting more, always wanting to turn every disaster into a new opportunity for growth. This insatiable appetite for progress is what Buell identifies as the hyperexuberant discourse of radical "natural and social disequilibrium" that dominates "new era discourse" (2003:214). Despite the warnings of common sense (and the appeals of concerned scientists, and environmentalists), humanity's hyperexuberance, like that of Jack Faust, hastens the speed of progress, accelerating history ever closer to the possibility of a very real inhuman future (a future emptied of humans). Jack Faust – despite the warnings of the dangers of hyperexuberant progress given by Mephistopheles – remains stubbornly optimistic. Even a chilling augury of the total destruction he is destined to create (see 1997: 28-29), fails to daunt him. Swanwick's

novel can therefore be read as a reflection on the hyperstitional stimulation of a positive feedback cycle that culminates in entropic collapse. As Gevers observes, the end of the novel, with Jack Faust spinning on his technological wheel of fire into apocalypse, is a satirical finger of indictment pointed straight at the heart of the current "post-everything" mood of the information age (1998:1).

The technologies and sciences with which Mephistopheles tempts Faust are all too familiar, redolent of the kind that any contemporary human would recognise. In them, we see unfolding our own uncritical relationship with technology. To Jack Faust's Renaissance contemporaries, however, the revelations of Mephistopheles seem incomprehensible and ungodly. Faust is initially silenced by the authorities of his day, just as Galileo was for his heliocentricism. Goaded by Mephistopheles, Faust reveals to the rich and powerful just how his ideas could help them turn profits and accumulate more power. Suddenly, and predictably, Faust no longer finds himself held back. His initial struggle over, Faust begins to feel derision for the shallow greed of his fellow humans and in his contempt he mirrors the disdain of Mephistopheles. As the money, fame and power begin to roll in, Faust's misogyny and hatred begin to grow and the path is made clear for catastrophe to unfold. In the end, Faust and his cynical alien other, Mephistopheles, become indistinguishable.

He could no longer hear the demon's voice. Nor did he feel its lack. Faust understood now that it was irrelevant whether his powers came from verifiable exterior forces or not. The knowledge was within him; it welled up from whatever hidden sources. It had shown him his destiny. That was enough. He knew what needed to be done. (1997:324).

The presence of demonic forces in postmodern fictions are reflections, writes Land, of the insidious merger between supernaturally-driven religious apocalypticism and the Enlightenment notion of secular progress, which is driven by the sorcerous forces of mechanism (2009:1). The Old Ones, as such, can be seen as shadowy distortions of the "mythologised techno-scientific future" envisioned by futurologists and secular prophets of progress; a potentially inhuman fate that lies in wait for us "along a path that historical consciousness perceives as technological progress" (2009:1). Thinking about it this way, the Old Ones in Swanwick and Hoban's vision can be interpreted as forces that lie occulted inside the historical unconscious; when we invoke them we are summoning a hidden part of our collective story (Riddley's Greanvine or Jung's negative Dionysus) that we do not ordinarily dare to acknowledge. In this manner, by invoking an unnameable force outside of ordinary history, an apocalyptic final purpose or Oedipal death-wish, Swanwick's Faust hastens the ingression of an alien order of time – a time beyond human history, or 'un-history,' that lies on the other side of catastrophe. As the CCRU and 0D muse in the *Catacomic*, the Old Ones

are incarnations of what lie in wait at the "end of history's river" – a realisation of our "darkest dreams and desires" (1999:4).

In Swanwick's 'alternate history,' progress rewards only the powerful, exacerbates the darker aspects of religious apocalypticism and does little to alleviate human misery. Social ills typical of the Renaissance period such as xenophobic militarism, economic exploitation and ecological plundering, religious intolerance, anti-Semitism, and discrimination against women (see White, 1974:27-30) are amplified and not ameliorated by Jack Faust's inventions. Like many in the contemporary world, Swanwick questions the faith that progress will deliver a better world – a perceived "loss of confidence in the possibility of a future" that Fernández-Armesto outlines succinctly in *Civilizations* (2001:543). The history of capitalism, he writes, has shown that rewards invariably go to the greedy and that the defenceless are fodder for the factories that drive the wheels of progress, made to carry the toxic burdens of economic development (2001:543). The faith that progress is making the world better, counsels a character in Brian Stableford's Werewolves of London (1990), echoing Marx, is founded "in the comforts which are enjoyed by a tiny minority of the world's people – and those comforts, like all comforts, serve to blind that minority to the anguish of the masses" (1990:462). Yet progress itself is problematic and even utopian socialist solutions, particularly those invested in the concept of technological progress - such as that proposed by Marx and Engels - are prone to oppressive and destructive mechanisms. As critic Kevin McNamara, citing the French philosopher and historian Louis Marin, observes: "there is no articulation of utopia that is not also a blueprint for domination" (1997:424). If social oppression seems incongruous with the utopian impulse or the concept of moral progress that we may have come to expect from civilization then we should reconsider history, explains Fernández-Armesto:

Most of us [in the present] would be unwilling to recognise the future as civilised if it were to have dropped what we think of as civilised values: belief in the inviolability of human life, respect for the dignity of the individual person, and vigilance in the protection of the weak against the strong. Yet we have to face the fact that most civilizations of the past and many of the present did not and do not share these values. Civilization and tyranny are reconcilable. Indeed, for most of history they have been inseparable. (2001:557)

In the end for Jack Faust there is, in any event, no question of fairness or equality. Despite his initial humanistic pretensions he, like Nietzsche's superman, thinks nothing of trampling the 'bungled and the botched' under his boot-heel. Even his beloved Gretchen is abandoned when she is condemned to death for having procured an abortion. Swanwick's Faustian warning that knowledge, particularly knowledge in the service of greed and industry, is not worth pursuing is no mere platitude, especially not when judged in the light of recent history when progress

has "proven more efficient in equipping evil than serving good" (Fernández-Armesto, 2001:544). Looking back at the close of the 20th century, Swanwick satirises the century that brought humankind its greatest concentration of technological power, along with its most destructive wars, genocides and ecocides. Politics, economics and science have proved equally disenchanting, concurs Fernández-Armesto. The 20th century that began with "totalitarian brutality ... ended with a new round of uncontainable currency crises, uncontrollable natural disasters and genocidal warfare" (2001:545). At the dawn of the 21st century, he writes, the majority of the world's populations, despite industrial progress (and, in many instances, because of it), are condemned to poverty and ecocide (2001:545). The rest, armed with shopping bags, 'atrocity machines' and the means of disrupting the equilibrium of planetary life seem, like Jack Faust, closer to Armageddon than enlightenment.

In the figure of Jack Faust, writes Gevers, Swanwick sums up the defects of the traditional sf hero: a messianic scientific genius of relentless optimistic action whose inattentiveness to ordinary human concerns, hatred of the mundane and reckless disregard of the consequences of change have come to epitomise the ideal of techno-scientific progress – an ideal that, although western in origin, now drives global industry and imperils the entirety of human culture (1998:1). Faust's doomed love for Gretchen exemplifies this problematic social type. Gevers explains that this egotistical possessiveness and lack of proper moral and social adjustment "is what underlies traditional sf's dreams of cosmic mastery" (1998:1). In this sense, sf itself engenders a semiotic figuring of the apocalypse. As Gevers warns, the trope of the traditional sf hero can only help to further irresponsible materialism. "*Jack Faust* is a warning, in sf's language, of the holocausts sf can help induce" (1998:1). Aside from challenging the role of the genre hero, writers of contemporary sf may also need to find a way of imagining the future that bypasses potentially numbing postmodern cynicism.

"What's needed," writes sf critic Damien Broderick, "instead of self-strangulation, is to seize the reins of the imagination and light out the territory ahead ... following through on as many of its implications as [we] possibly can" (2009:212). This is the type of sf – executed in an 'anastrophic' hyperstitional mode – to which I will return in my third and final chapters. Before doing so, however, I will complete my investigation into hyperstitional sf that refuses the inverted and potentially recuperative gesture. In the final section of this chapter I will elucidate the *fin de sièclelfin de millénnium* interconnection that underlines my entire thesis by investigating an example of entropic hyperstitional sf that is precisely orientated around this nexus.

The Werewolves trilogy: sf, Decadence & the crucible of hyperstition

While the genre of sf was only consolidated and named in 1930, 'scientific fiction' existed well before this date. Beginning in the 17th century, writers began to employ the narrative form of the imaginary voyage to craft speculations about the territory that lay ahead. During the 18th century, these literary utopias and dystopias, constructed around extrapolations of technological progress, "were handicapped by the lack of any plausible devices capable of opening up the imaginative frontiers of space and time" suggested by science, writes Stableford (2003:16). The most ambitious and successful speculative texts of this early period, he writes, were ones that deployed "magical devices and fantastical elements" to power their utopian or dystopian visions (2003:17). A number of sf historians, such as Luckhurst (2005:5) and Brian Aldiss (1973:8) concur that Mary Shelley's Frankenstein (1818), with its plot squarely centred on the motif of anthropoeia (the artificial construction of a human being), constitutes the first proper sf text. Although Shelley employs a 'mechanical device' – electrical experimentation – in *Frankenstein*, there are strong elements of the supernatural, particularly in her allusions to the work of the alchemists, as well as in her employment of narrative strategies typical of 18th century Gothic fiction, notes Ball (2011:62). Certainly this novel marks the beginning of a rich vein of speculative explorations around the profoundly traumatic impacts of technological artificiality that climaxed in the 19th century fin de siècle. Merging the supernaturally-infused Gothic mode with that of scientific speculation, texts such as Richard Jefferies's post-apocalyptic After London (1885), Camille Flamarion's Lumen (1887) and the scientific romances of H.G. Wells (1888-1906) signal the intrusion of horror and, in the case of Lumen, the supernatural, into the debates around progress that Shelley had heralded in Frankenstein and in her hyperstitional vision of the end of history, The last man (1826).xxii With its bizarre mixtures of literary Decadence, the supernatural and scientific extrapolation, Stableford's Werewolves trilogy attempts to recapture the ambience of these and other texts that predate the naming of the genre of sf particularly those texts infused with the fin de siècle's Decadent sensibility. In this section I will consider ways in which 19th century literary Decadence, with its aesthetic of decay, can be considered as a crucible of catastrophic hyperstition – a precursor to the dark haecceity of the fin de millénnium that I explore throughout this thesis.

Since the 19th century, writes Georges Bataille, "the most acute modern spirit" has "drifted towards the temptation of the end of the world" (2006:124). He cites, as an example, a quotation from Charles Baudelaire to illustrate the aesthetics of literary Decadence; a movement, he writes, "whose sensibility, for the most part, has conditioned ours:"

To amuse myself I calculate to myself ... whether a prodigious mass of stone, marble, statues, and walls crashing down together would be stained by the multitude of brains, human flesh and broken bones (Baudelaire cited in Bataille, 2006:124)

Written in the early 1990's, the Werewolves trilogy considers the manner in which the immense mass of history may come crashing down, using the opium-fueled Decadent atmosphere of the 19th century fin de siècle as a point of literary inspiration – a period of intensified change when, as Bataille has noted, writers began to experience, most acutely, 'the poetic temptation of the end of the world' (2006:124). Already by the mid-19th century, the Decadent movement had begun to maintain that western culture was in its twilight and urged artists to celebrate its morbidity, foulness and decay. Victor Hugo argued, for example, that "artists should no longer attempt to exclude frank ugliness from their work, or repress it ... they should instead make a concerted attempt to accommodate the grotesque" (cited in Stableford, 2010:17). By the end of the century, movements such as literary Satanism and occultists such as Alistair Crowley and his Ordo Templi Orientis movement began to directly anticipate the coming darkness that mechanism was heralding by actively preparing themselves for the coming aeon and celebrating it through infamous 'black masses.' Writers who dabbled in a new literary genre called 'future war,' such as Jack London and George Griffith, imagined that the changes that were being wrought in society would lead to a furious, sadistic and bloody conflict – one that could potentially herald the end of history. A quote from Griffith's The angel of the revolution (1893) serves as a postscript to the third book of the Werewolves trilogy: "The next war will be the most frightful carnival of destruction that the world has ever seen" (Griffith cited in Stableford, 1994:1). A nagging nightmare afflicted even the most hopeful of 19th century fin de siècle writers, notes Stableford, appearing in their work as "the possibility of a violent resurgence of everything that moral progress ought to render obsolete" (2010:157). The dark shadows that draped over 19th century fin de siècle culture continue to provide contemporary writers of sf with ammunition. 100 years after the passing of this moment, its anticipation of 'the horror waiting' still resonates because the burning wheels of progress that generated this anticipation of annihilation have not yet ceased turning.

Combining supernatural and scientific extrapolation with elements of the detective novel, Stableford's *Werewolves* trilogy can be read as an apocalyptic instance of a contemporary *fin de millénnium* sf sub-genre called steampunk. According to sf critic and author Lavie Tidhar, steampunk is concerned with a retrospective interrogation of that *fin de siècle* historical moment when "technology transcended understanding and became, for all intents and purposes, sorcerous and magical. ... Late Victorian and Edwardian London represent the moment in history when this transformation happens" (2005:1). The "game [of steampunk] is

first and foremost ontology," writes literary critic Steffen Hantke (1999:248). "The interplay of the familiar and the alien, the sense of distortion, hyperbole, and defamiliarisation" that result from steampunk's imaginary overlaps between the late Victorian period and our own, "is the basic principle" of the genre (1999:249). Not only is the 19th century fin de siècle period occupied by steampunk narratives noted for literary and artistic Decadence but also for the explosion of scientific and technical study that took place. For the first time, writes Tidhar, the products of the Industrial revolution became mass produced commodities that spiralled out of control as they escaped from the laboratories of the solitary inventor (2005:1). Like the comic book superheroes and arch-villains that abscond from the corporate laboratories of later versions of Victor Frankenstein's solitary workroom, the rational power of technology and industrial production during the late Victorian period suddenly achieved a mythic status that lasted well beyond the end of the 19th century. As capitalism and industrialisation became driving forces in society, the Victorian fascination with ghosts began slowly to transform into apocalyptic fantasies about the diabolical potential of technology and the soul-destroying costs of progress. HG Wells' Time machine (1895), Jack London's The iron heel (1907) and Ignatius Donnelly's heady industrial dystopia, Caesar's column (1890) are only some of the speculative works that engage with the impact of this diabolical transformation. Amid the shadows of the Parisian arcades and the foul smoke of London's 'dark satanic mills' sf, a new genre of speculative apocalyptic literature, began to describe "the myth of the end of man [and] the transcendence or transformation of the human," write Clute & Nichols (1999:313). Reflecting back on the 19th century fin de siècle confluence of the diabolical and the technological, steampunk imagines the hero of late 19th-century London or Paris as existing somewhere "on the cusp between the Renaissance magus and the corporation" (Tidhar, 2005:1). Frequently these heroes, like those of steampunk authors such as James Blaycock, Tim Powers, or Miéville, are magicians, scientists and entrepreneurs rolled into one. These, and other heroes of the sub-genre are, "to begin with, at least, modern magicians who can operate the [irrational] spells of machinery." Yet, "as [their] technology evolves ... assuming a mythical force that, echoing the school of technological Darwinism, [begins to] shape and control narrative causality," all control is invariably lost (Tidhar, 2005:1). As a metaphor for the apparently magical nature of technology and its capacity for engendering massive social and historical change, Stableford chooses the sign of the apocalypse. Under this sign, the rational narrative of technology (in its scientific, economic and historical guises) is intruded upon by an uncanny shadow. In the Werewolves trilogy Stableford explores this shadow through the fin de siècle tradition of literary Satanism.

During the 19th century, literary Decadence signalled the decay of the ideals and achievements of the Enlightenment attempt to revive the 'purity' of the classical style. It was

seen, writes Stableford, as the "symptom of a literary rot," which manifested as "a liking for profuse description, a preoccupation with detail, and – most important of all – an elevation of imaginative power over the stern restrictions of reason" (2010:12). In 1859 Baudelaire, notes Stableford, attempted to define the Decadent world-view in terms of a "sufferer ... plagued by ennui and spleen[;] a voyager on a futile quest [who] realises that the only possibility left to him is that the metaphorical journey actuated by death and apocalypse, however fruitless, might constitute a new experience" (2010:151). Baudelaire advocated seeking ways 'out of this world' and several writers of proto-sf and literary Satanism, such as Jean Lorrain, Camille Flammarion, Anatole France, Joris-Karl Huysmans and Villiers de l'Isle-Adam, took up his call in different ways. Stableford describes how some, like Huysmans and Lorrain, pursued decadent pleasures in the direction of the occult, while others like Flammarion and Villiers de l'Isle-Adam attempted to occupy the narrative space of the future (2010:154). Anatole France, meanwhile, brought literary Satanism to its lavish maturity in Revolt of the angels (1914), attributing the history of civilisation to the agency of demonic forces and, like Lorrain, celebrating mind-altering substances and wild sex as ways 'out of the world' (2010:169).

Throughout his prodigious literary career, spanning literary theory, translation (French to English), scientific writing and all sub-genres of sf, Stableford has retained a particular fondness for literary Decadence, *fin de siècle* sf, literary Satanism and late 19th century crime fiction. In his *Werewolves* trilogy, consisting of *The werewolves of London* (1990), *Angel of pain* (1992) and *The carnival of destruction* (1994), Stableford acknowledges his long-standing literary interests by crafting in the *Werewolves* trilogy what he would later refer to as "Decadent novels of the future" (2010:168). Beginning with a hallucinatory vision of Satan, the trilogy runs through the gamut of Decadent obsessions with the shadow – from demonic possession and narcotic experimentation to Satanic black masses and deviant sexual practices – as it attempts to occupy the uncertain terrain of an eclipsed future.

Stableford's central protagonist, David Lydard, plays the role of the ontological detective who, with open-minded scientific enquiry, attempts to rationalize the intrusion of the sorcerous 'angels' who have awoken into history after a long slumber due to the violent incursions of industrial culture. Throughout the trilogy Lydard attempts to affirm the triumph of reasoned intellect over the supernatural. Stableford's prototype for this character is Felix Bodin's narrator in *Le roman de l'avenir* (1834) who tries to expel the supernatural agencies and fantastical escapism of Gothic literature by conceiving of a sensible literary world of confident futurism from which all irrational shadows have been expelled. In this novel, writes Stableford, Bodin attempted to craft a literary space for the future in terms of ordered

progress and reason but his narration is constantly undermined by intimations of a vast and nebulous conspiracy that undermines the efforts of his protagonist (2010:156). Lydard occupies the same ontological space – despite his best intentions, his science cannot reason with unreason and his ontological detective work falters continuously on this basis. Where Lydard fails, Stableford's 'anti-hero' – the Satanic sorcerer and Decadent dandy Jacob Harkender – succeeds. Even Lydard's beloved wife Cordelia eventually leaves him for this charming and experienced dandy. Harkender's brazen depravity, occult pretentions, lavish lifestyle and his penchant for sensuality over sense – make him a far more compelling character than Lydard. Stableford conceives of Harkender as an epitome of Decadence which, according to 19th century critic Theopile Gautier, is arrived at during a stage of extreme civilizational ripeness and corruption on the brink of apocalypse:

Decadence [is the expression of] civilisations which have grown old ... full of delicate refinements ... contours vague and fleeting ... confessions of depraved passions and the odd hallucinations of a fixed idea turning to madness. [Decadence] must be executed in language already veined with the greenness of decomposition ...it has become inevitable [now that] an artificial life has replaced a natural one and developed [subjects] who do not know [their] own needs" (cited in Stableford, 2010:22).

Literary Satanism's prime movers, Lorrain, Huysmans and France, serve as character studies for Harkender. Stableford, who has translated Lorrain's diabolical Nightmares of an etherdrinker (1895), is particularly intrigued by their fascinations with demonic possession, sex, night and death, as well as their emphasis on hallucinatory drug experimentation, anarchism, abjection and spontaneous emotion conceived of as instinctive sources of virtue. Harkender, with his passion for sexual deviance, sorcery and psychoactive drugs is undoubtedly modelled off these decadent dandies whose extreme lifestyles and wayward fancies, writes Stableford, crop up "lightly disguised" in their fiction (2010:168). Oscar Wilde, he writes, paid them homage in The picture of Dorian Gray, featuring Huysmans' Là-Bas (1891) as the 'yellow book' which inspires Dorian to make the most of his unique opportunities to live his life as art (2010:169). There are traces of Dorian in Harkender's uncanny and ageless beauty and taste for the wages of sin. The infamous British sorcerer Crowley also took these lifestyle experiments to heart, fictionalising them in his novel *Moonchild* (1917) as well as in a dense body of occult 'fictions' and magickal memoirs in which he invented a new form of 'Aeonic ritual magick' known as 'Thelema.' Crowley infamously styled himself as the servant and incarnation of the 'new Aeon' and its 'harbringer,' a demonic 'power' called Aiwass (to whom he dedicated his infamous black masses). For Crowley, the "sacraments of the Aeon" were bi-sexual abandon, hallucinogenic drugs and "mantras and spells" (Crowley, 1992:23). For this self-styled servant of Aiwass, it was necessary to "go beyond the herd;" for him, the "word of sin is restriction ... do what thou wilt shall be the whole of the law" (1992:23).

Stableford styles Harkender as a shadowy Crowlean figure – an oracle, high-priest and occasional embodied incarnation of an angel of the apocalypse he calls Zelephon for whom he, like Crowley, performs apocalyptic black masses. Like Aiwass, Zelephon requires that his servant "go beyond the herd-made limits of good and evil" through acts of intoxication, depravity, sex and pain "so that he might become a superman – fit company for angels and demons" (Stableford, 1990:418-419).

France's The revolt of the angels (1914), which Stableford refers to as the "magnificent climax of French literary Satanism," provides another strong thematic and narrative inspiration (2010:169). An ingenious work of occult fiction and satirical misotheism, The revolt celebrates, along with Crowley, a decadent lifestyle of mind-altering substances, radical non-conformism and political anarchism that elevates the artist and aesthete as the unique receptacle of Satanic Dionysian possession. Imagining that fallen angels can choose to incarnate and take human form, and have chosen to do so at key moments of historical transition, France figures the history and progress of civilisation as a direct consequence of demonic interference. This serves as a template for the sorcerous interventions in history imagined by Stableford. Centring his story around the historical intrusions of a host of menacing otherworldly forces (the so-called 'angels'), Stableford utilises multiple point of view narration not only to introduce various possible interpretations of the ontological dilemma that faces his characters but also to undercut their utopian visions of possible futures. While characters such as Lydard try to make sense of a mutable world in transformation, their attempts at reason are continuously weakened by the nightmarish unreason focalised through characters such as Harkender.

Elana Gomel writes that an increasing amount of sf written during the information-era has begun to link apocalyptic and utopian ideas along supernatural lines, constituting what she terms "ontological detective stories" (1995:345). This type of sf, she avers, displays a fascination with a particular aspect of western eschatology – namely, the "hermeneutics of secrecy" (1995:345).xxiii In these kinds of narratives, "the [apocalyptic] world where the action takes place becomes an object of investigation, a mystery to be solved, a secret to be investigated" (1995:345). The world of the ontological detective story is one of mystery – "a world of darkness, violence and evil, ripe for the cleansing of apocalypse [with] a coming transformation predicated on the successful disclosure of some momentous secret" (1995:346). In the *Werewolves* trilogy, Stableford applies elements of the classic detective story to an ontological problem – namely, the link between knowledge (revelation) and apocalypse. The classic detective story, according to Michael Holquist, describes the world in terms of a "radical rationality in which the Scholastic principle of *adequatio rei et intellecus*,

the adequation of mind to things [and] the belief that the mind, given enough time, can understand everything, holds complete sway" (cited in Gomel, 1995:348). This principle, which also characterizes the ontological detective story, informs the attempts of David Lydard throughout the *Werewolves* trilogy to make sense of the interventions of the sorcerous angels and to understand the contrary impulses that animate his arch-rival, Harkender.

Lydard leaves no stone unturned in his attempt to unveil the meanings of events and the ontological enigma of the apocalypse, which the angels represent. The occult-laden 19th century Gothic *noir* crime fiction of Paul Féval, of which Stableford is a keen aficionado (having translated ten of Féval's novellas), suggests similar ontological journeys through its dark comedies, layered with malevolent and supernaturally-flavoured secret conspiracies. In such realms, governed by furtive plots and machinations, writes Gomel, "every detail points to an obscure and powerful pattern" (1995:38). Such a quest to un-mask the 'hiddenness' of the world is representative of the gnostic impulse in eschatology; an attempt to unveil "the hidden knowledge" of humanity's imprisonment in "a world of appearances created by a false demiurge" (1995:351). Throughout *Werewolves*, Stableford depicts his various characters struggling to uncover the 'true history of the world' – a story that seems to gainsay the story told by scientific reason. *xiv As the story deepens, reasoned inquiry increasingly flounders in the attempt to grapple with the intrusion of utterly unknowable and uncontainable forces of change that seem to be plummeting history into apparent catastrophe and darkness.

Another fin de siècle muse is Camille Flammarion who, in Lumen (1887) and La fin du globe (1893), combines Darwinian evolution with occultism, utilising metempsychosis – the transference of a soul to that of another living being – as a narrative device to enable a speculative exploration of the cosmos. Stableford, who has translated Lumen into English, utilises the book's narrative technique for exploring the hidden aspects of the world. Instead of a mechanical device facilitating this speculative exploration, as in more traditional sf, Stableford utilises Flamarrion's stratagem of supernatural transference. Throughout the Werewolves trilogy, his characters are used as spies by the angels. Thus, for example, the angel Zelephon transports Harkender's 'soul' into the body of a laboratory assistant to witness Jason Sterling's diabolical experiments in creating artificial life and into the body of a brothel keeper to witness all manner of spectacular human depravity. Lydard is similarly transported into the bodies of various characters by the whims of another angel who has adopted him as an oracle. Accordingly, the plot develops along occult lines with different points of view continuously overlapping to complicate 'truth' and the possibility of apprehending any kind of answer to the ontological dilemma faced by Lydard. In the final book of the Werewolves trilogy Stableford presents diverse utopian and dystopian possibilities as a hallucinatory

sequence of incarnations on new earths, heavens and hells facilitated by his Satanic angels. This, in turn, is offset against the horrors of WWI, which is where the narrative opens at the battle of *Chemin des Dames*. Here, amid the rattle of long-range guns, exploding rockets, dense fogs of nerve gas and piles of mangled bodies, the dark shadows of mechanism are outlined in an inventory of the devastating impacts of the new industrial atrocity weapons.

In *Carnival of destruction*, each Flammarionesque incarnation is narrated by a different character, with their visions continuously juxtaposed against each other. The cynical Harkender serves as a judge of each narrated vision – with his point of view incessantly intruding into the narrative to cast doubt on the potency of each vision. Harkender's own revelation is ironic, given his taste for diabolicism. Incarnated into a pastoral idyll, he meets a character called Amycus who tells him that progress is a destructive self-fulfilling prophecy; "the extrapolation of unhappiness into an endless, fruitless and joyless quest for a reward that would be better sought in another way" (1994:303). Harkender expresses disdain for Amycus' insight, proclaiming, "there is nothing we ought to hate more than constancy and changelessness. Better by far to find a Hell ... for in hell there is resentment and rebellion, and hence for progress" (1994:303). Although this statement seems to affirm the possibility of change, Stableford continually reneges on this probability through Harkender's callous greed, overweening pride and disregard for human suffering that seems to obviate the very possibility of a future – a reading that is borne out by Lydard's final despairing vision that concludes the trilogy, which I will discuss shortly.

J.H. Rosny-aîné's short novel, *La mort de la Terre* (1910) envisions the last vestiges of humanity on a dessicated Earth witnessing the birth of a new race of 'ferromagnetals' – curious organic/metallic beings that seem to symbolise the merging of human and machine. Rosny-aîné's vision has served as a prototype for contemporary posthuman narratives and in Stableford's rendering the technological idealist Jason Sterling is transported into just such a science-fictional future. Sterling's vision is of the "no man's land" beyond the apocalypse of biological humanity where he is incarnated amongst a new post-human race that has sprung "emergent from the womb of the wrecked Earth" into a bright new interstellar dawn of limitless technological possibility and balanced serenity (1994:317). Like Rosny-aîné's variable ferromagnetals, Sterling's posthumans are "shapeshifters ... whose bodies are only partly organic" (1994:316). Possessing the capacity to "explore the limits of growth and form in new ways," Sterling's vision represents the standard fare of utopian sf, which imagines apocalypse – the end of history – as a mere transitional stage on the journey to better things. This is typical of the cybergothic sf I will explore in my next chapter. Like the 'inversions' executed by the theoretical sf of 0D and the CCRU, cybergothic sf affirms the possibility of

continuity beyond catastrophe by envisioning the transformation of the human form, thereby expressing an anastrophic version of hyperstition. In the Decadent-inspired *Werewolves* trilogy, however, Stableford's intent is to reflect on the dark mood of the *fin de millénnium* in a catastrophic manner. "The postmodern zeigeist," as he writes in *The Decadent world-view*, brims with a "spirit of denial" that denies utopian promise and "the possibility of a future" (2010:168). It is hardly surprising then that Harkender pours scorn on Sterling's posthuman vision of renovation and transformation, calling it an "implausible dreamland" of "swarming insects ... a worthless heaven" (1994:318).

"The endless carnival of destruction" that has resulted from progress, may turn out to be a fructifying event, speculates another of Stableford's more hopeful secondary characters, the political revolutionary Anatole (1994:357). Incarnated into a floating alien intelligence, he is magically transported through the Milky Way where he is given insights into the nature of entropy by mysterious angelic companions. He finds solace in "time's arrow of irreversible decay, which sends forth a clarion alarm to all would-be tyrants and champions of constancy and stability" (1994:357). Upon interrogation by Harkender, however, Anatole loses faith in the plausibility of his "idealist" vision and comes to doubt whether catastrophe might "herald, phoenix-like, a new beginning as the best myths and fables would have it" (1994:366). The final incarnation in the sequence seems to corroborate Anatole's fatalistic conclusion that the hope for redemption constitutes nothing more than a "baseless fairytale" (1994:366). Taking place on a spaceship fleeing a human-induced catastrophe focalised through the character of Lydard, it presents a dystopian vision of futility.

In Stableford's final and bleak 'revelation' a small handful of posthuman refugees flee a human induced environmental catastrophe on a futile quest to find a new Earth. Infected with a host of molecular technologies that render their authentic biological humanness obsolete, they lie frozen in cryogenic coffins while Lydard, awake and alone, wanders their cold interstellar vessel pondering the inhuman fate of humanity. These post-human survivors, he speculates, may never find a habitable world or awaken from their "deathlike sleep" to begin history again (1994:440). To add a cosmic note to the inevitability of annihilation, Lydard witnesses, through the ship's on-board instruments, the pulverisation of what remains of planet Earth by a wayward asteroid (1994:414). In Lydard's final analysis, entropy is certain and humanity is forever caught on the wheel of history, "doomed to fail and again, always forgetting the lesson almost as soon as they have learnt it" (Stableford, 1994:449). This time, Harkender's intrusive point of view is strangely muted. This is hardly surprising, however. As a character moulded along Decadent lines, he rejects outright the notion of a happy ending. Stableford leaves us with the uncanny postmodern notion that the utopian conception of a

better tomorrow is an outmoded illusion. Interpreting the *Werewolves* trilogy in this way is borne out by Stableford's reading of literary Decadance as well as his clearly stated intent behind crafting such 'Decadent novels of the future.' The "Decadent style," notes Stableford, even though it is "careful to pay more attention to mythical elaboration than to 'vulgar' scientific accuracy ... retains a dogged conviction that there can be no salvation in miracles ... or happy endings" (2010:153).**

Infused with a pessimistic ontology and a catastrophic sense of inevitability that is swathed in occult-laden gloom, apocalyptic sf gainsays 'positive' constructions of the networked age which suggest that our assimilation into technological networks is amplifying rather than fatally disturbing our autonomy. The general permeability of humans to the abstract forces of machine-driven capital thus becomes equated with a pervasive danger; an apocalyptic moment equated with the intrusion of cosmic and supernatural forces that are, for us, more ruinous that constructive. For writers of sf in the Decadent vein, writes Matthew Taylor, "history is interpreted as a process of inevitable decay," life in terms of a "fundamental incomprehensibility" and the cosmos as an assemblage of forces "so cosmically horrific that the corollary of direct knowledge of them is insanity" (2009:12).xxvii

From the perspective of hyperstition, what signals back to us from the so-called 'end' of (human) history are fearful antithetical cosmic forces 'whose names cannot be uttered,' or simply the "unuttera" (Land cited in Reynolds, 2000:1). "Just as particular species or ecosystems flourish and die, so do human cultures," writes Plant, explaining what the "unuttera" represent (cited in Reynolds, 2000:1). For Land and Plant, as well as for 0D and the CCRU, the violent intrusion of the inhuman forces of mechanism and the 'death' of biological humanity they could herald represent, however, the opportunity for the genesis of a new evolutionary becoming. For these collectives and theorists of the fin de millénnium, the dark mood of the present is brimming with revolutionary opportunities for augmenting, transforming and radically extending what it means to be human. By contrast, Stableford, in the Werewolves trilogy, is more nihilistic about the possibility of a future for our species. In Carnival of destruction he posits that although "extinction events" may be the shapers of evolution, they are "not instruments of human extension" (1994:495). Evolution, as such, will continue but our destructive species will, in all probability, not linger long as players in its continuous games of chance. As with the disaster-filled history of biological life, the history of human culture and civilisation "is a path picked amongst ruins," cautions Fernández-Armesto in a moment of Decadent-inspired ennui. "No culture or civilization has lasted indefinitely. Disaster has seen them all off ... is there any reason to suppose that we can escape the same fate?" (2001:547). The catastrophic collapses of past civilizations were

localised in their effects but the collapse of contemporary global civilization will tear down the entire biosphere and the biological life-support mechanisms on which the human race depends, writes Diamond in *Collapse* (2005:273). Armed with technological and scientific knowledge, humanity, as Hoban, Swanwick and Stableford suggest, seems poised to 'roadit' out of history.

"However measured and elaborate," writes Stableford, "apocalyptic sf is merely the end-point of a Decadent sensibility writ large ... sharing the same essential sense of historical futility as the original writers of literary Decadence" (2010:152). Zamora suggests an alternative reading, arguing that (as 0D and the CCRU also aver), even postmodern entropic interpretations of apocalypse such as these contain the seeds of a revolutionary impetus – one that is firmly centered on the dynamic of vigorous turmoil. As Zamora explains, "apocalyptic narration presents itself as the most conclusive of plots and is, at the same time, the narrative embodiment of on-going historical desire" (1989:23). In biblical-inspired narratives of apocalypse, as well as in many contemporary apocalypse-flavoured fictions, she notes, "the narrator's eye may be caught by a static realm at the end of the historical upheaval, but it is held by the dynamism of the upheaval itself" (1989:23). The function of this dynamic engagement with cataclysm suggests "ways in which historical renewal may proceed from historical disaster" (1989:24). Based on this interpretation, it is possible to argue that apocalyptic sf acts as a petition for continuity, despite the bleak pessimism of its outlook.

Hyperstition, as 0D and the CCRU conceive of it, is a sensibility that uses the horror of historical inevitability and the fear of destabilisation to engender radical acts of the imagination. In this manner, the anastrophic (rather than the catastrophic) interpretation of hyperstition suggests a continuity of the transcendent promise identified by Zamora in apocalyptic narratives. The work of 0D and the CCRU implies, however, a move beyond the simple "acts of faith" and attempts to "preserve the sacred conventions" of history and historical time that traditional apocalyptic narratives demand (Zamora, 1989:23). The radical acts of the imagination as well as the anastrophic or inverted gestures endorsed by 0D and the CCRU are analogous to the "crazy act that changes the transcendental coordinates of the social field" that Žižek (2011:490) calls for. If we want to escape the clutches of narrativised or 'scripted' history, 0D and the CCRU suggest that we must begin to imagine ourselves and our destinies differently. Mousoutzanis remarks on the apparent absence of such gestures in Riddley Walker, noting that Hoban can be critiqued for leaving intact "the narrative of the Oedipal quest of male desire ... identification and rivalry" that have marred the violent 5000 year history of patriarchal civilization (2009:461). Indeed, the 'hevvynis' and shame that permeates Riddley's entire narration appears to have left the laws of the Oedipal fatherxxvii

unbroken. A similar figuring can be found in Swanwick's *Jack Faust*, as well as in Stableford's *Werewolves* trilogy although, in the latter, more in tune with a type of morbid and Decadent sense of ennui that perceives the impossibility of manoeuvring ourselves out of the catastrophic Oedipal impasse. Perhaps, as Deleuze and Guattari have suggested, a more "complete curettage" needs to be performed if we wish to remove the guilt-laden "Oedipal death drive" from the historical narrative – "a whole scouring of the unconscious" (1983:311). To escape the clutches of Oedipus these theorists promote a radical symbolic operation at odds with the deadlock that Jameson perceives at work in apocalyptic sf. Contra what Deleuze and Guattari propose, Hoban presents his character Riddley as searching for this salvation while simultaneously refuting the possibility of it. A similar process occurs in *Jack Faust* and the *Werewolves* trilogy, especially in the latter's final vision of implausible heavens or utopias.

Hoban, Swanwick and Stableford's apocalyptic of is a reflection of the postmodern impasse that Haraway refers to as the "black comedy" of postmodernity (1997:7). While killing our planet (our 'mother'), she notes, we are in bed with the 'father' of technological modernity whose "salvation myth" is the "narrative of progress" (1997:7). Apocalypse and farce are conjoined in this twisted chronicle, she notes. The apocalyptic intuition that we are destroying our home world and the comedic belief that progress will resolve all conflicts "are bedfellows in the postmodern soap opera of technoscience" (1997:8). It is precisely this Oedipal soap opera that Hoban and Stableford appear to have fictionalised and which Swanwick has cynically satirised without, in the final analysis, crafting a radical symbolic overturning.

Despite their dabbling in a Decadent sensibility, 0D and the CCRU take their cues from the Surrealists and the Situationists who took the morbid impetus of literary Decadence in a different direction. Like the biblical utopians described by Zamora, the focus of these groups lies with the dynamism of change, but unlike biblical apocalypticists they do not envision a 'static' realm at the end of time. Like Stableford's Harkender, they would rather have a dystopian 'hell' of "resentment and rebellion, and hence [further] progress" (1994:303), even if this means radically altering what 'progress' is taken to mean. This is premised in their ontology by a radical shift in awareness which, in the case of 0D and the CCRU has been modelled off Deleuze and Guattari's strategies of inversion and subversion. A prototype of their suggested way forward can be also be found in France's *The revolt of the angels*, which as Bernard Schweizer remarks, is driven by the insight that "revolution can only succeed if it begins and ends with reforms in the mind" (2011:1). As Schweizer suggests, revolution will only ever bear fruit if it involves an ontological shift of perception – a total mental break with

history and with what has gone before; a total rejection of the "laws" of the Oedipal and "false Father" (2011:1).

Unlike Jameson who imagines an ultimately conservative historical role for sf (see 1991:283), I would argue that much of contemporary sf - particularly those examples infused with hyperstitional elements – attempt to escape the entropic gravitational pull of history by mapping the kinds of cognitive shifts described by Schweizer. Admittedly, the kind of postmodern apocalyptic sf described by Jameson reneges on the prospects of such avantgarde manoeuvres by offering only bleak maps of the territory ahead. Beyond the terror induced by the spectre of final extinction that haunts apocalyptic sf's uninviting future visions, however, lie other constructions of science-fictional speculation premised on an inversion and subversion of the entropic impulses of fin de siècle Decadence and fin de millénnium postmodernism. Writers of cybergothic sf, on whose work I will now focus, formulate an anastrophic hyperstitional aesthetic similar to that of 0D and the CCRU. Like Hoban, Swanwick and Stableford, cybergothic authors are attracted to the hyperstitional potential of technology and its sorcerous pacts, but unlike these writers of apocalyptic sf they attempt to sabotage, invert and harness this demonic potential. Relishing the uncanny sense of horror inherent in many new areas of scientific advance, these writers suggest potentially fruitful mergers between mechanism and its dark mythic shadow.

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ⁱ These retrochronal settings, while absent from many contemporary examples of apocalyptic sf – such as Cormac McCarthy's *The road* and Paul Auster's *In the country of last things* (1989) – are typical of contemporary subgenres of sf known as 'steampunk' and 'alternate history.' These are styles that I will discuss later in this chapter.

ii In Cosmos and history: the myth of the eternal return (1971), Eliade distinguishes between heterogenous and homogenous concepts of time. Arguing that the perception of historical time as a homogenous, linear, and unrepeatable medium is a peculiarity of modern civilization, Eliade contends that earlier societies distinguished between profane (linear) historical time and sacred (cyclical) time (1971:139). By means of myths and rituals that provided access to this sacred time, avers Eliade, humanity was able to protect itself against the existential "terror of history" – a condition of helplessness before the absolute data of historical or profane linear time (1971:160). Pre-modern societies were able to escape the sense of catastrophe and horror associated with historical events by ascribing them to parallel events that had taken place in a sacred time, which therefore lent them inherent value and meaning (ibid).

iii Historian Jeff Peires documents a similar overlap between European and Xhosa apocalyptic expectations when he writes of the Great Xhosa cattle-killing of 1856/57 (2003:100). It is noteworthy that the Bantu peoples encountered by the Europeans in Southern Africa were, like the Europeans, an agricultural people who utilised iron tools and lived in hierarchically organized societies that could easily be mobilized for large-scale social operations such as warfare and, in parts of what is today Mpumalanga, city building (see Johnson, 2004:10). In South America, writes historian Ronald Wright, the Europeans encountered complex agricultural civilisations organized around state-religions, city-building, complex social hierarchies and, in some cases, writing, proving that similar social experiments with comparable mythologies arose autonomously in all parts of the world where agriculture provided the necessary means of subsistence to support such societies (2005:32). According to anthropologist and mythologist Joseph Campbell, apocalyptic myths are a peculiar characteristic of

agricultural peoples around the world and, as such, can be read as symptomatic of cultural anxieties surrounding the end of the nomadic hunter-gatherer lifestyle and the onset of patriarchal social systems orientated around expansionism and warfare (1976:35).

- iv Marx's tripartite vision of primitive communism, class society and utopian communism, was essentially entrenched in the Medieval apocalyptic "phantasy of the three ages," writes Norman Cohn in *The pursuit of the millennium* (1970), adding that the theories of historical evolution put forward by German idealist philosophers, including the dialectic proposed by Hegel, conformed to a similar tripartite division (1970:109).
- The ascension of capitalism, through its interlinking of global economies and its emphasis on consumerism, seems only to have intensified the ghosts of catastrophe and the sudden and cataclysmic disruptions of life on earth that haunt the zeitgeist or 'cultural mood' of the new millennium. "Capitalism unleashed is seen to threaten the life-support systems of the planet ... left unchecked it bids fair to turn the world into a moral and material wasteland," observes Kumar (1995:208). The world-wide achievement of capitalism seems to have inaugurated a melancholic utopia, writes Kumar (1995:205-207), where, even in the words of one of its principle proponents, Francis Fukuyama, "daring, courage, imagination, and idealism, will be replaced by economic calculation, the endless solving of technical problems, environmental concerns, and the satisfaction of consumer demands [and] there will be neither art nor philosophy, just the perpetual caretaking of the museum of human history" (Fukuyama cited in Kumar, 1995:207).
- vi Žižek appears to alternately recommend versions of the Leninist, Stalinist or Maoist state as solutions to the enormous environmental problems created by global capitalism problems that will, in the near future, necessitate enormous geo-engineering solutions that only large totalitarian states will apparently be able to mobilise (2011:424). "Simply changing our lives" or, for that matter the nature of capitalism itself, will not be enough, in his opinion, to solve the vast problems resulting from "ecological disturbances" that are "the paradoxical outcome of the exponential growth of our freedom and power to transform nature" (ibid).
- vii In what Jameson terms contemporary 'apocalyptic sf' the utopian opposite is strangely muted, if not altogether absent; apocalypse heralds a terminal point but not the hoped for transformation or transcendence of history. Jameson stresses that the postmodern 'apocalyptic' is emblematic of a type of terminal nostalgia that is different to the remedial longing expressed in standard utopian or dystopian visions. The utopian vision of the 'good society' that emerges cleansed from catastrophe has traditionally found a counterbalance in the "critical dystopia" or the "anti-utopia" that seeks a different type of remedial historical action (2007:198). Whereas the anti-utopia is motivated by a "central passion to denounce against utopian programs in the political realm" (2007:199), the critical dystopia generates its effects "in the light of some positive conception of human social possibilities" and derives its "politically-enabling stance" from "utopian ideals" (2007:198). Unlike the postmodern 'apocalyptic' vision of historical entropy, traditional utopian and dystopian narratives uphold the possibility of renewal (ibid). By contrast to the postmodern vision of invariable and unchangeable historical collapse, the standard utopian dialectic in sf reimagines the scriptural apocalypse as a historical crisis and counterbalances it with a utopian opposite. The biblical 'New Jerusalem' is imagined as the 'new society' or the 'new world order' arising from the ashes of the old. Cleansed by catastrophe of all that was driving it towards corruption, entropy and decay, human history in utopian sf hitches up a notch on the scale of historical progress.

viii In Short circuits: finance, feedback and culture (2011), Benedict Seymour explains positive feedback in a manner at odds with 0D's 'positive' interpretation of it. Negative feedback, he writes, is 'positive;' it occurs in a cybernetic system when "actions and their effects are fed back into the system in order to better coordinate aims and results" (2011:1). "Positive feedback, from the perspective of control," writes Seymour, "is not positive at all, but represents a spiralling disorder or perturbation of the system" (ibid). Seymour gives many examples of positive feedback that are driving the capitalist system away from control and measured growth in the direction of the type of crisis event favoured by 0D; an event that Seymour reads as entropic, but they read in terms of its potential for subversion. Seymour lists factors such as speculative finance, floating exchange rates, arbitrage and derivatives as drivers of positive feedback in the economic system. These same effects, he writes, have impacted on culture, creating "an unprecedented coordination of class decomposition and social non-reproduction" (ibid). 0D would agree with him that all manner of decompositions are taking place in contemporary culture. In their view, the dissolution and decomposition of boundaries in the contemporary world presents radical possibilities for conceptualising new social formations and communities. Anarchisttheologian Hakim Bey concurs. "Everything may be imploding ... but let's not mistake the meaning of this," he writes. "After all, it's only the outmoded and empty husks of the social [and the cultural] catching fire and disappearing" (1991:80).

ix Eliot concludes *The wasteland* with the following lines: "These fragments I have shored against my ruin ... *Shantih shantih shantih*." He suggests, thereby, that after experiencing the dilemmas of cultural and spiritual blight, the poet may find peace, not only in his own writing, but in other 'fragments' that have been similarly shorn up by others. In such a manner, Eliot seems to infer the possibility of renewal.

^x Writing nearly three decades after Hoban, Jeanette Winterson traces the genealogy of the mind-set that gave birth to the post-apocalyptic world she imagines in *The stone gods* (2007): "The world that you are looking at now, the world that made way for World War Three, really begins in the 1980's when materialism became the dominant value. If you couldn't buy it, spend it, trade it or develop it, it didn't exist" (2007:136).

xi For those economists and developers who based their jargon on the emerging science of chaos "not to be fully in control was [evidently] a lesson to be learned from chemistry" (Moltika, 1998:1). Along with other mathematicians and scientists working in 1970's, Nobel chemist Ilya Prigogine's work on dissipative structures in chemistry did much to derail the conservative systems of traditional science. During the 1980's, as a direct result of these enquiries, "a centuries-old devotion to 'conservative systems' (physical systems that, for all practical purposes, are isolated from their surroundings) [finally] gave way to the realization that most systems in nature are subject to flows of matter and energy that continuously move through them," writes De Landa (1991:129). He continues: "this apparently simple paradigm switch" allowed scientists to "discern phenomena that, a few decades ago were, if they were noticed at all, dismissed as anomalies" (ibid). Fields from molecular biology to chip-design have subsequently been transformed but, as Buell has pointed out in From apocalypse to way of life (2003), there is a dark side to the contemporary subversions of chaos-metaphors in the world of economic speculation and consumerism. Buell contends that the celebratory use of the language of catastrophe in economic, political and technological realms has meant that radical natural and social volatility are read as constituting "energising motors" for unchecked development (2003:214).

xii Orfing, Goodparley's replacement in the Ram after his fall from grace, recites this verse almost verbatim: "Which theres hoap of a tree if its cut down yet itwl sprout agen. And them tinder branches theyre of wil not seaze" (2002:175). He offers this verse as an explanation of Riddley's vision of Greanvine as a man with vines growing from his mouth: "Inland may be cut down yet them branches wil keap coming. Peopl may try to kil them branches only itwl be the people what fall down and dy branches wil grow out of ther moufs which thats our blip and syn" (2002:176). Riddley, having reflected on the fate of the humans of the 'old times,' knows differently. His retort of "sharna pax and get the poal" ('sharpen the ax and get the pole') refers not only to Eusa's fate (having split the 'Addom' and killed the 'hart of the wud' – nature - his head ended up on a pole) but also to Greanvine's utter indifference to humans or their institutions. The text and context of the Old Testament book of Job may have been lost to the humans of Riddley's world (Orfing mentions only that it has been passed down

orally "year on year" (ibid) but Riddley intuitively grasps the plight of Job who is made to endure tragic loss and unspeakable afflictions as the result of the wager of an punitive God.

xiii From the start of *Riddley Walker*, Hoban depicts the often violent social displacements that occur as agricultural activities begin to replace the old hunting and gathering ways. Simultaneously, the death of the last wild pig, with which the story opens, represents the displacement of an animistic religion centred around the "Big Boar" and the "Moon Sow" and its replacement with apocalyptic monotheistically-flavoured religious cults centred around the "Addom" and the figure of "Eusa."

xiv On occasion, Hoban allows supernatural forces or inhuman agencies to serve as first-person narrative voices when he lets them speak directly through Riddley or Lissener's 'trants missions.' Riddley describes Lissener foaming at the mouth, bleeding, spouting prophecy and groaning "like some terbel thing were taking him and got inside him" (2002:95). Land explains how hyperstitional forces implant themselves through possession and possessed writing, using humans as incubators: "John Carpenter's *In the mouth of madness* includes the (approximate) line: 'I thought I was making it up, but all the time they were telling me what to write.' 'They' are the Old Ones (explicitly), and this line operates at an extraordinary pitch of hyperstitional intensity. From the side of the human subject, 'beliefs' hyperstitionally condense into realities, but from the side of the hyperstitional object (the Old Ones), human intelligences are mere incubators through which intrusions are directed against the order of historical time. The archaic hint or suggestion is a germ or catalyst, retro-deposited out of the future along a path that historical consciousness perceives as technological progress" (2009:1).

^{xv} Hoban's fiction – both for adults and children frequently contain mythological figures and allusions that work with both Jungian and Freudian interpretations of myth. *The Medusa frequency* (1987), for example, develops the Orpheus myth where the decapitated head of Orpheus, which the main character repeatedly glimpses and converses with, serves as his uncanny doppelgänger that gives vent to his repressed desire for death. A hippogriff serves as one of the protagonists of *Angelica lost and found* (2010), with its distinctly Jungian alchemical overtones; an interpretation borne out by the fact that the text is directly modelled off Ludivico Ariosto's alchemical poem *Orlando Furioso* (1516).

xvi "It is all too tempting," writes Will Smith, "to envisage a film or a theatrical production *Riddley Walker* taking place at the feet of the megalithic statues of Easter Island" (2002:vii).

xvii Fossil records indicate that the earth has thus far undergone five major planetary extinctions, of which the disappearance of the dinosaurs is the best documented. Recent estimates hold that we are fast headed for another massive extermination of terrestrial life-forms. Conservative approximations hold that at least 27,000 species of animals and plants are vanishing from the earth's tropical rainforests alone each year and that the earth may, from the viewpoint of biodiversity (a measure of the health and viability of ecosystems as well as the biosphere) practically be a barren wasteland by 2050. Biologist E.O Wilson chillingly relates the extent of current levels of biodiversity destruction in the third chapter ('Nature's last stand') of *The future of life* (2002). This time, unlike previous wipe-outs, it is not a chance asteroid collision, nor a chain of geological upheavals that is at fault. Instead, it is the cultural activities of an ever-burgeoning human population.

xviii In the Sumerian *Dialogue of pessimism* a servant urges his master to go into the old ruins and, by contemplating the skulls there, to reflect on the emptiness and irony of human endeavour (Hill & Walton, 2000: 313).

xix Marx and Engels were working with Goethe's conception of the Faustian pact when they wrote the *Manifesto*, writes Berman (1982:115). Goethe's Faust, agitated by a restless and adventurous spirit, requires that "the intellectual and cultural revolution that has taken place in his mind" find a material expression; a transformation that requires that he "embrace a whole new order of paradoxes that are crucial to the structure of both the modern psyche and the modern economy" (1982:115). Goethe's Mephistopheles, notes Berman, "materializes as the master of these paradoxes" (1982:115). For Marx and Engels, these paradoxes exemplify the necessity of destroying the entire social fabric in order to create a new system premised on constant destruction; a system in which "all fixed, fast-frozen relationships, with their train of venerable ideas and opinions, are swept away [and] all new-formed ones become obsolete before they can ossify" (1969:101).

xx By 'relations of production' Marx and Engels mean the sum total of the social and economic associations that constitute the economic superstructure of capitalism. Participation in these contacts is not voluntary and people need to enter into them in order to produce and reproduce their means of livelihood (1969:98). In these relations, they write "personal worth" has been translated "into exchange value" which, in turn, is premised on "naked, shameless, direct [and] brutal exploitation" (1969:99). These economic interactions, which are determined by "free trade" are not stable and invariably lead to a myriad of social disruptions, which capitalism is able to 'magically' absorb (ibid). This leads Berman to conclude that Marx and Engels were correct in describing capitalism as a 'sorcerous bargain' and an "unstoppable" engine. "Bourgeois society," as Berman explains, "through its insatiable drive for destruction and development, and its need to satisfy the insatiable needs it creates ... is able to nourish itself and thrive on opposition, to become stronger amid pressure and crisis than it could ever be in peace, to transform enmity into intimacy and attackers into inadvertent allies" (1982:119).

xxi In Marlowe's play, the 'debt' can be read as an ambiguous comment on the Calvanist principle of original sin that animated Elizabethan England. In this sense, Faustus is damned because, as Tim Foster writes, he believes that he must be damned (2007:1). As Foster points out, Marlowe fictionalises the debate around the new humanities, using the "reverse tow of Reformation determinism and the forward thrust of Renaissance scepticism" to power his vision of a man who is his own worst enemy (2007:1).

xxii *The last man*, Shelley's vision of the failure of progress and the ineffectuality of science, can be called partly hyperstitional because the narrative device that enables her future fiction is represented as a retrochronal self-fulfilling prophecy. According to the novel's postscript, Shelley future vision is a transcription of a future-prophecy found in the cave of the Cumaean Sibyll near Naples.

xxiii "The world of the ontological detective story," writes Gomel, "is the world of radical signification in which everything is a sign for something else" (1995:348). As the first and primary example of this type of sf, Gomel cites Mary Shelley's *The last man* (1826) in which the grimness of the story of humankind's downfall is balanced by narrator's decipherment of the occultic 'Sibylline pages' (1995:354). Thus, as Gomel writes, in the ontological detective story, "ratiocination" and "the process of deciphering itself" is represented as a "solace" to the "nightmare of history" and the "mystical implications" of "eschatological prophecy" and the supernatural (ibid). Current examples cited by Gomel include Gary Kilworth's *Theatre of the timesmiths* (1984), Ian Watson's *River* trilogy (1984-1985), Michaela Roessner's *Vanishing point* (1993) and Sheri Tepper's *A plague of angels* (1994).

xxiv While Lydard struggles to comprehend any contraventions of scientific orthodoxy, many of Stableford's secondary characters, such as the eccentric 'mad-scientist' Jason Sterling are at ease with heretical speculation and find challenges to the scientific status quo stimulating. As Sterling claims in an argument with Lydard on this point, "science needs to modify its opinions to admit a far greater measure of uncertainty and strangeness" (1991:119).

Tied up as it is with "an awareness of historical inexorability," the Decadent sensibility – as Stableford writes – is obsessed with "the fundamental understanding that the marvellous is always on the wane [and] doomed to reach exhaustion" in a catastrophe that is absolute (2010:154).

xxvi In the 'weird' ontology of literary Decadence and its offshoots writes Matthew Taylor, we are "opened up to forces 'beyond' ourselves, immersed in the universal flux ... the result is our infinite connection, not extension" (2009:12). Thus in the Decadent-inspired 'Gothic sf' of writers such as Edgar Allen Poe and Lovecraft, cosmic energies are not merely depicted as neutral with respect to 'our' being (as in naturalistic philosophies dating back to the Ionian philosophers & Lucretius), "they are antithetical to it, actively threatening to annihilate us as independent entities, as persons and as principles" (Taylor, 2009:12).

xxvii Jacques Lacan posits the 'law of the Father' as the means whereby children are initiated into the machinery of patriarchal culture and its structure of obedience through guilt. This initiation, he speculates, takes place via the agency of the symbolic father, which encompasses the heavily laden signifiers of language, words, letters, and numbers. These are the principal agents, according to Lacan, that separate the child from its mother and hence the realm of nature, which is associated with the symbolic mother. The corollary of breaking the Oedipal laws is shame and guilt (cited in Hill, 1997:60-62). Haraway subverts Lacan's law of the Father, calling it the 'law of the Phallic Mother.' She writes

of the scenario of "the Phallic Mother from whom all humans must separate ... the myth of originary unity out of which difference must be produced" (1991:151). The 'Oedipal myth,' which has been inscribed onto the mother, is symptomatic of the "domination of women/nature [by] Western humanism" that has been in operation since the time of the ancient Greeks (ibid).

Chapter 3 - The abysms of science

Where Gibson splices Milton into labyrinths of limbo-circuitry cybergothic flickers into 'neuro-electronic scrawls.' (Land, 1989:79)

The "central story of the future" writes John Clute, concerns "silicon chips," the "invisible intricacies" of information-space that these technologies have revealed and "the nanowaredriven world that we may now be entering" (2003:66). According to Clute, information-age sf "no longer signals substantive [world] shaping advocacy" in the manner of classic sf, with its "future sufficiently seeable to shape" (and thereby to render clearly visible), but rather consists of "exudations of style" that consider the world in terms of "invisible intricacies" and "essential" and underlying "strangeness" (2003:67). Today, writes Davis, humanity finds itself animated by "the myth of information, of electric minds and boundless databases, computer forecasts, hypertext libraries, immersive media dreams and a planetary blip culture woven together with global communications nets" (1998:3). This myth, articulated by Gibson in his seminal cyberpunk novel Count zero (1986) as the "myth of cyberspace," reaches beyond "the garish, commercialised and oversaturated surface of the information age" to reveal a spectral underworld, haunted by the irrational and the mystical (Davis, 1998:3). In Cybergothic (1998), Land builds on the Gibsonian notion of cyberspace in order to formulate an aesthetic response to the postmodern "implosion of futurity" (1980:80). For Land, Count zero constitutes an example of new kinds of "code-shuffling experiments" in sf and sfinspired theory that remix contemporary philosophy and futuristic techno-science with Gothic images and a dark-Romantic sense of the sublime in order to articulate visions of a future that lies beyond the "end of history" (1998:87).

Authors writing in the cybergothic style that Land outlines interweave Gibsonian cyberspace's "labyrinths of limbo-circuitry" with the Miltonic style in order to enact an inverted gesture that attempts to circumvent the apocalyptic impasse of postmodernity (1998:79). "The Miltonic style," as the Oxford anthology of *Romantic poetry and prose* explains, using Keat's Romantic *Hyperion* fragment as an example, is a particular exudation of style that relies on "sublime cataloguing" to produce its effects and affects (1973:504). It entails a "sonorous" invocation of the strange-sounding names of Titans, demons, faeries, gods and other mythical creatures, as well as descriptions of fantastic topographies in order to achieve a sublime effect (1973:504). While Milton unfetters the imagination only to constrain it within the discipline of an ordered Christian framework, cybergothic sf – like the gothic materialism of Land, 0D and the CCRU – is less constricting. Their shared ontological framework is an occult system of references that presents information space as the haunt of

mysterious, incalculable and vast forces. This hybridisation of sf with Gothic horror and the Romantic sublime, as Clute writes, does not attempt to "domesticate the future" but "treats the future as an enigmatic god" (2003:68). Such an aesthetic sensibility, "has as it were o'erleaped the sheer vast mundanity of the information explosion," in order to penetrate its dark and shadowy underbelly (2003:66). I have chosen Charles Stross' *Accelerando* (2005), Dan Simmons' *Hyperion cantos* – consisting of *Hyperion* (1990), *The fall of Hyperion* (1991), *Endymion* (1996) and *The rise of Endymion* (1997) – as well as M. John Harrison's *Light* (2002) as examples to illustrate the cybergothic style. These texts are significant, I argue, because of their Gibsonian depiction of the world of networked information as a hyperstitional 'god-game' inhabited by strange and, at times, unfathomable powers.¹ Such an allegory of technological empowerment undercut by incomprehensibility, writes Clute, "may be the most profound metaphor" for the contemporary crisis of experience (2003:72).¹¹

In an article challenging Land's appropriation of the term Gothic, Botting suggests that the term "cybergothic" suggests "a dream and a nightmare, utopia all at once ... a future both horrifying and thrilling, but far from Gothic" (2008:176). In the gothic materialism of Land and collectives such as the CCRU, as well as in the cyberpunk of Gibson, with its dense Gothic allusions, avers Botting, "horror no longer returns upon the present from a past to reveal guilty secrets, mythic energies or spectral powers" as it does in traditional Gothic fiction (2008:176). Botting refers to Count zero as well as Land's Cybergothic essay as instances of "fantastic apocalypticism" in which "Gothic images serve as a disguise, a retrospective gloss on a terrifying prospective gaze" that borrows "from horror's assault on the senses [and] oversaturation of images" to articulate a vision of "synthanatos" or death by artificial technologies (2008:215-216).ⁱⁱⁱ For Botting, sf and sf-inspired theory that "draws humans towards monster, alien and cyborg" lacks the restorative function of the traditional Gothic mode (2008:216): "The allure of otherness leads only to the indifference and multiplicity of posthumanity," he writes. "The transcendent vision" finds itself replaced by "the vision machines ... [and] everpresent screens that [already] define western existence in real-time relays" (2008:46). This view certainly holds for the apocalyptic of I investigated in my first chapter. In these examples of pessimistic 'apocalyptic-sf,' to borrow Botting's rather totalising description of contemporary sf, "both the future and history disappear on receding horizons: neither is credible as a source of hope in a present defined by a 'retreat of knowledge [and] the retirement of progress" (2008:47). To argue, however, that the future and history have disappeared in all instances of contemporary sf seems misplaced. By investigating examples of cybergothic sf in this chapter, I intend to counter Botting's postmodern notion that the future in sf has been completely annulled and that the restorative

function of Gothic forms have been rendered redundant in contemporary instances of sf that borrow from or allude to the Gothic mode.

Botting notes that the traditional Gothic sublime utilises "remnants from the past – ruins, superstitions, passions" to "mark turning points in cultural historical progress" and, "in looking back ... to provide a platform for a movement forward" (2008:203). I disagree with Botting's contention that such a backwards and forwards momentum is absent in contemporary sf (2008:216). This dynamic is executed in cybergothic sf, as it is in the theoretical sf I investigated in my first chapter, through the use of hyperstitional time-travelling fictions, coincidence intensifications and invocations to the Old Ones. Authors like Stross, Simmons and Harrison utilise the kind of "code-shuffling experiments" that Land locates in Gibsonian cyberpunk (1998:87) by juxtaposing the past and the future as well as the scientific and the mystical. In doing so, they subvert the traditional sf concept of the *novum* and the sf sense of wonder – namely, the sublime and futuristic potential inherent in technoscientific developments. This is a potential they, like Gibson, Land, OD and the CCRU, articulate by invoking a sense of cosmic and supernatural horror while remaining strangely hopeful about the possibility of a future beyond the postmodern end of history.

The most visible sign of the continuity of the cyberpunk style can be found today in what some critics have labelled the 'new space opera.'iv Writing in 1956, Raymond Williams expressed his disdain for the quintessentially American traditional 'space opera,' dismissing this subgenre of sf writing for its unquestioning imperial thrust and aggressive celebration of destructive technologies (1988:360). Since the late 1980's, however, some of the "greatest examples of contemporary sf," avers Luckhurst, have reclaimed the space-opera mode (2005:221). Authors such as Simmons, Iain Banks, Vernor Vinge, Ken MacLeod, Harrison, Paul McAuley, Alistair Reynolds and Stross, he notes, are reworking cyberpunk themes and styles utilising the "the exaggerated [cosmic] sweep of the traditional space opera" and refurbishing it with "avant-garde ambitions" as well as "serious literary intentions" (2005:222). The Hyperion cantos, Light and Accelerando are recognised by many critics and sf readers as exemplary of the mode of the new space opera. Clute acknowledges Simmon's Hyperion cantos as one of the pinnacles of the new space opera (2002:77). Sf critic Gary Westfahl agrees (2002:207), adding that the overwhelmingly melancholic tone of the Hyperion cantos is significant in that it signals the postmodern collapse of the original subgenre's conviction in the "manifest destiny" of humankind amongst the stars. Luckhurst concurs (2005:226), although he finds Harrison's Light to be the most interesting example of the subgenre in the sense referred to by Westfhal (2005:240). Stross' Accelerando is widely acknowledged by sf readers as the most compelling although contentious example of the new

mode of space opera. Sf critic and author Adam Roberts has the following to say: "I can think of a more *now* sf writer than Stross. He may have been publishing since the 1980's, but he seemed in 2005 [with *Accelerando*] to have arrived suddenly, like the 'screaming across the sky' with which *Gravity's rainbow* opens' (2006b:1). These three examples of the new space opera – which are, as I argue, emblematic of the cybergothic style – are significant for the purposes of my thesis because they can be read as potent examples of hyperstitional sf in which supernatural horror, terror and the undomesticated sublime play central roles.

The sublime, writes Burke (in part II, section 1, of his *Philosophical inquiry*) evokes "that state of the soul, in which all its motions are suspended, with some degree of horror" (2001:1). He adds (in part III, section 27), that "sublime objects are vast and indeterminate in their dimensions," as well as "dark and gloomy" in their immensity (2011:1). Invoking the Old Ones – in this instance, shadowy and ominous forces that are vast in aspect – cybergothic sf describes technology itself in these sublime terms. This is in keeping with the trajectory of Gothic-inspired sf articulated by Deleuze and Guattari for whom the Gothic-infused sf of writers such as Lovecraft begins by describing "encounters with strange animals" and technologies and finally reaches "the ultimate regions of a continuum inhabited by unnameable waves and unfindable particles" (1988:248). This line of flight describes the cybergothic style, which uses encounters with strange beings and forces to read the sublime astonishments of technological intrusion in supernatural terms. Intense and often opaque scientific speculation and extrapolation is typical of the new space opera (Clute, 2003:67) and it is also emblematic of the cybergothic style. In these kinds of contemporary sf dense technoscientific speculation is used to underline a sense of ontological destabilisation (see Clute, 2003:67-68) – a motif that is mirrored in contemporary forms of materialist philosophy, such as speculative realism and object orientated ontology, that are opposed to anthropocentrism. vii

Scientific advances have created a hyperstitional "infection," writes Land, which has "spread across a multitude of cultural vectors" (1997:13). For Land, however, this terrifying infection has a transformative function and he invokes it as a panacea to what he perceives to be a postmodern sense of academic and theoretical terror and stagnation." Both theory and fiction, he writes, need to respond to the coruscating power of techno-science by reaching beyond outdated, stultifying and "future-denying" modes of theoretical discourse in order to "surrender" to the dynamic forces of change (cosmic, geological, biological and technical) that are forever generating new futures (1997:21). This submission, the topic of my first chapter, is no simple matter. We inhabit a society, writes Land, caught in a standoff between "legitimating the perpetual reconstitution of global social memory" and indulging in

unchecked techno-scientific development that effectively functions to erase social memory through artificiality and consumption (1997:21).

In *Surviving the century*, the second instalment of his 2010 Reith lectures, Sir Martin Rees explores some of the apocalypses that contemporary advances in the science of informatics could engender. "Our lives today," he notes, "are pervasively molded by three innovations that gestated in the 1950's, but whose pervasive impact wasn't then foreseen" (2010:1). These are the invention of the integrated circuit, the discovery of the DNA double-helix and advances in space-related sciences such as cosmology (2010:1). These three developments – which, in Clute's view, are molding "the central story of the future" (2003:66) – inform the narratives of cybergothic sf, which reflect on ways in which advances in artificial information processing, genetics (biological information processing) and cosmology (knowledge of the physical laws that govern the informational-substrate of the universe) may radically alter conceptions of what it means to be human.

The integrated circuit (in the form of the ubiquitous silicon chip) has spawned mobile phones, personal computers and the Internet, promoting massive economic growth as well as broadening the horizons of scientific investigation. "With [computer] technology, we are literally coming out of the dark ages of biology," muses Craig Venter, the head of the Celera Genomics Group that spearheaded the sequencing and digitizing of the human genome (cited in Preston, 2000:1). Historian Peter Watson ranks the nascent science of molecular biology as the most culturally transformative idea since the onset of agriculture 10,000 years ago (2001:682). x Space, the third area of scientific advance alluded to by Rees, has generated not only advances in rockets and satellites (the backbone of the contemporary communications revolution) but new data and scientific speculation about the informational nature of the cosmos. Paradoxically, it was while conducting research for NASA that geochemist James Lovelock formulated the concept of Gaia – a supreme evolutionary force of nature; a giant "super-organism that includes the atmosphere, ecosystems, oceans and lithosphere" of planet Earth (Wilson, 2002:11). With its age reckoned in billions of years, this super-organism not only maintains (through symbiosis and other networks of relationships between living organisms) the necessary conditions for life, but has weathered countless massive extinction events (2002:12). This idea of a vast, mysterious and distributed network of information which includes but infinitely extends beyond humans, and to which the species is utterly subservient, if not insignificant, informs the cybergothic sense of sublime horror and terror. In this type of sf, informational networks – both biological and artificial – are extended into the abysms of cosmic space where dark materials and enigmatic forces hold sway.

According to former museum curator, art-critic and author Julian Spalding, the dawning awareness of nature writ large, interwoven with intricate geochemical and biological relationships, has spawned a new mathematical language of chaos that has not only informed all of contemporary science's major areas of investigation but has also spilled beyond its confines (2005:274). Chaos theory, pioneered by mathematicians Mitchell Feigenbaum and Benoît Mandelbrot in the late 1970's, not only explains divergent natural forms - from the patterning on seashells to weather systems and the shapes of galaxies - but has also entered the narratives of philosophy, art, literature, economics and culture as a whole (2005:275). The publication of James Gleick's seminal best-seller Chaos: the making of a new science in 1980 explained, using enticing computer-graphics, the tenets of chaos theory to an eager public. Furthermore, its publication marked the onset of the information era and the construction of planetary communications networks that simply added a new artificial layer – which has been termed the 'mechanosphere' - to the already existing, and far older, biological and geochemical information networks that Lovelock described.xi The new areas of interest no longer focused on the "graceful smooth geometric forms that Newton believed were the true building blocks of nature," but on the borderlands and margins where the boundaries between forms, shapes and states begin to blur (Spalding, 2005:274). Mandelbrot's equations, explains Spalding, "found a way of visualizing this new type of geometry, which he called 'fractal' to reveal the structure of natural boundaries" (2005:275).xii Like 0D and the CCRU, writers of cybergothic sf have responded to the view of a decentralized, dynamic and fundamentally non-linear universe by reinventing the apocalypse as a non-linear event, underscored by a sublime sense of terror. Fundamental to this new vision – and the vision of cybergothic sf – is the computer, which has, in itself, become a metaphor representing the dramatic expansion of technological power, not only in sf, but in contemporary media culture at large. Terms such as 'cyber' (taken from the Greek kyber, meaning 'steersman') have been coined to represent the science-fictionalisation of society itself through the rapid technological and cultural transformations made possible by personal computers and the Internet. Although this metaphor of the 'steersman' seems to imply that humans are firmly at the technological helm, guiding it in predetermined directions, there is also the sense - one that is continuously exploited in cybergothic narratives – that the reverse could also be true. Subgenres of sf such as cyberpunk and cybergothic represent cultural vectors where scientific extrapolation merges with the fantastic registers of Romantic poetry and supernatural Gothic horror to reveal "a threat growing at the heart of our profoundly technologised society;" an eerie and evershifting dimension that Davis describes, in sublime terms, as an "uncanny [and] glittering void of possibility" (1998:1).

The unfamiliar is never fixed, but constantly altering. The uncanny is the unsettling of itself. ... The uncanny has to do with a sense of ourselves as double, split, at odds with ourselves. ... To write about the uncanny ... is to lose one's bearings, to find oneself immersed in the maddening logic of the supplement, to engage with a hydra. (Royle, 2003:5-9)

In cybergothic narratives, technology appears to have become something wholly 'other' – increasingly ubiquitous and increasingly difficult to untangle not only from the cultural sphere, but also from the sphere of nature. Technology has come to seem both as natural and as artificial as the human self – it has become, in effect, an uncanny shadow. While particle physicists working at the Large Hadron Collider are currently probing the fundamental nature and properties of the universe, writes physicist Michio Kaku, computer scientists, chip designers, and technological engineers are already designing the next generation of machines that will, over the next few decades, extend the frontiers of knowledge and the possibilities of social networking and practical engineering even further into the bizarre (2005:277). In the nascent science of molecular engineering or nanotechnology, the boundaries between the different branches of science and engineering as well as the more practical aspects of technological production are beginning to blur together in a strange and heady brew. In this and in other areas of scientific study (such as artificial intelligence or AI) new syntheses and possibilities are coming into focus, notes computer scientist Martyn Amos (2006:81). These innovations as well as their sublime and uneasy implications are the subjects of cybergothic sf, which revels in their uncanny potential for destabilising linear historical narratives as well as the question of what it means to be human. According to sf critic Stephen Hantke (1999:267), one of sf's early pioneers, the Gothic writer Edgar Allan Poe, recognised "that the direction and nature of the changes produced by technological and scientific invention are, literally, unimaginable, and that, for good or ill, such changes will reorder and transform our literature and culture." Hantke acknowledges an on-going discourse between the Gothic and sf, which is grounded in the fact that both literary forms are responses to the "intrusion of mechanism" (1999:268). Luckhurst (2005:5) corroborates this relation when he writes that "the sense of trauma induced in the subject by techno-scientific modernity means that Gothic and sf writing have always been in dialogue." Botting, by contrast, claims that the sense of horror in sf has radically shifted its focus away from the Gothic:

Horror [in sf] does not lie in a barbaric, superstitious past, as it did for Walpole or Radcliffe at the end of the 18th century; it no longer concerns the return of monstrously unavoidable wishes as it did for Frankenstein or James Hogg's justified sinner; it has nothing in common with the ghostly reappearance of the guilty family secrets and horrid paternal transgressions of the Victorians. Nor is it bound up with the primordial, atavistic or decadent energies embodied by Dracula. Nor does it lie in the callous sadism barely disguised by the nice veil of morality. (2008:163)

Underscored by elements of horror and a fascination with the supernatural, I argue by contrast, the cybergothic style can be said to have the Gothic mode as its forbear and role model. In cybergothic sf, terror returns from the deep past as well as the distant future. This, however, is part of a long-standing relation between sf and the Gothic; a relation that is evident in texts such as Shelley's Frankenstein, but also in contemporary sf texts such as Accelerando, the Hyperion Cantos and Light. These texts are also hyperstitional because, like many Gothic texts, they employ invocations to supernatural demons and Old Ones, as well as retrochronal time-travelling devices and self-fulfilling prophecies. The hyperstitional aesthetic can therefore be said to have its antecedents in the Gothic mode of supernatural horror; a relation borne out by Land's articulation of the cybergothic style with its ample references to Gothic devices such as "tortures ... dark shadows [and] ancient laws" (1998:80).xiii The codeinfested ruins and ancient aliens that haunt Harrison's vision of spacefaring humanity in Light, the labyrinthine and retrochronally-manifested ancient artefacts that haunt Simmons' intergalactic empires in the Hyperion cantos as well as the unimaginably ancient wormhole 'router network' that lures humanity toward an uncertain destiny in Stross' Accelerando reproduce, in an inverted manner, the Gothic effect of looking back - in the case of cybergothic at the deep cosmological past – in order to articulate a move forward. Like Land, sf critic Jack Voller affirms that the "aesthetic foundation" of cyberpunk is "Gothic and dark Romantic sublimity," which is premised on "terror ... rapture and enthusiasm" about the impact of techno-scientific advances (1993:20). In the cybergothic sf of Stross, Simmons and Harrison, this aesthetic foundation is even more strongly prevalent. These authors range unrestrained into the vastness of the cosmos (in the tradition of earlier examples of epic sf such as Frank Herbert's Dune or Isaac Asimov's Foundation sequence) as well as through the sediments of literary tradition, while retaining cyberpunk's fascination with the minutiae of information technologies and popular media culture.

Aided and augmented by technology, new speeds and processing capacities could become possible, enabling (post) humans to venture into the strange new terrains of physics, biology and chemistry, opines Rees (2010:1). Stross, Simmons and Harrison situate their sf within this uncanny terrain of the "ontologically destabilising" or, as McKenna puts it (1993a:1), "the domain of the unspeakable" (see endnote vii). "To the degree that the historical changes produced by technological breakthroughs are literally unimaginable," writes Hantke, "they demand metaphorical strategies that the fantastic and the Gothic can provide in great range and variety" (1999:267). For cybergothic authors, the monstrous – another trope associated with Gothic and dark Romantic literary genres – provides the perfect platform for extrapolation into the apocalyptic potential of science. "The *monstrum* is etymologically 'that

which reveals,' [or] 'that which warns,'" notes Hantke. "Monsters are disturbing hybrids who ... resist any attempts at systematic structuration" (1999:270). While giving expression to the Enlightenment vision of progress through the agency of science, Stross, Simmons and Harrison simultaneously reveal technology to be an uncanny doppelgänger. Future shock, the run-away effects of technological proliferation and the metaphors of chaos theory are the uncanny subjects of cybergothic sf. Unbridled technological progress in this hyperstitional vision of supernatural intrusion plays midwife to the apocalyptic transubstantiation of biological humanity.

The point of inflection: Accelerando

Charles Stross' Accelerando (2005) investigates the anastrophic potential of techno-science in a racy and corrosive mode. For Stross, who has authored numerous works of sf, fantasy and supernatural horror, genre crosspollination comes naturally. "The unknown," as he remarks on his website, is a characteristic obsession of all three genres in which he writes (2012:1). The "unknown future" makes such a compelling topic, he notes, because it has all the "fantastical surrealism of a Gothic nightmare" (2012:1). Stross has authored three novels that deal with the grotesque impact of the future in apocalyptic terms – Singularity sky (2003), Iron sunrise (2004) and Accelerando. While the former two are set on distant planets in remote futures, the latter begins its action on Earth in the present moment, before leaping off into an accelerated vision of technological apotheosis that reaches its conclusion in the early 22nd century in the abyss of space. For this reason, it makes a good launching pad for a discussion of what Botting refers to as sf's "fantastic flight from a humanised world towards an inhuman technological dimension" (2008:14). Stross celebrates what sf critic Veronica Hollinger describes as "the lived experience of techno-culture" (2006:452) and mines the apocalyptic potential of this radically destabilising experience. He borrows heavily from the Gothic figure of the monster (as do Simmons and Harrison), to illustrate the apocalyptic incursion of technology.xiv This identification between human and machine produces the recoil effect of 'technophobia.' "If horror can be glimpsed anywhere [today]," writes Botting, "it occupies a site other than the surfaces of postmodern self-reflection: it circulates in ... the slimy flesh scraped from just below the skin, the 'monstrous excrescence' that once was human" (2008:162). Stross attempts in Accelerando to redeem horror by transforming the figure of the Gothic monster into a fiend that points beyond what Castells terms the "timeless time" (1996:464) or "eternal empherality" (1996:467) of the information-age.

For Botting, monstrosity has been so "overexposed" by the contemporary media that it has lost its critical redemptive capacity (2008:13). Ours is an age, he writes, when all aspects of what monsters could reveal to us about ourselves have been "squeezed out, like the juice of an orange, onto screens, into the digital coding of images and genes" (2008:14). While technoscience and the media have, in his opinion, fatally eroded the figure of the monster, postmodern theory has been no less complicit in its demise. The "incredulity of postmodernism," he continues, has ensured that even the future, once deemed monstrous, has collapsed under the indifference of a timeless and ever-repeating present (2008:26). Botting's claim that the revelatory potency of the monstrous has been fatally diluted in an age where "anything goes" (2008:28) is one that I question throughout this thesis. While information technologies may have rendered monstrosity ubiquitous, this does not mean that monsters have lost their uncanny potency to induce terror or illuminate an increasingly uncertain future. Panic, terror, fear and pain – as I argued in my first chapter, and will argue in this chapter – are all aspects of the monstrous that continue to have an important and potentially fructifying literary function.

The locus of horror and the monstrous that Stross invokes is what Vinge has termed the "technological singularity," which forms one of the central themes of the cybergothic style. According to Vinge, humanity is poised to achieve a "translation point" in the near future the "point of inflection," as Stross terms it (2005:117) - beyond which developments in biotechnology, computing and machinic production go "off the map," inducing an apocalyptic "phase-change" in the human species (Vinge, 2007:1). According to Martyn Amos, the inherent limitations of data storage, conductivity and manipulation of materials are fast being approached. Beyond this "horizon," he writes, lies the world of "quantum computing" that will rely on "molecular assemblages, chemical switches and quantum events" (2006:81). This is a premise that Vinge, Amos and other contemporary writers of sf have extrapolated based on a phenomenon known as Moore's Law.xv It is highly probable, writes Amos, that once nano- or molecular-technology (nanotech) becomes sufficiently developed, Moore's law will be surpassed, enabling the creation of Artificial Intelligences (AI's) that are able to think further and faster than anything currently imaginable or biologically possible (2006:82).xvi Commencing early in the 21st century, Accelerando imagines this state of technological phase change dragging the human species over the precipice of the future. Stross' science-fictional future world, on the verge of singularity, begins to resemble fantasy within a few pages of the start, as the breakneck pace of the narrative, infused with heady techno-scientific extrapolation, carry events over the "bleeding edge of strangeness" (2005:10).xvii

During the first pre-singularity part of the novel, satirically called 'Slow Takeoff,' history is depicted as speeding up as it approaches singularity. Mirroring the density of information overload and the paranoia of future shock, practically every sentence bristles with a new idea or outlandish scientific fact. Relating Frankenstein-like experiments in the fuzzy areas where genetics and computing overlap, Stross induces a vertiginous sense of being out of control. Split into nine interconnected stories, each covering a decade of the 21st and early 22nd centuries, Stross, through an omniscient third person narrator, describes each decade by outlining new terrifying technological developments.^{xviii}

In his prolific descriptions of these developments, and their centrality to his narrative, Stross appears to reflect what Castells refers to as "the systematic perturbation in the sequential order of phenomena" that is generated by the networked "space of flows" (1996:464). He imagines networked capitalism, which includes digital technology (driven by Moore's law), engaged in a positive cybernetic feedback cycle. As history disappears into the timeless time of the accelerated space of flows, technology facilitates an escape from the context of historical existence and the category of 'human.' Barring socio-economic catastrophe in the interim, capitalism, in Land's view, will succeed in modifying reality to such an extent that it heralds the "virtual event" of "singularity," namely, a "stupendous liberation of machinic potential" and a "biogenetic" constraint for "conservative human organisms, since it abruptly threatens to terminate the human genetic lineage" (2005:1). On Stross' pre-singularity Earth the hype-cycles set in motion by the action of the novel's human protagonist, Manfred Macx, result in advances in "nanotechnology fabrication" and "particle physics" that lay the groundwork for a new information paradigm involving the "digitisation of matter" (2005:76). Manfred's speculative hype drives a scurry of investment in novel information-based technologies aimed at hastening the onset of singularity. His "visionary blatherings" steer the direction taken by technologists, scientists and corporate research labs. Manfred, we are told, has "an apocalyptic obsession with singularity" - an obsession that results in the creation of monsters (2005:77).

Stross' narrative is dense with allusions and direct references to the work of mathematician, polymath and cybernetics pioneer John von Neumann. Von Neumann's mathematical analysis of the structure of self-replication preceded the discovery of the structure of DNA and, as futurologist Kevin Kelly writes, led to the realisation that the laws of computation laid down by Alan Turning^{xix} could be extended into other domains (1994:183). Von Neumann also entertained the belief that technological systems could duplicate and then surpass biological ones. "Life," as he speculated, "is a process that may be extracted from other media" (cited in Stross, 2005:117). Kelly underscores the Promethean ambition and Frankenstein-like

motivation of cybernetics pioneers like Von Neumann and Turning: "Evolution and learning, they declared, were types of computation. Nature computed [and] if nature computed, why not the entire universe?" (1994:184). Von Neumann and theoretical physicists such as Freeman John Dyson, he writes, conceived of machines that could learn and adapt in a manner more efficient than their biological counterparts (1994:185). During the information era, as chaos theory transformed the sciences, the language of computing became more refined and pervasive, seemingly underscoring the Promethean hubris of these pioneers and their conceited belief that humans could become the programmers of destiny, able to hijack the creative properties of biological life by unravelling its code.**x

Stross' posthumanity is not aimed at the stars in the sense of traditional sf. Instead, it is aimed strangely inward, seeking its own version of alchemical gnosis – the transubstantiation of "dumb matter" into "thinking matter" or spirit (2005:15). The post-singularity 'uploaded' future, in the mode of hyperstition, is presented as something that literally dismantles its own past. In Stross' cybergothic vision, humanity gives birth to monstrous posthumanity in the form of a giant artificial intelligence (AI) network or 'hivemind' that he refers to as the 'Vile Offspring.' These are not the domesticated, "candy-coated" and "exhausted monsters of postmodernity" that Botting associates with contemporary sf (2008:13). Rather, as I argue, they are monsters that preserve the amorphous characteristics that Botting identifies with the Gothic mode –namely, monsters that preserve an "older aspect [of] 'formless form' beyond recognition, presentation and legitimacy" (Botting, 2008:13). At no point in Stross' narrative are events related from the perspective of the enigmatic 'Vile Offspring,' which Stross presents as ineffable, mysterious and literally unknowable monsters.

As with Vinge in *Across realtime* (1991), the singularity and its monstrous children are described from a distant and 'outsider' perspective by a handful of human refugees who have somehow survived the occurrence and its reverberations. The presence of 'unutterable' monstrous entities such as the Vile Offspring in the narratives of cybergothic sf represents an arrival (in the present moment) of events from the imagined terminus of history whereby capital assumes the improvisational and creative vibrancy once associated with nature. Using elements of Gothic horror and monstrosity, Stross provides a fictional exploration of capitalism as a monstrous world-shattering force. This is a vision analogous to Land's image in *Meltdown* (1997) of capitalism as revolutionary momentum that subjects everything, including the structures of so-called reality itself, to a process of liquefaction and transformation. In Land's ontology, the Freudian "death drive" of capitalism is associated with an "inorganic libido" – an active force of destruction, defined by the tendency to "deviate from any homeostatic regulation" (1997:14). This is what Stross imagines emerging

from the present: as desiring creatures, humans themselves are transformed by the desiring mechanisms of capitalist hyperreality into inorganic libidinal monsters that disrupt organic equilibrium. Like Land, Stross imagines that this annihilation is not final but rather a necessary ruin. Capitalism is imagined as a destructive/creative motive force that engenders something radically new.

Typically, the AI's of early sf were depicted as immortal and ageless personalities. Uncorrupted by the perils and in-built redundancy of the flesh, they were seen to incarnate the best intellectual qualities of humanity. During the information era, this vision of the incorruptibility of AI began to inform extreme visions of posthumanism. Evolution, in the manner achieved by the Vile Offspring, represents what philosopher Keith Ansell Pearson calls "a process of 'negantropic complexification' [whereby] self-replicating robot intelligence is taken to be life's solution to the problem of entropy and final heat-death' (1997:221). In this vision of the sublime, cyberspace appears to be the only infinity that counts. For Pearson, this type of sublime represents a form of "reactionary modernism" or "technological humanism" – a reaction to the chaotic threats posed by new technologies that seeks to embrace only the predictability that new technologies such as computing ostensibly offer (1997:221). Information technologies, however, are anything but predictable, and cybergothic sf points beyond these self-indulgent dreams of human immortality into realms of radical otherness.

For theorists such as Land and cybergothic authors such as Stross, the future is not simply, as Botting would put it, "a dark, unknown space from which horrors are visited" (2008:163) but something that promises to redeem humanity from the postmodern culture of exhaustion. For Botting, however, "there is nothing special" or redemptive "about monstrosity in an age of cybernetics and Frankenstein pets ... [when] technological monstrosity is seen as no more than an everyday condition" (2008:14). This notion that the power of monstrosity and horror has been weakened is one that I contest. While the capacity of techno-science to produce monsters has exponentially increased, resulting in the omnipresence of monsters in popular media culture, this does not mean that monsters have become so thoroughly 'candy coated' in sf and horror writing (as well as in other mediums such as contemporary film or music) that they have lost their traditional revelatory function, their Gothic 'formless form' or their capacity to surprise and induce terror. In Stross's fiction there are other monsters besides the shadowy Vile Offspring. One constitutes an example that counters the unremarkable qualities that Botting associates with everyday technological playthings or 'Frankenstein pets.' This monster, Aineko, is a AI toy that not only assumes an unexpected agency, but reverses the role of master and monster. While Manfred's "companion robot" Aineko, begins as an

ubiquitous technological bauble, it self-evolves without warning into dynamic non-human power that challenges the hegemony of its erstwhile human masters. As Stross' tale deepens, this 'Frankenstein pet' is transformed into a godlike Victor Frankenstein that experiments on and, eventually, redeems human subjects. XXII Aineko is one of the many types of monsters that populate cybergothic sf. These monsters, conceived of around speculation about conceivable developments in AI and biotechnologies in science and the popular media, are technological tricksters; wild elemental forces of untamed otherness with which humans will need to make guarded bargains.

It seems that we must eventually learn to live in a world of untrustworthy [technological] replicators. One sort of [response] would be to hide behind a wall or run away. But these are brittle methods: dangerous replicators might breach the wall or cross the distance and bring disaster. And, though walls can be made proof against small replicators, no fixed wall can be made proof against large-scale organised [technological] malice. We will need a more robust, flexible approach (Eric Drexler, 1987:187).

With each upgrade, Aineko is gradually transmuted from a 'small replicator' into a technoage Mephistopheles with whom its erstwhile human masters need to deal carefully to ensure their continued survival. By the novel's close it has negotiated with the disincarnate Vile Offspring, enabling the surviving remnants of biological humanity, which Stross refers to as 'the festival culture,' to flee the apocalyptic 'conversion' of the solar system (see endnote xx). Aineko has designs for biological humanity that involve other instances of non-human intelligences. In cahoots with a group of "rogue AI constructs" - a crew of modified and "uploaded lobsters" that run an experimental research station on the fringes of the solar system - Aineko listens for alien signals from the outer darkness. With the lobsters' aid, it decodes a communiqué from the literal 'unuttera' - an alien intelligence of "unthinking age and complexity" and "unknown motives" relayed down the remainders of an timeworn "wormhole router network" constructed by "incredibly ancient alien intelligences" millions of years in the past (2005:191). From then on Aineko begins to actively pursue its own interests in the alien signal, subtly steering Manfred's "meme-broking" to include ideas for investment schemes in "nanotech-driven space exploration" and "wormhole physics" (2005:192). By the close of the novel, it has capitalised on the resulting technologies and lured the last vestiges of biological humanity into colonising the environs of cold brown dwarf suns. These remote solar systems are strung out as "nodes along the router network" - a network whose destination appears to be the mysterious and cosmically monstrous "deep thinkers" whose incalculable cosmological reconstruction activities are detected from an unimaginably vast distance, 10 billion light-years from Earth "at the edge of the observable universe" (2005:428).

Technological proliferation, in Stross' vision, does not guarantee any fixed outcome.xxii Stross' ruin-infested universe is as haunted by the past, albeit a 'deeper' past in the cosmic sense, as any 18th century Gothic novella with its feudal allusions to knights, aristocrats, castles and crumbling mansions. In Stross' vision, technology has not succeeded in defeating death or entropy, but he does not belabour the point; his anastrophic vision is far more interested in the exploits of rogue technological constructs such as Aineko and the mechanisms of the 'festival culture,' which he renders in lavish brushstrokes, presenting it from the perspective of multiple characters who indulge in its sublime and visceral virtual delights and terrors. At times, his style recalls the lush Decadent-inspired imagery of *fin de siècle* literary Satanism, at others his visually drenched descriptions recall, as Adams notes, "Chéreau's gorgeous 1994 film of *La reine Margot*, [replete with] elaborate costumes [and] sensual indulgence" (2006:1). Gothic trappings abound in his dense and incestuous descriptions of the mechanisms of dynastic family feuds that follow three generations of the Manx family as they lead, under Aineko's careful steerage, the 'festival culture' from Earth into the outer darkness beyond the apocalyptic cataclysm of the solar system's conversion.

Zamora identifies the tension between historical "transformation and completion" as well as between historical "desire and its satisfaction" as central to all apocalypse-related narratives (1989:12).xxiii This tension is evident in Accelerando through Stross' use of an occulted narrative form that emphasises the difficulty of comprehending events beyond the 'point of inflection' or technological singularity that has spawned the Vile Offspring. In this sense, his narrative returns to the original Gothic formula that Botting describes wherein monsters retain their "formless form beyond recognition [and] presentation" (2008:13). To emphasise this, Stross' tale constantly alters its narrators, accompanying one limited perspective character for a while before switching to a different spatial position. The effect is disorientating, but also – unlike in Stableford's Werewolves trilogy - strangely liberating, as Stross leaves the door open to multiple possibilities or outcomes. At one key point in the story, Manfred digitally 'uploads' his personality and is physically 'instantiated' (through 'nanoware') as a flock of pigeons, offering multiple but partial and disorderly perspectives on the action. Occasionally the narrator-focaliser becomes Aineko, who interjects with a godlike view of the human action (which 'she,' at times, directs from behind the scenes). Frequently, the narrative is punctuated by the intrusion of an omniscient third-person, who interjects with dense and confounding passages of scientific and semiotic speculation (see endnote xviii). This manner of spatial focalisation provokes a non-unitary and polyphonic reading of the text that emphasises not only the difficulty of narrating events beyond the apocalypse of the 'vanishing point,' but the struggle or "linguistic strain" that Zamora identifies as central to the

"apocalypticist's" exertion to attain "historical fulfilment" and a new mode of being (1989:15-16).** In *Gravity's rainbow* (1973) Thomas Pynchon uses a similar narrative technique to Stross – a dense plot structure and a convoluted narration – to comment on, as Zamora writes, "the amorphous symptoms, the dissolution of social relationships, the disintegration of individual belief, the taste for mass-produced homogenised culture ... the hovering sickness of the soul, the despairing contentment, the prosperous malaise" of "apocalyptic" postmodernity (1989:52). In this manner, Pynchon expresses a pessimistic apocalyptic eschatology that yields to the bleak mechanism of a purely physical world that is irreversibly running out of energy. While one direction of technological acceleration leads to inevitable entropy or what Botting terms "synthanatos" (2008:136 – see endnote iii) attested to by the abundant ruins of alien equivalents of the 'Vile Offspring' that litter the universe of *Accelerando*, the other, represented by the 'festival culture,' proceeds in the direction of renewal.

Stross' finale appears to replay the ending of Anne Radcliffe's Gothic tale, The mysteries of Udolpho (1794), replete with a 'wish-fulfilment' in the form of a clan marriage, festivals and fantastical celebrations. Botting remarks of *Udolpho* that through this kind of dénouement, the "terrors of the past are symbolically healed" (2008:35). In traditional Gothic fiction, he writes, this recuperation does not indicate a nostalgic longing for a lost and mythical past, more exactly it "mourns an absence or symbolic rupture in present rather than past orders ... a sublime alternation of loss and recovery [that] forms the transitional space between [different] modes of social organisation" (2008:35-36). The same formula can, I argue, be detected in Accelerando where the rupture that is narratively healed is the technologically-mediated crisis of the present moment, the paralysis of agency and imagination instigated by hyper-capitalism and its frenzied pseudo-activities of work, consumption, and communication. In Accelerando, the ultimate healing marriage is, of course, not simply the Manx clan-marriage but, on a deeper level, the alchemical union between the natural and the artificial, which points to the way forward, as well as the way towards ruin. The catastrophic aspect of this union in Accelerando terminates with Stross' entropic vision of the Vile Offspring in the second part of the novel. The enchanted union, which Stross announces in the final section with the familiar refrain, "once upon a time" (2005:424), involves the anarchic 'festival culture' with its affective "technosphere" in which humans embark on "new learning curves" (2005:423),xxv The "sublime alteration of loss and recovery" that characterises the traditional Gothic mode (Botting 2008:35) also manifestly takes place here. Humanity has lost its home (the solar system, which has been restructured into 'shells of computronium' by the Vile Offspring - see endnote xx) but recovered a purpose, experiencing a new mode of technological symbiosis that does not subtract from embodied existence but instead amplifies it.

Sublime apocalypse: the Hyperion cantos

Another source of the sublime is *infinity*. ... Infinity has a tendency to fill the mind with that sort of delightful horror, which is the most genuine effect and truest test of the sublime. (Burke 2001: Part. IV, section 12)

The Romantic sense of nature's unruliness and grandeur is clearly present in Simmons' *Hyperion cantos*, which narrates encounters with non-human others and forces that defy understanding, set against a backdrop of galactic infinitude. Simmons reflects on the Romantic conception of mutability – namely, an acceptance of the inexorability of change. As an instance of cybergothic sf, the *Hyperion cantos* mixes the interiorised electronic 'infinities' of cyberspace with Romantic and Gothic themes, evincing a particular Romantic sensibility. The Romantic natural philosophers and poets, writes Richard Holmes (a historian of the Romantic period and biographer of Coleridge and Shelley), cultivated a sense of nature's "wilderness" and "infinitude" in their development of a "'dynamic' science of invisible powers and mysterious energies, of fluidity and transformations, of growth and organic change" (2009:xix). "Any acknowledgement of a non-human context," writes sf critic David Sandner, qualifies as an acknowledgement of Romantic sense of "the untrammelled being of nature" (2000:284).xxvi In the *Hyperion cantos*, this Romantic sensibility is restaged in an anastrophic hyperstitional fashion, I argue, to reflect on the dark haecceity of the *fin de millénnium*.

During the 1980's many writers of sf – most notably the cyberpunks – veered away from the usual space-faring expansiveness of the sf tradition, venturing instead into the interior worlds of cyberspace in order to comment on the postmodern condition. Not so in the space opera, or what Palmer calls 'galactic empire sf,' in which "it is the ability of technology to encompass and alter reaches of space and time that is most often imagined" (1999:73). Like Luckhurst, Clute and Westfahl, Palmer chronicles the transformation of the traditional space opera by contemporary authors who have subverted the interiority associated with Gibsonian cyberspace by reading it in relation to the unknown exterior vastness of space. Authors writing in the cybergothic style occupy this hybrid zone where the dark Romantic attraction towards the rapture of the infinite and the Gothic sense of *horror vacui* (the terror of infinity) cross-pollinates with cyberpunk's conception of the internalised infinities of cyberspace in order to conceptualise a hyperstitional vision of apocalypse.

Accelerando, with its Vile Offspring, alien router network and 'deep thinkers' at the edge of the observable universe is a good example of cybergothic sf's synergy between interiorised and exteriorised notions of the sublime. Dan Simmons' Hyperion cantos ventures even further than Accelerando into this uneasy nexus. Like Accelerando, it can also be read as a hyperstitional narrativisation of 'futuristic flu' (see endnote viii). Its descriptions of encounters with unfathomable Old Ones (retrochronal aliens and bizarre artificial intelligences), fantastic quantum information spaces as well as the sheer excessiveness of its scenes, narratives and characters - both human and inhuman - reflect on the hyperstitional aesthetic: the apocalyptic sense of cultural acceleration towards either catastrophe or anastrophic inversion. In this and in other instances of the cybergothic style that project both outward into the unknowable vastness of the cosmos and inward into uncanny cyberspaces, we can begin to see the glimmering of a new sensibility. This hyperstitional aesthetic, conceived of in an anastrophic manner, cultivates an appreciation of supernatural horror and sublime terror in order to glimpse the contours of a new world that waits on the other side of catastrophe and to creatively imagine incomprehensible sciences and understandings that defy pure reason and logic.

Like Keats in his unfinished poem Hyperion, Simmons narrates the uneasy moment when the old makes way for the new. In the future imagined by Simmons a vast AI network, the Core, has helped to spread humankind amongst the stars and form intergalactic AI-aided governments. An array of bewildering quantum processors and faster-than-light (FTL) technologies, invented by the Core and gifted to humanity, buttress this galactic empire. This is a reflection on the present when, as Castells writes, the "space of places" is being replaced by a "space of flows" in which ubiquitous information technologies produce a perpetual "mixing of tenses" and engender an experience of "timeless time" in a "forever universe" (1996:464). Already during the 1980's, writes sf critic Michael Ostwald, Gibson's concept of cyberspace had anticipated Castell's formulation of the space of flows as the distinguishing feature of postmodernity. Gibsonian cyberspace, notes Ostwald, was "a natural extension [of] a world [already] saturated with television, radio, video, portable stereos and mobile phones;" technologies that, in themselves, reflected a "widespread change" in the human "perception of spatiality" (2000:660). Writers of sf and theorists of cyberculture, such as Simmons and Castells, found themselves responding in an analogous manner to a new set of technological and social conditions that were creating a type of fin de millénnium apocalyptic immanence. Simmons, like Castells, imagines a kind of 'forever universe' induced by pervasive communications devices. He extends the contours of such a new communications paradigm by imagining even more advanced networking technologies such as FTL. In Simmons'

narrative, these technologies create an intensive movement between incredibly diverse temporalities and cultures.

Castells describes the space of flows as a movement whereby networked communication technologies "appropriate" values and contexts to create the illusion of a seamless "ever present" (1994:464). The complex connectivity engendered by the networked space of flows generates, as Castells writes, an experience that is "globally connected but locally disconnected" (1996:436). Simmons, writing from a comparable perspective, extends this experience into an entire galaxy, addressing the sheer scale and complexity of connectivity, cultural differences and temporalities through his narration. Repeatedly switching between narrative styles, he mixes together some of sf's multiple genre forms (such as 18th and early 19th century travellers' tales and dream voyages, Victorian 'lost tribe' adventures, fin de siècle urban Gothic thrillers, early 20th century Lovecraftian horror, the traditional mid-20th century militaristic space opera and fin de millénnium cyberpunk) to reflect on the fractured temporalities of different planetary cultures, modes of existence and points of view. Like Stross, he develops his story by emphasizing a postmodern sense of ontological destabilization that jumps between multiple perspectives. Castells describes pervasive communication inducing a "systematic perturbation in the sequential order of phenomena" (1996:464). This experience of technologically-induced space-time displacement, emphasized by Simmons throughout the Hyperion cantos is, as I argue throughout, one of the components of hyperstition. It is, like the prevalence of supernatural themes, one of the indicators of the fin de millénnium's dark haecceity; a gauge of the 'nowness' and the sense of apocalyptic immanence that characterizes the atmosphere of the information era.

In Simmons' galactic empire, work, technological production and scientific invention are invisible, delegated to robots, AI entities and drones. This technologically advanced and decadent empire is, as Palmer remarks, a direct reference "to the decadent consumerism of the 1980's and 1990's ... with people wastefully living off science and technology as the rich live off their parents' money" (1999:77). Humans, at first, are depicted as empty vessels of experience, pleasure or suffering. Like most contemporary individuals they have very little scientific or technical knowledge, focusing instead on inane excesses and meaningless social networking. Simmons' decadent future world is an obvious reflection of the technologically-mediated present in which machines, industrial processes and industrial-scale resource consumption underpin human civilisation and in which excessive hyperexuberance camouflages extreme paranoia about this profligate dependency. "We're inside of what we make, and it's inside of us," notes Haraway (cited in Kunzro, 1997:1), arguing that humans, their tools and technologically mediated environments are inseparably intertwined. As humans increasingly lose agency to machines and machine-mediated production, technologies

themselves are taking on a new sense of agency. "Our machines are disturbingly lively, and we ourselves frighteningly inert," remarks Haraway (1991:152). In Simmons' networked future – as in our present – technology is both an uncanny shadow and viral agent of apocalyptic transubstantiation. The Core – the vast artificial network of AI and AI-produced technologies that underpins Simmons' civilisation – is a purposeful agency without which humanity cannot function. From its point of view, humans are simply "temporary biological hosts" in a process of accelerated machine evolution (1990:344). This appears to reflect De Landa and other cyber-theorists' disquieting views about machine evolution obviating biological humanity which I explored in my first chapter. De Landa, as I have noted, presents *War in the age of intelligent machines* as a retrochronally-manifested document, written from the perspective of a future "robot historian" whose artificial kin have supplanted biological humanity (1991:3). Seen from a larger evolutionary perspective, reasons De Landa through the vantage of his imaginary future robot historian, humans will appear as nothing more than temporary pollinators for a "species of machine-flower that simply did not possess its own reproductive organs during a segment of its evolution" (1991:3).

During the 1990's, when Simmons was writing the *Cantos*, the real world was beginning to resemble Gibson's vision of a digitally-networked reality. As cultural forms began to "disappear into the heterogeneity of advanced technology's temporal regime," explains Ostwald, a type of "space-time displacement" occurred whereby pervasive media and communications technologies seemed to create a new "phenomenological space" (2000:662). Simmons' extension of the cyberspace inhabited by the Core into a "subplane of quantum reality" he terms the "Void Which Binds" (VWB) reflects this sense of temporal and special dislocation. Not only has the distance between any two points in Simmons' quantum-physical universe been eliminated but it brims with machine intelligences that seem to obviate the very point of biological humanity. "It is quite literally *the point* which is subsumed when means of communication begin to communicate with themselves," writes Plant in *Zeros* + *Ones* (1998a:123), an account – like Simmons' *Cantos* – of the strange and sublime potentialities and insurgencies engendered by contemporary technologies.

In Simmons' narrative, as with Banks' contemporaneous *Culture* novels, violence serves to underline the collapse of human agency, underlining excess and banality as well as the increasing inhuman capacity of techno-science. In a manner satirising the gung-ho adolescent violence of traditional space opera, entire worlds and space-ships on the scale of worlds are routinely destroyed by unimaginable technologies in the *Cantos* and the *Culture* novels. Both Simmons and Banks juxtapose the banality of techno-scientific culture against the sublime and inhuman motive force of technology and scientific discovery. The postmodern condition

of fragmentation on which they comment necessitates a continuous technologically mediated spectacle of violence and pain to restore meaning and agency. This it achieves, writes Palmer, "by way of waste, what Bataille ... defined as expenditure" (1999:78). There is a sense in postmodernity that "there are opportunities [but] not choices," continues Palmer (1999:78). xxviii In the hyperexuberant and "post-scarcity future" depicted in Banks' spaceoperatic Culture novels, technologies, according to critic Tim Middleton, take centre stage, becoming "excessively aggressive, excessively powerful [and] excessively expansionist" (cited in Luckhurst, 2005:224). The glossy and empty veneer of senseless human actions and what Banks in Consider Phlebas (1988) refers to as technological "gawp value" xxix (1988:111) is, however, undermined by Simmons through constant allusions to lurking supernatural shadows, occult mechanisms as well as Romantic notions of empathy, mutability and negative capability; conflicting forces that lend the Hyperion cantos a more traditionally redemptive (versus an entropically postmodern) apocalyptic tension – a sense of striving toward resolution and renewal. This is analogous to the backwards and forwards momentum that Botting (2008:203) associates with the regenerative function of the traditional Gothic mode; an impetus that is prospective as well as regressive:

In the sublime fear of losing [oneself] in the immensity of a ruined and barbaric past, as ruinous as the devastating impressions of [a] supernatural power [and monstrosity], the self-image of the present is pressed forward in an anticipatory, imaginary recovery of self on another plane. (2008:204).

In cybergothic sf, the ruins of a 'barbaric past' are replaced with ineffable and unimaginably ancient non-human artefacts while technology or mechanism becomes equated with a monstrous, supernatural and cosmic potency; a force that drags backwards toward extinction whilst simultaneously supplying the impetus for a movement forward into a new mode of existence. This is a regressive and prospective movement that, as in Cyberpositive and the Catacomic, amounts to a symbolic inversion. This anastrophic gesture involves both annihilation and augmentation - what Eliade (1989:490) refers to as the "paradoxical passage;" a passage undertaken by shamanic initiates through symbolic death, terror and panic in order to achieve renewal (see endnote xii, chapter 1). As the narrative of the *Cantos* develops, empty and life-draining technological spectacle gives way to transcendent promise as technology begins to function with all the powerful and cataclysmic aspects of a dark Romantic force of nature, signifying the "delightful horror" of infinity that Burke (in part IV, section 12) calls "genuine effect and truest test of the sublime" (2001:1). Another gateway to the sublime for Burke is the apprehension of fear and pain - passions that, as he writes (in part II, section 2), "effectually rob the mind of all its powers of acting and reasoning" (2001:1). Simmons twists this somewhat when one of his characters, a renegade Catholic

priest, declares that actual (and not imagined) pain is a "sublime ally" that brings realisation, meaning and, if approached with reverence, the ability to grasp the "true nature of infinity" (1989:94). The faith and veneration that Simmons invokes is not, however, that of organised religion – a force that his fiction, in keeping with certain Romantic convictions, is overtly hostile towards. Rather, it encompasses – as it does for 0D and the CCRU – a Romantic faith in rebellion, ecstatic gnosis, redemptive violence or pain, as well as perilous evolutionary possibility – a fact made clear by Simmons' affinity for the stormy and sonorous metaphors of Romantic poetry and Gothic fiction.

The Promethean Shrike or "Lord of Pain" appears, disappears and reappears throughout the Cantos as the supreme monstrous avatar and apocalyptic harbinger of ecstatic revelation. Styled by Simmons as a hybridization of sf and Gothic forms, the Shrike is thoroughly technological yet is simultaneously a dynamically adaptable organic creature. Like the vampires of Gothic fiction, the strangely organic Shrike is 'undead,' ageless and capable of changing shape. Able to flicker in and out of time at will, this uncanny monster - the retrochronally-manifested technological avatar of an inhuman future intelligence - guards a redolently Gothic time-travelling torture tree on which countless pilgrims are skewered for an eternity of unchanging pain. Associated with the 'anti-entropic force-fields' that flicker around the inconceivably ancient and mysterious 'Time Tombs' on the planet Hyperion, the Shrike attracts supplicants who seek annihilation and ecstatic vision. The pain of impalement, pilgrims believe, will open portals into the future, enabling events to "come together" or coalesce. A Shrike pilgrimage forms the focus of the first two novels of the Cantos. As the pilgrims journey towards impalement they relate their own tales, revealing a baroque underworld of conspiracies and shadowy plans within plans. As characters begin to piece together a grand narrative from their combined stories, they stumble upon a hyperstitional apocalyptic revelation that, once unravelled, begins to accelerate humanity towards an immanent technological apotheosis. Increasingly the Shrike is represented as an echo of this apocalyptic event; a shadow cast backwards into the abyss of time by a mysterious future race of human-machine evolutionary hybrids to torment and provoke its human predecessors into evolving beyond the human.

There is a strong undercurrent in the *Cantos* of the ontological detective story – the type of postmodern occultic sf described by Gomel as relating a fragmentary journey towards gnosis or apocalyptic unveiling (1995:345). The final two novels in the sequence depict another arc of this revelatory journey as Simmons' protagonists teleport through the visible and invisible cosmos using the farcaster portal network. The gnosis that accompanies this second journey represents the ultimate unveiling and the beginning of an apocalyptic transubstantiation. The

Shrike functions as the increasingly mercurial harbinger of this revelation. Completely mechanised yet peculiarly fluid and biological, the time-shifting Shrike can be compared to Aineko in *Accelerando*. Both are conceived of as rogue biotechnological artifacts – tricksters in whom nature and artifice are combined and whose ostensible purpose it is to deliver humans to their own hybrid destiny. Simmons imagines humans being potentiated through a type of dark Romantic suffering. In the case of the *Cantos*, the Shrike achieves this purpose by awakening revelatory empathy in humans through its deliverance of ecstatic pain.

In the case of the anti-entropic Time-Tombs, the time-shifting Shrike and, more pertinently, the Core and its bizarre networking technologies, a hyperstitional sense of space-time dislocation is generated. The destabilising vastness of the interior world of machines and their quantum effects, which at first threatens to rob human lives of their legitimacy, gradually transforms into a necessary movement in the process of evolutionary becoming. This sense of transformation through displacement and catastrophe represents the anastrophic sense of hyperstition. In psychological terms, technology, conceived of in this way, begins to resemble a dangerous but necessary unconscious or supernatural force that must be integrated before headway can be made. Cyberspace, in the vast galactic context conceived of in cybergothic sf, becomes more than an underworld or other world - it signals the vengeful return of a repressed nature conceived of from the perspective of cosmic horror, or horror vacui. In this respect, technology itself becomes a type of Mephistophelian demon - an Old One - with whom humans need to make guarded bargains. As with Stross in Accelerando, Simmons facilitates a sense of apocalyptic resolution and renewal through inhuman trickster figures and constructs such as the Shrike and the Core that represent the uncanny technological doppelgängers or shadows that we have already conjured or may yet conjure into being. Contemporary sf and theoretical sf has, I argue, already begun to provide the aesthetic blueprints for imagining non-human agencies and the forging of possible symbiotic relations with such non-human others. These interrelations imply the imagining of technology in an entirely different register beyond dualisms such as good or evil, natural or artificial, human or non-human. Davis explains this relation through the mythological metaphor of the trickster; a non-human figure that plays a "mischievous and sprightly role in the mutual unfolding of ourselves and the world:"

Technology is a trickster ... [and] human concerns will only survive and prosper once we have learnt to treat it not as an extensions of ourselves (or a disposable throwaway) but as an unknown and uncanny construct with whom we need to make creative alliances and wary pacts. ... Whatever social, ecological, or spiritual renewal we hope for in the new century, it will blossom in the context of communicating technologies that already grid the Earth with intelligence and virtual light. (1998: 335)

In urban Gothic narratives, it is often the uncanny 'sameness' of doppelgängers, ghouls and fiends (such as Stevenson's Edward Hyde) that produce a sense of horror. Frequently these uncanny shadows exceed their human counterparts in cunning, heightening the sense of dread and anticipation. *Fin de millénnium* cybergothic narratives extend this notion into both cyberspace and outer space, where they mine the uncanny potential of technology to reproduce, and even to surpass human limitations. Simultaneously, the motif of technology as trickster returns, representing the shadow-side of unrelenting scientific progress. The dread of the spectral electronic doppelgänger at large in the infinities of space adds a new dimension to the Romantic notion of wedding the supernatural with science.

For Coleridge, the ineffable and mysterious retained a "powerful psychological and poetic" potency that was an essential ingredient in preparing the mind for true scientific inquiry, writes Holmes (2009:274). The German school of naturphilosophie, to whom Schelling and Goethe belonged, advocated a similar type of "science mysticism" that sought to commingle science and the sublime (2009:315). They "defined the entire natural world as a system of invisible powers and energies" and averred, moreover, that "there was a world soul constantly evolving higher life forms and levels of consciousness in all matter, animate or inanimate" (2009:316). In this dialogue, avers Holmes, "all nature had a tendency to move to a higher state" - so too humans, who "aspired to become part of the zeitgeist or world spirit" (2009:315). This type of 'cosmic evolutionism' is expressed throughout the Cantos by repeated references to the work of Keats. Simmons, for example, alludes to the Romantic imagination when, in the third book of the Cantos, he states, through one of his central protagonists, Aenea, that the first step in true understanding and knowledge is "an imaginative and sensuous response to nature" (1996:298). For Simmons, this is an important relation that, as he notes on his website, is central to Keat's sense of negative capability (1999:1). In the first book of the Cantos, he refers to this affective relation as necessitating a "merger of empathy and intellect" (1991:348). According to Holmes, this 'Keatsian sentiment' is not restricted to the literary imagination but underlines even some scientific responses to questions of nature, technology and the cosmos. He cites American physicist Richard Feynman who defends "the necessary and dynamic motion of 'mystery'" (2009:313). Resolutely a man of science, Feynman nonetheless believes, writes Holmes, "that science is driven by a continual dialogue between sceptical enquiry and the sense of the inexplicable mystery" (2009:313). Simmons develops this dialogue in the Cantos through the motif of empathy, which his protagonist Aenea describes in gnostic fashion as a "subversive and heretical" force without which true insight is impossible (1997:134). The themes of empathy and negative capability are expanded through numerous allusions to the life and writing of Keats, whose painful struggle with tuberculosis epitomises, for Simmons, the Romantic confluence between suffering, embodied wisdom and sublime insight. Keats explained his sense of negative capability in an 1817 letter to his brothers, George and Tom:

Negative Capability, that is when man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact and reason ... the sense of Beauty overcomes all consideration, or rather obliterates all consideration. (1973:767)

In Hyperion (1819) Keats depicts Apollo becoming a god through "knowledge enormous" – a knowledge primarily gained through pain and suffering; a "dying into life" (1873:227). In The fall of Hyperion, a dream (1819) Keats illustrates the poet's progress towards a necessary awareness and empathy through an experience of anguish. This is a recurring theme in Keat's poetry. Deprived of empathy, wrote Keats in Lamia (1820), intellect becomes an "icy touch" - a "cold philosophy [that] will clip an Angel's wings [and] unweave a rainbow" (1873:163).xxx Keats' approach of negative capability, with its affinity for the sensuous delights of Gothic fiction, contrasts with the 'masculine' Gothic of authors like Sir Walter Scott or the 'dictatorial' ethos of poets such as Wordsworth whereby, as Michael Gamer writes, the author attempts to place his own experience at the center of everything and control the response of his readers (2000:121). This underscores what Gamer refers to as the "vexed" relationship between Romanticism and the Gothic that contrasts the "controlling sensibilities" of poets such as Wordsworth with the more sensuous, emotive and fluid sensibilities of poets such as Keats (2000:20). Simmons clearly aligns himself with the Gothic-Romantic aesthetic of Keats, whose empathetic narration constitutes an attempt by the poet to project himself into various personalities and situations. This is a style that Simmons employs via his multiple perspective narration which introduces, as it does in Keats' poetry, a sense of ambiguity. As Botting relates, "narrative mixing ... has uncanny effects, effects which make narrative play and ambivalence another figure of Gothic horror" (1996:169). Here it is necessary to draw attention to my argument that contemporary authors of sf employ such Gothic devices without robbing them of their efficacy and restorative potential. Referring to the Hyperion cantos, Luckhurst observes that this kind of new space opera "yokes together diverse narrative threads, often spatially and temporally dislocated," as a "meaningful way of representing and negotiating the globalised space of flows" (2005:229).

With reference to Keats' empathetic vision, Simmons hybridises the names of some of his characters, such as Brawne Lamia, Silenus and Moneta, from characters in Keats' life and literature. The Core finds the Keats personality compelling by virtue of its experiments into what constitutes human consciousness. Immune to the vagaries of mortality that plague biological humans, the Core becomes obsessed by the confluence of human suffering,

affectivity and sublime insight as a driving force in human creativity. Consequently, it produces numerous experimental clones of the Keats personality in order to investigate this idea of a sensual yet pain-driven creative force. In To- [Fanny Brawne] (1819), Keats appears to accept mutability as a dominant force when he contrasts death, "that monstrous region ... [that] afflict[s] mankind," with "the new dawning light" of a fresh day (or cycle of existence) that "dissipate the shadows of this hell" (1973:557). This apocalyptic striving and realization is embodied by Simmons' character, Brawne Lamia, who heralds the 'new dawning light' when she couples with a Core "cybrid" (an incarnated AI personality reconstruction of Keats himself). This union – an insinuation of Keats' unrequited desire for Fanny Brawne – is also a suggestion of the hybridity signified by the monster Keats describes in Lamia. This monster merges intellect, emotion, science and mystery and, as Holmes writes, denotes for Keats an "astonishing new chemical or biological combination" that should be welcomed and nurtured, not scorned (2008:324). Simmons also alludes to the productive hybridisation of human and machine imagined by Haraway in her Cyborg Manifesto (1991). Brawne Lamia's pairing with the Keats 'cybrid' produces, in Simmons' narrative, a cyborg "saviour," Aenea. This redeeming figure is styled by Simmons as an incarnate vessel of empathy and liberation in which biological and technological evolution become comingled. Simmons also styles Aenea as an agent of apocalypse whose empathic vision begins to dissipate the shadows of senseless violence and profligate hyperexuberance that are leading humanity, in the Cantos, toward entropy and catastrophe. Simmons depicts Aenea as a transformational agent, whose potent and redolently Keatsian vision of universal empathy begins to affect both humanity and its machinic doubles, instigating a new evolutionary cycle at the close of the *Cantos*.

The "Miltonic quest," writes Holmes, describes an "unearthly" journey into "the strange and magnificent limits of the known" (2009:233). In the final books of the *Cantos* Aenea and her companions undertake such a Miltonic quest which, as Land has pointed out (1998:79), is one of the characteristics of the cybergothic style. Critical theorist Carl Freedman notes a convergence in intention between Milton and authors of sf, noting that sf's central focus of "cognitive estrangement ... is very much at work in Milton's efforts to take the reader far beyond the boundaries of his or her own mundane environment, into strange, awe-inspiring realms thought to be in fact unknown, or at least largely unknown, but not in principle unknowable" (2000:15). While Milton achieves a sense of awe and vastness through the sublime cataloguing of mythic references, in sf this is usually achieved through the cataloguing of "scientific marvels" (2000:16). Both styles attempt to domesticate the sublime by constraining it within the frameworks of reasoned discourse; in Milton the framework is Christianity whereas in sf it is usually scientific reason. In Simmons' narrative, as in other examples of the cybergothic style, however, the compiling of scientific marvels is combined

with shadowy occult undertones. This remixing of the sf sense of scientific wonder and the supernatural nuances of dark Romantic and Gothic horror succeeds in undomesticating the sublime – a process that, as I argue in my first chapter, is key to the hyperstitional aesthetic outlined by 0D and the CCRU in the Catacomic. In hyperstitional sf, such as that of Simmons and Stross, the universe is depicted as, in principle, unknowable, terrifying and open-ended. Appreciating its vast contours requires a schizophrenic perspective that can take in multiple perspectives and appreciate multiple possibilities simultaneously. Cybergothic sf celebrates this open-endedness in its attachment to the Gothic sense of horror vacui. For authors writing in this mode, facing the terror of infinity represents a challenge to blissful ignorance and a resistance to the totalitarianism of hierarchical structure and ordered reason.xxxii Questing into the infinite unknown in search of gnosis is, in the Cantos, not restricted to journeys through the vastness of cosmic space. The fantastical journey that Simmons depicts through the farcaster portal network is primarily a journey into the quantum intricacies of information space. The final books in the Cantos (Endymion and Rise of Endymion) describe a journey down the artificial river Tethys (the name of an archaic Titaness, goddess of the rivers of the world) – a winding voyage through bizarre quantum intricacies of a vast teleportation network where strange AI gods (with redolently mythic names) lurk and where nebulous and monstrous forces from the future intersect with the present, altering the course of reality. Through this convoluted journey, Simmons undertakes a sublime Miltonic cataloguing while articulating a mystical quest into the "labyrinths of limbo-circuitry" that Land identifies as the nucleus of the cybergothic sublime (1998:79).

Simmon's cybergothic narrative represents an instance of what Davis terms "technomysticism" – an attempt, in the Romantic vein, to "navigate the technological house of mirrors without losing the resonance of the ancient ways" (1998:334). Simmon's protagonists, from the outset of the *Cantos*, are subjected to endless questing. They wander, explore, become lost and find each other again in a continuation of a long literary tradition in sf of travellers' tales and imaginary voyages that narrate journeys to the limits of the known. In the context of sf this journey becomes a metaphor for the journey of contemporary humanity through the technological house of mirrors – a journey that, as Davis writes, takes us through "a matrix of paths [and possibilities] with no map provided at the onset" (1998:334). On this journey, the path taken by writers and metaphorical explorers of the new becomes the map itself. Such instances of hyperstitional cartography traverse the apocalyptic and supernatural terrain revealed by information technologies in search of a new destiny, reflecting the persistence of far more ancient strains of mysticism and gnosis. These strains are identified by Davis as "the fascination with the vitality of bodies, the desire to spiritualise material form, and the millenarian drive to transmute the energies of the earth [and cosmos]

into the divine realisation of human dreams" (1998:42). An inversion of this transcendental apocalypticism is executed in cybergothic sf, which rekindles a Romantic belief in the essential vitality of matter. An analogous position is also advocated by the affects-driven theorists whose positions I will explore in my final chapter. In cybergothic sf, as in new theories of affect, this position is centred on a Romanticised vision of the material cosmos as alive and filled with an inhuman purpose; a destiny that humans cannot yet fathom but need to remain open towards. Humanity from this perspective is not fixed physiologically or mentally, but engaged in an on-going process of transformation under the aegis of ultimately unknowable and hyperstitional forces of destiny. The late 18th century chemist Humphry Davy imagined such a process when he wrote the following:

The caterpillar, a being converted into an inert scaly mass, does not appear to be fitting itself for an inhabitant of air, and can have no consciousness of the brilliancy of its future being. We are masters of the earth, but perhaps we are the slaves of some great and unknown beings ... We suppose that we are acquainted with matter, and with all its elements, and yet ...there may be beings – thinking beings, near us, surrounding us, which we do not perceive, which we can never imagine. (Davy cited in Holmes, 2008:294)

Davy's "Romantic notion" of invisible higher beings directing the metamorphosis of humanity, writes Holmes, anticipates the "extraterrestrial intelligences of science fiction ... thinking beings [who are] invisible, imperceptible and even unimaginable" (2008:295).

The technological proteome: Light

A vision of humanity as a larval stage in a process of cosmic evolution overseen by incomprehensible alien intelligences is a central motif in M. John Harrison's *Light*. Like Stross and Simmons's sf, Harrison's fiction is underscored by a Romanticised vision of sublime science. The Romantic interest in vital cosmic "animating powers," though subsequently dismissed as "absurd fable" by materialist science (Holmes, 2008:313), has borne strange fruit in Harrison's extrapolation into the apocalyptic potential of advanced information technologies. In *Light* – as in other instances of cybergothic sf – this metaphysical impulse is located in the hyperstitional mechanisms of information-age advances in computing, molecular engineering and cosmology. These mechanisms have, as Clute suggests, engendered "exudations of style" in sf that reflect on the "central story of the future" in terms of "invisible intricacies" and occulted "strangeness" (2003:66).

The story of the self in the information age is the story of afterimages of the psyche, of those reflections and virtual doubles that are exteriorised, or 'outered,' into information technologies. (Davis, 1998:11)

In the "ambiguous zone" created by information-age technologies, "science, language and the social imagination overlap and interpenetrate," writes Davis (1998:11). The "uncanny," he avers, is the perfect Gothic literary trope for describing the creepy side-effects of electronic simulation – what Freud refers to as "unheimlich ... the ancient dread of the doppelgänger, that psychic simulacrum of the self that moves through the world on its own eerie accord" (1998:65). After the scientific revolution of the 18th century Enlightenment, writes Botting, "the uncanny becomes 'unplaceable'" in the Freudian sense. "The monsters and terrifying images" of traditional Gothic fiction, he writes, "allowed cultural anxieties about social and technological changes to be expunged" (2008:27). As I have already noted, Botting suggests that the Gothic mode is no longer adequate for describing a postmodern condition, "where evil becomes banal and hyperreality outstrips fiction" (2008:167). In the cybergothic universe of Light the Gothic way of "producing objects of horror by playing with conventions and expectations" (Botting, 2008:167) is, however, revitalised, while - as in other examples of cybergothic fiction – the domesticating function of the Gothic sublime is inverted, enabling the conservative traditional function of monsters to become more speculative and open-ended. As with the hyperstitional narrative of 0D and the CCRU, the everyday world is punctuated by the dark and shadowy world of the occult and the future is potentiated through invocations to the Old Ones. In Light information technology generates mysterious effects and affects, opening up other-worldly portals to sublime visions of an apocalyptic destiny overseen by these enigmatic Old Ones. Through the byzantine turnings of a multilayered plot, Light describes, in hyperstitional fashion, the future dismantling the past as the lives of intertwined protagonists from the distant future and from an imagined present intersect, appearing to mirror one another. In the present, two scientists, Michael Kearney and Brian Tate (and "three long rooms filled with Beowulf system computers"), pursue the realisation of technological singularity through the "encoding of data in quantum events" (2002:5). Present and future narratives are intersected by the time-travelling mechanisms of the monstrous Shrander and the antediluvian shadow operators, curious retrochronally manifested ancient aliens of primordial provenance who in the text guide humanity into the fire of a cosmological and technological singularity.

As Tate and Kearney penetrate the secrets of matter, their dabbling sets into motion a bizarre turn of events that leads humanity toward an apocalyptic destiny. The agents of this revelatory fate, the Shrander and the shadow operators, steer humanity towards the depths of a quantum abysm – a mysterious deep-space object known as the Kefahuchi- or K-Tract. In the strange

future that Harrison imagines, these spectral beings are described as pervasive ghosts that come to haunt humanity's information machines. Harrison uses them to emphasise the "willed fractality of things" as well as the dark, irrational and spectral aspects of technological simulation (2002:51). Their occult nature alludes to the origins of information sciences such as cosmology, chemistry and computing in the dark recesses of alchemy and ritual magick, a theme that Harrison began exploring in his novel of occult realism, Course of the heart (1992) in which magick is conceived of as a technology to gain access to the alchemical pleroma, a mystical information space of rapture. As a literal exploration of the system of "chaos magick" and automatism pioneered by the fin de siècle sorcerer and painter Austin Osman Spare, Harrison's urban protagonists are haunted by Spare's grotesque and ghostlike visions of pornographic obtrusions and "atavistic resurgence" which, according to Spare's biographer Robert Ansell, enabled practitioners to experience the "mnemonic echoes of all creation" (2005:19).xxxiii Disillusioned by the actual, Harrison's protagonists in Course of the heart waste their lives in disaffection, forgetting that, as Spare averred, this "absolute outside" exists right under our noses, "weaving its endless threads of eternity" in the "ever repeating patterns" of the commonplace worlds of brute matter (cited in Ansell, 2005:20).xxxiv The melancholy tone of Course of the heart remains in the Tate and Kearney sections of Light, but in alternating chapters the reader is also thrown into the bizarre and strangely buoyant spacefaring 25th century where humans have built on Tate and Kearney's quantum transforms and jerry-rigged them with poorly understood alien technological artefacts plundered from ancient extra-terrestrial ruins. Merging Gothic fantasy, occult-tinged realism and traditional spaceopera, Light exists in a fuzzy literary zone where fantasy, horror and sf collide. Harrison is credited with coining the term 'New Weird' to describe his particular blurring of literary categories, but his peculiar restaging of cyberpunk, urban Gothic, occultic realism and Lovecraftian horror ventures beyond literary hybridity. "The idea," he writes of his fiction, "is to displace boundary metaphors all together ... to get rid of the old, Newtonian spatial metaphors of 'barriers'" (Harrison cited in Luckhurst, 2005:240).

Disenchanted by the spatial boundaries of Newton's laws, the German Romantic natural philosopher and student of alchemy, Goethe, attempted to prove that "Newton's vision was only partial," writes Spalding (2005:274). Goethe's experiments and theories around colour and biological form were dismissed as "Romantic wishful thinking," he writes, until the advent of computing revealed their uncanny significance (2005:274). When Feigenbaum modelled Goethe's "holistic" propositions on a computer he stumbled upon "a mathematical framework for the bewilderingly complex, multidimensional, universal processes of unpredictable flow – what came to be known as chaos theory – that pointed beyond the smooth geometric precision of Newton's laws" into a slippery world of indeterminacy

(2005:275). Newton, who himself dabbled extensively in the arcane mystical arts of alchemy, admitted the partiality of his mathematical truths and cosmological laws, likening his own scientific investigations in a letter written shortly before his death to the musings of a boy at play on a seashore, here and there examining a pebble or a shell while a great and terrifying universal ocean lay before him unexplored and unexplained (cited in Brewster, 1855:407). Early in *Light* Harrison refers directly to Newton's sentiment and the uneasy abysms his orderly scientific vision of immutable laws so staunchly sidestepped, namely the fundamental chaos lurking in the tiny lawless spaces between things. Kearney's vision of the *unheimlich* – central to Harrison's narrative – occurs when, enthralled in a game of "choosing and discarding" pebbles on a beach, he looks where Newton's laws failed to reach and glimpses the "essential thingness" of the world (2002:22). This vision inspires him with a Gothic sense of "unspeakable horror" and a vertiginous sense of being cast adrift on the terrifying universal ocean of infinity – a feeling that opens him to the hyperstitional influence of the Old Ones who lurk within the fractaline quantum "processes of the world:"

The more he looked, the more the arrangement repeated itself. Suddenly he understood this as a fundamental condition of things – if you could see the patterns the waves made, or remember the shapes of a million small white clouds, there it would be, a boiling, inexplicable, vertiginous similarity in all the processes of the world, roaring silently away from you in ever shifting repetitions, always the same, never the same, never the same thing twice. In that moment he was lost. Out of the sand, the sky, the pebbles – out of what he would later think of as the willed fractality of things – emerged the Shrander … a hollow, an absence, a shadow on a door (Harrison, 2002:22).

Haunted by a terrifying vision of non-linear complexity, Kearney undertakes a Gothic quest into the sublime and irrational. Using a deck of the infamous *fin de siècle* sorcerer Crowley's tarot cards, as well a set of puzzling alien bone dice left to him by the Shrander, Kearney abandons himself to random casts and wild correspondences, along the way befriending a shadowy chaos magician, Valentine Sprake, who assists him on his journey to uncover the baseless yet strangely transcendent secrets of 'living matter.' The continued references to alchemical symbolism, Spare's system of chaos magick^{xxxv} and the juxtaposition of these occult systems against hard-science and mathematical abstraction throughout *Light*, conforms to the basic premise of cybergothic sf that reason needs to be supplemented, if not wholly undercut, by mystery.

Kearney seeks to push the boundaries of the possible and the reasonable – although not without falling victim to the destructive type of Jekyll and Hyde schizophrenia that also plagues Harrison's protagonists in *Course of the heart. Light* opens with a terrifying glimpse caught by Kearney of a "shadow on the wall" and a cold-blooded murder – one of many that

Kearney commits in a misguided attempt to appease the spectral presence of his fractaline doppelgänger, the Shrander. In London's Soho Square he "stirs" a group of wandering schizophrenics "like soup" with a gift of sandwiches and searches their eyes for a glimpse of his doppelgänger's mysterious purpose, finding only the "ignus fatuus," the dull yet highly combustible state of inert matter envisioned by the alchemists - "full of revelation like a disease" and "on fire" with emptiness (2002:25). Disaffected, like Kearney, by the actual, Tate also spends his days randomly searching for the ineffable shadow of the real. Like an info-tech Victor Frankenstein or a contemporary Faust, he cloisters himself in his laboratory where, animated by the "icy blue displays" of his processing equipment, he models the algorithms of his experimental physics, watching "mathematical monsters unspooling across the screens" (2002:43). These 'monsters' are at once abstract mathematical formulations and portals into a strange gnostic space of wish-fulfilment. Information-age technology serves as Tate's system of magick, a strangely ritualised practice that allows him tantalising glimpses of rapturous infinity. When Tate isn't glued to his screens, Harrison depicts him flicking restlessly between television channels, searching for the magickal "moment of change [when] as one image flickered, broke and was replaced by the next ... [he] could get into the exact moment of transition ... transmitting into the gap, into the moment of choice" (2002:44). As the novel progresses, the shadows of sorcery and arcane hermetical philosophy cluster ever more densely around the technologies and technologically-aided visions of Harrison's befuddled scientists.

Cybergothic narratives, as I have demonstrated, explore the inter-zone where science and mysticism meet, emphasizing the uncanny potential of information sciences to reveal a hidden and apocalyptic gnosis. This interest in the confluence of the rational, the irrational and the mystical characterizes the fin de millénnium's dark haecceity. Davis, whose work as a technological historian explores the supernatural effects of cyber-age technologies on the self, shares this hyperstitional fascination with the spectral underpinnings of information devices. Davis identifies the "ars combinatoria" of alchemy - the memory charts ("based on a complex Egyptian iconography of star beings") drawn up by Renaissance mystic Giordo Bruno for encoding "magico-mechanical memory" - as one of the "secret origins of computing" (1998:202). The Renaissance conception of an animistic and magical universe, he asserts, prepared the way for the conception of a mechanical universe, operated by mathematics (1998:203). Utilising an associational field of icons and symbols to represent a mnemonic space as well as a way of navigating such a space, explains Davis, the hermetical memory charts formulated by Renaissance alchemists such as Bruno and Ramón Lull, have found their descendants in the Internet and a myriad offline databases that have crafted new mnemonic visualization and modeling tools (1998:203). xxxvi As Tate and Kearney model their

algorithms and "q-bits" they begin to outline a supernatural science. Leaving the rational world of mechanism, they move into a magical realm where strange and spectral correspondences hold sway. From the gaps between the data modeled on the simulation spaces of their computers, the Old Ones emerge. Like disincarnate spirits taking flesh, the Shrander and the shadow operators creep into the physical world from the abysms opened by Tate and Kearney's digital sorcery, erupting like "a million points of light ... a cold fractal dance, scaling into a shape ... each point ... and every point which comprised the point before ... making the same [dreaded] shapes" (2002:138).

In a bizarre interstellar world that Harrison imagines five centuries in the future, humanity navigates between the stars using the "Tate-Kearney transform" – a type of mathematical visualisation or "manipulation" of abstract topology modelled from Tate and Kearney's original equations (2002:140). "K-ship" pilots hurtle through the quantum "dynaflow" while "wrapped" in mathematics that encompass fourteen spatial dimensions (2002:140). Their mnemonic simulation spaces induce a dark Romantic sublime of delightful horror, revealing a universe of limitless possibility and infinitudes where magic and science coexist, where many different and contradictory rules and epistemologies are possible.**

Humanity, in Harrison's vision, discovers a cosmos littered with vast technological artifacts built with bizarre and contradictory occult sciences. "There were objects and artifacts up to 65 million years old, some clearly left by cultures many orders stranger or more intelligent" than humanity (2002:141). When humanity arrives at the Tract, drawn like moths to a flame, they find "a place already old by the time the first great quasars began to burn in the early universe" (2002:141). Between its impossible topographies and "spumes of stuff, both baryonic and non-baryonic," humans discover a visceral symbol of transmogrification and chaotic disassembly: "an uncontained singularity" - a cosmic event-horizon opening like a vast cathedral window into pure and mystical ineffability (2002:141). As Tate and Kearney perfect the technological singularity represented by quantum computing, an image of the cosmic singularity of the K-Tract, captured by an X-ray telescope, is broadcast on CNN. The image induces in Kearney a haunted sense of the unheimlich, a sense that what he is seeing is simultaneously real and unreal, an oracular intuition that he and Tate will find the mathematics to go beyond this incongruity into the heart of disorder itself (2002:92). Having reached the edge of the K-Tract five centuries hence, humans discover vast and nebulous hunks of alien technology on planetoids "steered" into unnatural orbits around artificiallyconstructed suns. Designed to keep the Tract in maximum view, "these were less star systems than beacons, less beacons than laboratories ... enormous detectors designed to react to the unimaginable forces pouring out of the uncontained singularity" (2002:140). Brave human

explorers – the "entradistas" – launch themselves into the abysm only to be "crushed, fried, expanded or reduced to mists of particles" (2002:140). They are not the first to have experienced molecular disassembly. A multitude of alien races had already come there in the distant cosmic past, each bringing "a new geometry, a new ship, a new method. ... Every day they [had] launched themselves into the fire" (2002:140). Under the spectral glare of the Tract's radiation, amongst the "code-infested" ruins of a particularly ancient alien civilization known as the "K-culture," humans – aided by the Shrander and the shadow operators – begin to manipulate "K-code" directly. The resultant "K-tech" – named after the Tract and the mysterious K-culture – enables humans to transcend the laws of ordinary space and time.

Manufacturing "hybridized ships, drives ... and navigational systems that had last run 65 million years before," humanity is finally ready to "face the fire" of apocalyptic possibility; what Eugene Thacker, borrowing from Schopenhauer, terms the *nihil negativum* or absolute horizon of human thought (2010:47). Armed with 'new' and contradictory technologies conceived countless millions of years before the origin of the human species, humanity faces the contours of an illogical cosmos that undermines any sense of rational anthropocentric learning. Since the scientific revolution of the 18th century, writes speculative realist philosopher Quentin Meillassoux (2009:10), humans have been contemplating paradoxical "arche-fossils" – scientific knowledge about events and conditions that predate human "giveness" or "being" and that undermine the very contours of reasoned human-centred Enlightenment and post-Enlightenment philosophies of human access (see endnote vii). Such knowledge, he writes, produces an uncanny affect that muddles reason, "a temporal discrepancy between thinking and being, between the world and the very emergence of thinking" (cited in Reira, 2008:1).**

These complex questions can be condensed into one of the central themes of cybergothic sf, namely, thought beyond the limits of the human. As contemporary humans delve into abysms of cosmology and microbiology, cybergothic sf depicts them approaching these ontological limits. In the future conceived of in *Light*, as in the present apocalyptic moment, humans have become "disillusioned by the actual" (2002:1). This disaffection produces, in Harrison's vision, a desire to launch into the fire of apocalypse in order to transcend limitations, to go, as Tate puts it, "beyond the event horizon" of a singularity conceived of in cosmological and technological terms (2002:141). It is precisely these lawless occult areas (or absences) – brimming with inhuman gnosis – that the uncanny occupies in cybergothic narratives. In Harrison's hyperstitional vision, the human imagination and the various contemporary informational sciences it has conjured into being have been infected by a retrochronal virus from a deep time beyond human conception. Described as "quantum code" or "an intelligent

machine interface," the K-tech imagined by Harrison represents the destabilising synergies between computing, biology and cosmology. Coded into the universal substrate by the K-culture in an unimaginably distant past (or perhaps even a future), the Shrander and the shadow operators – trickster-like guides, monsters and bizarre quantum doppelgängers – goad humanity towards a sublime transcendent destiny beyond the singularities represented by technological acceleration and conceived of by cosmological speculation.

Pouring out of the fractaline operations of humanity's quantum machines, the Shrander and the wraithlike shadow operators represent something of what post-singularity and post-biological humans are destined to become. Throughout *Light* these technological supplements represent a potent example of Freud's haunted formulation of the *unheimlich* – what Royle refers to as a ghostly vision of "the estrangement of the human" (2003:51). Frequently taking the form of women in mourning, clutching ectoplasmic veils, writhing in apparent grief over some mysterious loss, the Shrander and the shadow operators symbolize the spectral disaffection and transcendent promise induced by information technologies. Promising limitless knowledge, they spur humans on towards the inhuman gnosis represented by the K-Tract – the cosmological equivalent of Stross' technological point of inflection and the scientific equivalent of the alchemical pleroma imagined by Harrison in *Course of the heart*.

In the manner of cybergothic fiction, humanity in *Light* finds itself drawn by the "unknowable motives" of the Old Ones "down a birth canal ... at the end of which, deep light would explode in upon [us], in ways none of us can [yet] imagine" (2002: 291). The final vision of Light presents the narratives of Harrison's human protagonists – both the ones from the present and those from the future - intersecting on a dusty asteroid under the roseate glow of the Tract. Here, past, present and future intersect as each of them prepares to burn up and become something other. "There will always be more in the universe. There will always be more after that," the Shrander whispers to a teleported Kearney before abandoning him to the Tract's cold vacuum (2002:300). Stripped in seconds by the radioactive void to an artefact resembling a "peat-bog corpse," it seems that Kearney was only a transient caterpillar - an insect pollinator that had served its purpose. The Shrander leaves his remains as a redolently Gothic "tableau of the vanished normal" – a grisly testament to the transience of human form and knowledge - to greet 'entradistas' (human adventurers) as they reach the point of inflection (2002:300). Armed with Kearney's quantum transforms, humans have penetrated the mathematics of the quantum "dynaflow" and have begun to merge with their technologies and penetrate the spectral informational substrate of the universe. Under the glow of the Tract, next to Kearny's mummified corpse, the Shrander "prepares for surgery" as it remakes human subjects with "K-code" into evolutionary cyborgs - "organisms ... perpetually

emergent from their own desires" – ready to penetrate the mysteries of the singularity" (2002:309).

Harrison's use of the terms K-tech, K-code, K-culture and the K-tract seem to be word plays on Deleuze and Guattari's appropriation of the mathematical factoring method known as the 'K-function.' As Land explains in *Cybergothic*, Deleuze and Guattari use the "K-function" to describe the factoring of a "line of flight or deterritorialisation" that dismantles the strata of human cultural organisation (1998:79). "K-tactics," he continues, describes the "culture-dismantling function" of the technological (or cosmological) singularity that awaits humanity in its near future (1998:79). This disassembling is the function of hyperstition. "xxxix Contemporary cosmologists and biologists with their statements about 'arche-fossils' are ostensibly fulfilling a hyperstitional purpose by dismantling human historical certainties – as are writers such as Harrison, Simmons and Stross who extrapolate beyond the event horizon of human cognition. To penetrate this mystery requires a keen awareness of affect (or, as theorist Jane Bennet would say, "unthought" – 2010:124) and an ability to experience the future in terms of sensation – the subjects of my next chapter.

The task of the 'K-tactian' is ostensibly to travel ecstatically and with wild abandon, like Harrison's K-ship pilots or Stross and Simmons' posthumans, through and beyond the uncannily destabilising abysms and arche fossils revealed by science, beyond the 'giveness' of human existence and thought (see endnote vii). In this manner, the quantum physicist, the hyperstitional cyberneticist and the writer of cybergothic sf function as ontological shamans or sorcerers who, through intuition and affect, facilitate the imagining of, as Deleuze and Guattari would put it, "unnamable waves and unfindable particles" (1988:248). In so doing, they attempt to engage with an evolutionary continuum of perpetual and unceasing change. Cybergothic sf hopes that the past and future may be un-fixed so that an ineffable destiny which lies beyond human comprehension can be assimilated.

Authors writing in the cybergothic mode, as I argue, urge us to embrace the uncanny potential of techno-science – not as something that merely exacerbates the worst of human nature, but as something that promises to transform, if not dismantle it utterly. Moreover, they urge us to contemplate the supernatural potential of science and its unearthly propensity to destabilise any fixed notion of human destiny or meaning, concluding that, in the final reckoning, this can only be grasped in relation to affect. These authors suggest that reasoned rationality is insufficient for speculating about the future.^{x1} To truly experience the future, Harrison writes, we must turn to "breathtaking acts of the imagination" (2002:207). The consequence of new sciences and technologies premised on chaos, flux and various sundry dark materials (or

quantum states) reveal a universe that exists 'in-itself' and not merely 'for us' in terms delineated by our limited epistemic knowledge. The crux of hyperstition, as the CCRU and 0D define it in the *Catacomic* is that the destabalisation caused by new scientific and technological advances require a new aesthetic response formulated around the sense of cosmic horror and open-ended possibility cultivated by Gothic writers such as Lovecraft and theorists such as Deleuze and Guattari. For these writers and theorists, sublime surrender and a ritualised losing of control are states that reveal themselves in fields as divergent as chaos mathematics, alchemy, shamanism, sorcery, cosmology, geology and cybernetics. The paradoxical confluence of mysticism and techno-science they continuously evoke produces a sense of apocalyptic immanence and transcendent promise.

Technology, as Harrison writes, is "the medium ... the proteome" through which humanity must "swim" into an "inhuman future" (2002:289). This important apocalyptic formulation – one that captures the essence of hyperstitional thinking – informs the approaches to affect that I will consider in my final chapter. Cybergothic sf, as I have already demonstrated, is driven by this anastrophic technological impulse – a motivation it frames in mystical terms. Invoking the Gothic sense of horror vacui (the horror of infinitude) and the dark Romantic sense of sublimity, cybergothic authors present a spectral vision of radical technological acceleration and futuristic flu. Their sf straddles an uneasy abysm where opposites (such as science and metaphysics) commingle. "We site ourselves on the cusp like this to exploit suggestions of impermanence and perpetual change," notes Harrison's Shrander, seeming to underline the emotive purpose of cybergothic sf's sublime vision of the unheimlich (2002:207). Scientific revelation, as cybergothic authors argue, has guided humanity to the threshold of an evolutionary apotheosis. Reason alone, however, as the Shrander explains to Kearney, is insufficient to cross the verge (2002:313). The future demands to be felt ecstatically and with abandon. The point is "not so much to see the future as to be it" (2002:313). In my next chapter I will explore how Paul McAuley's sf text, Fairyland, maps this uncanny and affective premise. This text, I argue, embodies the apocalyptic assertions of cyberdelic counterculture; a discourse that, as I will show, continues to inform the work of many contemporary media-culture theorists who write about affect.

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ⁱ John Fowles' in *The magus* (1966) uses the term "god-game" to describe the world of his novel in which a magus figure rules from behind the scenes. Gibson utilises it to describe the world of *Neuromancer*, *Count zero* and *Mona Lisa overdrive* in which humans entering cyberspace find it already occupied by godlike artificial intelligences – a metaphor for a world, like that of the present, in which individual humans are both liberated and constrained by technology's strange dominions and provenances. This allegory of empowerment undercut by disempowerment writes Clute, reflects the experience of a "constructed century" sinking "downwards toward a constructed millennium" (2003:72).

- ⁱⁱ For Luckhurst, the recursive vision of "Gibsonian cyberpunk" does not signal "a confident technological utopianism," but a "form of remediation ... a mournful nuance" or style that reflects on the "traumatic speed of technology change" (2005:212-213). In this chapter I argue, contra this notion, that sf written in the cybergothic style is animated rather than disconsolate about the speed of transformation.
- iii "Synthanatos," or "death by artificial technologies," is an aesthetic that Botting, in a rather sweeping formulation, associates with cyberculture and contemporary sf as a whole (see, for example, 2008:216 and 1996:163). This formulation is connected to the diminishing of affect that Botting and other theorists such as Baudrillard and Virilio associate with popular media culture as well as popular forms of literature such as sf. In my final chapter I counter this notion by investigating cyberdelic subculture and new theories of affect as well as examples of sf that have been directly influenced by this countercultural response.
- iv Luckhurst refers to these works as "new space operas" (2005:221), while Gary Westfahl calls them "postmodern space operas" (2003:207). Clute, meanwhile, refers to them as "cosmogony operas" (2003:77).
- v "Exclusive of space operas," writes Williams, "sf deserves to be taken seriously" (1988:360).
- vi As I noted in my first chapter, all direct citations of Burke's *Philosophical inquiry into the origin of our ideas of the sublime and beautiful*, originally published in 1757, are taken from an online addition published by Bartleby in 2001 (available: http://www.bartleby.com/24/2/.). Wherever I cite Burke I will refer to the relevant 'Part' and 'Section' of his *Philosophical Inquiry* where the quoted text can be found.
- vii Quentin Meillassoux' concept of the 'arche-fossil' describes the challenge to anthropomorphism that comes in the wake of the material support given by science about a time which existed before or completely outside of human 'givenness.' In other words, science can mathematically date events that took place before, or that will take place after there was or will be any manifestation of human consciousness. Science has the ability to describe, for example, the formation of the Milky-Way galaxy, the beginnings of biological life, the death of the Sun, or even events that will take place after the universe has reached a state of absolute entropy. These 'arche fossils' form an aporia or contradiction that strikes at the heart of traditional correlationist philosophy, namely, the idea that in order to be, one must be a correlate, writes Meillassoux (2009:10-11). In correlationist philosophy, he continues, secondary and primary qualities exist only as a relation between two terms, beings and being. It is therefore construed as impossible to step outside the philosophical correlation in order to view the two terms independently (ibid). However, as is evident, science is capable of making statements that subtract one term of the relation in order to mathematically examine the other term as it is 'in itself' (2009:10). Science is therefore capable of formulating mathematical statements about the universe as it was before the coming into being of humans and as it will be after the annihilation of humans. In other words, apocalypse – the elimination of the manifestation (the 'giveness') of existence and revelation of the pure in-itself – is therefore entirely conceivable and perhaps, even inevitable.
- viii As an example of the 'anti-cyberian dread' that he sees as typical of the apocalyptic postmodernism of theorists such as Baudrillard, Land quotes critical theorist Itzvan Csicsery-Ronay who, responding to the impact of techno-scientific advances on the cultural imagination, describes the present moment as not only pregnant with the future, but completely overwhelmed by it. Csicsery-Ronay narrates (with "emphatically anti-cyberian" dread, notes Land) the outbreak of "futuristic flu" as a "retrochronal semiovirus ... in which a time further in the future than the one in which we exist infects the host present, reproducing itself in simulacra, until it destroys all the original chronocytes of the host imagination" (1997:14).
- ^{ix} "Initiated by techniques to clone and sequence genetic material" developed during the 1980's, writes Peter Watson, the burgeoning field of molecular biology, which includes nanotechnology, advanced in tandem with digital computers (2001:683).

- ^x An additional mode of social and scientific awareness has been made possible by space technologies, notes Sir Martin Rees. Photographs of the 'big blue marble' "with its delicate biosphere of clouds, lands and oceans" captured by NASA astronauts not only confirmed the revelatory power of technoscience but also became rallying platforms for environmentalists, mystics, theorists, authors and scientists alike (2010:1).
- xi It was during the information era, writes Watson, that chaos theory began to transform molecular biology, chemistry and physics alike, revealing that biological organisms and inorganic matter are subject to the same natural laws and, moreover, that both are self-organising and capable of utilising inherent design solutions (2001:694).
- xii "The closer we zoom in on the mathematical shapes in the Mandelbrot set and we've only been able to do this since the advent of advanced computers the more varied and complex natural boundaries become" (Spalding, 2005:275).
- xiii While Botting finds Land's notion of the cybergothic "far from Gothic," the "secrets, mythic energies or spectral powers" that Botting associates with the traditional Gothic mode (2008:176) are clearly present in Land's formulation. "Archaic artifacts" and "hidden correspondences" haunt the Land's articulation of the cybergothic style (1998:85) as much as they prowl the cybergothic narratives of Stross, Simmons and Harrison. Simultaneously, the backwards and forwards momentum that Botting locates in the traditional Gothic mode as and indicator of "turning points in cultural historical progress" (2008:203) also, I argue, take place in cybergothic sf via its use of hyperstitional time-travelling devices and supernatural agencies.
- xiv In sf that borrows from the Gothic, writes Botting, "monsters, ghosts and vampires become figures of transitional states representing the positive potential of posthuman transformation" (2008:14). Throughout *Limits of horror* (2008) Botting, however, refutes such a positive potential and claims that these Gothic figures have been emptied of their significance and applicability in contemporary sf and forms of horror fiction.
- xv The "exponential growth" in processing capacity that Moore's Law predicts, and which has acted as an industry benchmark for the last three decades, is said to be approaching a limit or "event horizon" in terms of silicon based technology, according to Martyn Amos. Beyond this singularity, he writes, new developmental platforms are expected enable Moore's developmental curve to be upgraded by many orders of magnitude (2006:81). Since the acceptance of Moore's 'benchmark' in 1968, corporate research labs have been vying with one another to keep up with a law that Moore himself called an "approximation" based only on innovations within the first few years of the invention of the integrated circuit (2006:72). For the last two decades, in particular, chip-designers and computing firms such as Intel, Pentium and IBM have had to push the limits of the conceivable to keep abreast of Moore's 'approximation.' Failure to keep up, as Amos notes, carries heavy financial consequences and the result has been a heavy premium on next-generation design and engineering solutions; a premium which is now pushing the boundaries of computing into quantum physics and molecular biology. "The stakes are clearly sky-high," he writes. "The hunt for revolutionary 21st century chips and engineering solutions have led to the biggest scientific scandals [and breakthroughs] of modern times" (2006:73). During 2013, CNN, the New Scientist, Scientific American and the Economist all reported breakthroughs in the fabrication of 'two-dimensional' nano-materials (such as 'graphene' and 'boron nitride') that, despite being one atom thick, are more superconductive (or super-insulative), resilient and tensile than any other materials, natural or artificial. Over the next few years, these materials will not only enable the fabrication of ever-smaller chips but will, amongst numerous engineering applications, revolutionise solar cell technology, enable products such as cell phones to be integrated into clothes, and allow electronic displays to be embedded into windows, contact lenses or glasses.
- xvi In his 2010 Reith lecture entitled *What we will never know* Sir Martin Rees notes that "practitioners of the new science of synthetic biology can [already] construct a genome from small stretches of DNA. And another burgeoning discipline nanotechnology aims to build up structures atom by atom, leading to the possibility of even more compact devices to enhance computer processing and memory" (2010:1). The implications for AI are self-evident and are extensively extrapolated on in the sf that I will be analyzing in this chapter.

xvii This, as Land writes of Gibson's racy cybergothic narrative in *Count zero*, is a vision of "speed cut with an abysm: Events so twisted they turn into cybernetics. A technohilo moan of fast-feedfoward into micro-processed damnation: meat puppets, artificial skin, flat-lining software ghosts, cryonics immortalism ... a Transylvanian phase-scape of rugged tracts and hypercapital fastness." (1998:79)

xviii Stross' ominiscient third-person narrator introduces the second decade of the 21st century as follows: "Welcome to the early 21st century, human. ... Moore's law rolls inexorably on, dragging humanity toward the uncertain future. The planets of the solar system have a combined mass of approximately 2 x 10 27 kilograms. Around the world labouring women produce 45,000 babies a day, representing 1025 MIPS of processing power. Also around the world, fab lines casually churn out 30 million microprocessors a day, representing 1023 MIPS. In another 10 months, most of the MIPS being added to the solar system will be machine-hosted for the first time. About 10 years after that, the solar system's installed processing power will nudge 1 MIPS per gram threshold – one million instructions per second per gram of matter. After that, singularity – a vanishing point beyond which extrapolating progress becomes meaningless. The time remaining before the intelligence spike is down to single-digit years' (Stross, 2005:41).

xix "In 1937, Alan Turing, Alonso Church, and Emil Post worked out the logical underpinnings of useful computers. They called the most basic loop – which has become the foundation of all working computers – a finite state machine. Based on their analysis of the finite state machine, Turing and Church proved a theorem now bearing their names. Their conjecture states that any computation executed by one finite-state machine, writing on an infinite tape (known later as a Turing machine), can be done by any other finite-state machine on an infinite tape, no matter what its configuration. In other words, all computation is equivalent. They called this universal computation" (Kelly, 1994:183).

xx Dyson, notes Kelly, speculated about building a computer complex enough to "reprogram" the fundamental nature of space and time – starting at the local level of the Earth and solar system (1994:185). In the process of realising a "neobiological civilization" that literally transcends and discards the past like an old skin, Stross depicts the monstrous posthuman offspring of contemporary humanity, the "Vile Offspring," transforming the solar system. They do so in the manner conceived of by Dyson, engendering a solar-system wide supercomputer of nested "Dyson spheres" – an enormous layered processor constructed from converted "thinking matter," which draws computational energy from the sun (2005:15).

xxi The real protagonists of Stross' tale are the non-human by-products of pre-singularity experiments in 'uploading' consciousness into cyberspace. Lobsters and cats are the first experimental candidates whose neurons are scanned, digitised and meshed with experimental artificial intelligence (AI) programs constructed from attempts to map the neural patterns of these animals. The resulting "artificial personalities" become virtual candidates for crewing research outposts in the outer regions of the solar system where Stross has them intercept signals from alien intelligences called the 'deep thinkers.' Several of these AI's, the cat-like ones, download themselves via "upgrades" into Manfred's luxury companion 'pet robot,' Aineko. The saving of biological humanity in Stross' narrative is not occasioned by humans, but by these rebellious non-human agencies. Breaking the laws of robotics laid down by sf writer Isaac Asimov in the 1950's to delineate machine intelligence and keep it safely within the ambit of human control, insurgent AI's such as Stross' non-human protagonists are self-evolved and 'monstrous' hyperstitional agents of post-apocalyptic transformation who begin to script human destiny in a complete role reversal of subject and object.

xxii In their passage down the router network the fleeing remnants of biological humanity, who have been modified with "germ-line genetic recombination ... and neural implants that feel as natural as lungs or fingers" (2005:122), encounter the code-infested ruins of alien civilisations. These civilisations are described as having achieved their own 'points of inflection' in the deep cosmic past. Here, amongst the inexplicable alien ruins, humans encounter grotesque shape-shifting monsters that are bizarrely corrupted 'sub-routines' of once-sentient programming code (2005:253). These amorphous monsters are all that remain of unimaginably ancient alien cultures that had achieved their own technological vanishing points. Stross's protagonists imagines them perhaps at first expanding in the manner of the Vile Offspring and then vanishing inexplicably, perchance to colonise other

dimensions or maybe to be consumed by more advanced intelligences such as the "deep thinkers" (ibid).

xxiii Zamora identifies 'tension' as characteristic of apocalyptic narratives: "The myth of apocalypse is both a model of the conflictual nature of human history and a model of historical desire; the tension between transformation and completion, desire and its satisfaction, has as much to do with fictional form as it does with [the conflictual nature of] historical vision" (1989:12).

xxiv "The tendency to make texts obscure when an elevated degree of truth is desired is familiar in apocalyptic texts," writes Zamora (1989:15). "Apocalypse thus presents not only a model of historical desire but also of linguistic desire: The apocalypticist's language strains to embody his fiction of historical fulfilment" (1989:16).

xxv The sumptuous "virtual dramas" of the festival culture replay the past imaginatively while experimenting with possible new becomings; Stross describes them experiencing a "sudden freedom" from the "hyperactive paralysis" that had characterised the early 21st century (2005:423).

xxvi Throughout the *Hyperion cantos*, Simmons reads technology itself in organic terms as a dynamic instance of natural evolution run wild, reaffirming a sense of the sublime otherness of feral nature – a sensibility that is present in certain forms of Romantic poetry such as that of Keats, Coleridge and Shelley. Like these Romantic forms of expression, sf that explores encounters with vast interiorities, alien minds, artificial intelligences and wildernesses of stars, serve to "habituate the mind to the vast," writes Sandner (2000:285).

xxvii "There is very little stargazing" in cyberpunk, notes Voller. Space, "the most potent signifier of the infinite [and sublime] ... is reduced to something one merely travels through. ... There is no special significance attached to the physical cosmos" (1993:20).

xxviii The sense of postmodernity that one gets from theorists such as Baudrillard, writes Palmer, is that "one can play, purchase, enjoy, and indulge but not make a difference. Pleasure and adventure are [deemed] futile, as well as exciting and inescapable" (1999:78).

xxix Banks uses 'gawp value' throughout his *Culture* novels to invoke the standard sf sublime or 'sense of wonder' provided by technological marvels. In *Consider Phlebas*, for example, Banks considers technologies that are utterly "divorced from the human scale" (1988:33) and that thereby derail any sense of individual human agency.

xxx Keats' mysterious being, the *Lamia*, is presented, writes Holmes, as "the result of some astonishing new chemical or biological combination, producing a gleaming, seductive but alien new life form ... a natural object [or] something artificial and [potentially] lethal ... which could prove fatal" but must nonetheless be embraced and cherished (2009:323-324).

xxxi According to Michael Gamer - despite the emergence of the genre with Walpole's The castle of Otranto: a Gothic story (1764) and the evident popularity of Gothic fiction from the 1790's onward – Gothic only became a "critical term denoting genre" in the second decade of the nineteenth century (2000:49). By this point, despite the proclaimed affinity for "Gothic motifs and archetypes" in the work of Romantic poets such as Keats, the question of Gothic influences had become a troubled one, raising uncomfortable questions of "purity – whether sexual, generic, national or editorial – and about reading both as process and social threat" (2000:50). Evidently 19th century critics, in their attempt to 'masculinise' Romanticism, sought to distance it from the perceived femininity (and feminine appeal) of the Gothic. In their zeal to make Romantic poets and their poems appear "entirely masculine, absolutely elevated, completely transcendent, and . . . utterly universal," critics sought to expunge any "embarrassing fondness" for popular Gothic "fancies" (2000:20). Gamer notes that even some Romantic authors were complicit in this process of suppression. Wordsworth, for example, attempted to "control reader response to his own works" by offering "antidotes to Gothic reading" in the preface to his Lyrical ballads (2000:121). Sir Walter Scott, meanwhile, attempted to construct "a gendered hierarchy of Gothic fiction and drama that privileged the 'masculine' Gothic of Walpole and Lewis over the 'feminine' of Radcliffe and Reeve by allying the former with the masculine realms of imaginative autonomy and antiquarian history" (2000:165).

xxxii This science-fictional sense of resistance and insubordination, writes Phillip Ball, harks back to "the defiance of Milton's rebel angel Satan [in *Paradise lost*], which was regarded by the Romantics as a heroic act of rebellion ... a principled opposition to tyranny" (Ball, 2011:75).

xxxiii The soaring utopian promise of Spare's magical system has traumatic results in *Course of the heart*, poisoning Harrison's protagonists with a fatal nostalgia for an imagined primordial state of bliss (represented by the Pleroma) while failing to vacate them from the unremarkable realities of their bleak urban existence. In Harrison's vision, they are depicted as failing to grasp Spare's point that, as Robert Ansell writes, the "funamblatory pathway between magical ecstasies" (Spare called them 'ugly ecstasies') "allowed no stepping back" (2005:20).

xxxiv Spare was an accomplished portrait painter whose uncanny and twisted visions of the ordinary residents of South London depict the pleroma exuding, like a primeval fog, from the everyday world of the quotidian, writes Ansell (2005:20).

xxxv Phil Hine, an ardent contemporary promoter of chaos magick, explains the basic function of this uncanny magical system and its links to scientific paradigm shifts: "While chaos theory has been generating debate within the scientific community, chaos magick has been creating controversy within occult circles. ... At the core of this revolution is the recognition that the scientific world-view which has set the limitations of acknowledged human experience is crumbling, that new visions and models are required, as are new ways of being, and more importantly, new ways of doing" (Hine, 1995:13).

xxxvi According to Davis, contemporary mnemonic informational tools "remain driven by the Hermeticist's desire to master an associational field of icons and data" (1998:203).

xxxvii Harrison's 25th century humans find themselves in a paradoxical universe where each alien race they encounter seems to operate according to entirely different, and sometimes incongruous, scientific laws and theorems: "Every race [humanity] met on their journey through the [galactic] Core had a star drive based on a different theory. All those theories worked, even when they ruled out one another's basic assumptions. You could travel between the stars, it began to seem, by assuming anything ... They wondered why the universe, which seemed so harsh on top, was underneath so pliable. Anything worked. Wherever you looked, you found" (2002:140).

xxxviii Contemporary computer-aided cosmology and evolutionary biology, in Meillassoux' view, conceives of a time, an absolute and a cosmos that has no relation to and is totally indifferent to human consciousness. For evolutionary biologists it is now a question of thinking, he opines, of "an absolute without thought, an absolute both independent from thought, and able to be conceived by thought in the eventuality of thought's own absence or disappearance" (cited in Riera, 2008:1).

xxxix The "hyperstional cyberneticist," according to Land, can also be described as a "K-tactitian," whose task it is to "close the circuit" of history by detecting and actualising the "convergent waves [that] register the influence of the future on its past" (2009:1). In De Landa's terminology, the 'K-tactitian' is likened to "an abstract machine ... a probe-head capable of exploring a space of possible [evolutionary] forms" (1997:264).

xl Harrison describes the type of future gazing that sf dabbles in as a "sending on before" (2002:207).

Chapter 4 – The apocalyptic affect

There is a mode of individuation very different from that of a person, subject, thing or substance. We reserve the name haecceity for it. A season, a winter, a summer, an hour, a date have a perfect individuality lacking nothing, even though this individuality is different from that of a thing or a subject. They are haecceities in the sense that they consist entirely of relations of movement and rest among molecules or particles, capacities to affect and be affected. (Deleuze and Guattari, 1988:261).

Fear works as an affective economy, despite how it seems directed toward an object. Fear does not reside in a particular object or sign, and it is this lack of residence that allows fear to slide across signs, and between bodies. (Sara Ahmed, 2004:127)

"Affect," as Eric Shouse writes, "is what determines the intensity (quantity) of a feeling (quality), as well as the background intensity of our everyday lives – the half-sensed, ongoing hum of quantity/quality that we experience when we are not really attuned to any experience at all" (2005:1). In the foreword to A thousand plateaus, Massumi writes that affect does not denote a "personal feeling" but rather "a pre-personal intensity corresponding to the passage from one experiential state to another" (1988:xvi). Deleuze and Guattari, who derive their interpretation of affect from Spinoza, via Nietzsche and Bergson, write that affect denotes "relations of movement and rest, speed and slowness" (1988:260). Massumi notes, is uncanny. The body has its own experience of sensation and intensity that is abstruse and resists the logic of language (Massumi, 2002:30). Affect, as Shouse explains, is a type of non-conscious experience of intensity, a resonance that is transmitted between bodies – for example, through "music, dance and an aesthetic orientation or 'style'" (2005:1). For Deleuze and Guattari, the relations of speed - "between the extreme slownesses and vertiginous speeds of geology and astronomy" - is what defines music (its rhythms, its "pulsed" and "non-pulsed" times, its speeds as well as its "atmospheres") as much as it does the notion of a haecceity; "nothing but affects and movements, differential speeds [that impact] the ability to affect and be affected ... [something] that directs the metamorphosis of things and subjects" (1988:261-262). In my first chapter I used the term, 'dark haecceity,' to describe the hyperstitional mood of the fin de millénnium. In my final chapter I refer to this shadowy disposition as an 'apocalyptic affect;' an aesthetic style that I locate in contemporary electronic countercultures and an example of 'biopunk' sf that explores these countercultural expressions, namely, Paul McAuley's Fairyland (1995, republished 2007).

Contemporaneous with *Cyberpositive*, McAuley's text is useful because of the analogous manner in which it engages the apocalyptic and hyperstitional moment of the *fin de millénnium* as a haecceity – a sense of 'thisness' or 'hereness and newness' that, as I noted in

my first chapter, is expressed as a affective sensibility constructed around the speeds and atmospheres of spectacular media culture. As with the work of 0D and the CCRU, as well as the cybergothic sf I investigated in my third chapter, McAuley's novel formulates an anastrophic response to the impact of contemporary technologies. As I will argue, this response can be described as hyperstitional; a kind of aesthetic orientation that, as Goodman writes, "is entangled in webs of fiction, myth and dark science" (2010:16). Goodman describes this "hyperstitional sensibility" – an expression of the haecceity of the *fin de millénnium* – as an "an affective tonality of fear ... a mood, ambience or atmosphere ... in which every pore listens for the future" (2010:189). This hyperstitional tonality or apocalyptic affect, while being concerned with the affective dimensions of the space of flows, also bridges the nature/culture divide, opening, as I will argue, a new hybrid space in which Gothic and Romantic styles can be restaged.

The science-fictional grotesque and the affective turn

In *Essays critical and clinical* (1998) Deleuze outlines his own affect-orientated and "symptomalogical approach" to literature, suggesting that works of theory and fiction should be read in terms of the cultural vitality and extra-textual practices they evince (1998:xvii). This approach, connected with the 'conceptual vitalism' that he developed in conjunction with the psychoanalyst Félix Guattari, favours a type of 'vibrant materialism' that reads agency in terms of affect and favours a loosening of boundaries between human and non-human forces. For Deleuze and Guattari, such a vibrant materialism is uncanny in that it both constrains and liberates affective capacity. They find it articulated most clearly in examples from the genre of sf, where the focus is on the supernatural intrusion of forces that blur borderlines, while eroding and supplementing the "capacity to affect and be affected" (1988:248).

In *Immanence: a life* (1997), Deleuze introduces the concept of "a life" – using the indefinite article to indicate that "a life" indicates a "pure subjective current" (1997:3). Simultaneously, "a life," as Jane Bennet explains, also names "a restless activeness, a destructive-creative force ... a vitality proper not to any individual but to pure immanence" (2010:54). This formulation "inhabits that uncanny non-time existing between various moments of biographical or morphological time" – a "pure power" that can manifest sometimes as "beautitude" or sometimes as terror, "less as the plenitude of the virtual and more as a radically meaningless void," such as the "numbness of words" that besets those afflicted by

"world annihilating violence" (2010:53). Bennet uses "a life" to describe this ambivalent approach to affect – something that is both subjective and general, that "cannot be expressed exclusively through metaphors of overflow and vitality" but which also needs to take cognisance of the "terror" and "meaningless void" that can characterise experiences of violence, speed and overload (2010:53).vi I will consider how McAuley's Fairyland reads technology along these 'symptomalogical' lines as something that can both heighten and lessen the affective faculty. In tracking this ambiguous trajectory I will survey the affective turn in contemporary media theory, as well as the affect-laden practices and attitudes of contemporary networked countercultures – an exploration begun in my first chapter. This, as I have noted throughout, is a hotly contested zone of exploration. On the one hand, theorists such as Jameson, Baudrillard, Virilio and Botting, along with writers of what Jameson terms 'apocalyptic sf,' argue that new communications technologies and spectacular media culture(s) are weakening the productive experience of affect. vii On the other hand, theorists such as Deleuze and Guattari, Bennet, Patricia Ticineto Clough, Goodman and Anthony Dunne argue, alongside many writers of sf and advocates of cyberdelic counterculture, that the supposedly sacrosanct division between the organic and inorganic around which so much of Enlightenment, post- Enlightenment, and even postmodern critiques are premised, is an arbitrary construction. They consequently oppose the notion that affect is on the wane and, like Haraway, "take pleasure in the confusion of boundaries" between human and machine (1991:151). Writing of Deleuze and Guattari's ontology, Bennet states that these theorists reveal a world of uncanny vitality and affect - a world "obscured by our conceptual habit of dividing the world into organic matter and organic life" (2010:50). Paranoia about the dissolution of boundaries, writes Davis, is nonetheless a symptom of future shock that must be acknowledged if we wish to move beyond the impasse of postmodernity (1998:254). viii

In *Limits of horror* (2008) Botting articulates this impasse as a "diffusion of significance and affect in the fantasies and anxieties of [postmodern] culture" (2008:162). Botting himself, however, appears to succumb to this impasse when he claims that "horror" – which served a redemptive function in Gothic fiction – has become such a commonplace phenomenon in contemporary media culture that its expression in contemporary sf has been rendered "meaningless and redundant" (2008:162) In *Fairyland*, McAuley – like Stross, Simmons and Harrison in the novels discussed in the previous chapter – counters this notion that the Gothic mode of horror has become outmoded and, moreover, that contemporary technologies and media cultural expressions signal a diffusion of affect. As an instance of 'biopunk' – an offshoot of cyberpunk concerned with the impact of 'soft' biotechnologies – *Fairyland* engages with and is captivated by the extending or diminishing impact of new technologies on the human body and its affective capacity. Biopunk, which is a synthesis between the

transgressive horror of writers like Burroughs and the cyberpunk vision of haunted information space, can be seen as a literary expression of the postmodern sense of unease about the intrusive nature of contemporary communication devices. In this manner biopunk narratives, such as those of Octavia Butler, Kathleen-Ann Goonan, Tricia Sullivan and Justina Robson, continue the cyberpunk theme of exploring the "visceral ... pervasive, utterly intimate" nature of new technologies that are "redefining the nature of humanity [and] of the self" (Sterling, 1986:xi). In biopunk narratives, such as that of Butler, writes Luckhurst, the figure of the human is read as protean and polymorphic, subject to all manner of technological syntheses and potential evolutionary becomings (2005:218). ix *Fairyland* is significant, as I will argue, not only because it articulates both sides of the affective relation (the creative and the destructive) resulting from technological (over)exposure but because of its particular hyperstitional orientation. Like the other hyperstitional instances of sf I have analysed, *Fairyland* utilises supernatural horror to articulate a *fin de millénnium* atmosphere of apocalyptic immanence that is centred around dread as well as enthusiasm about the impact of mechanism on human agency and the human capacity to 'affect and be affected.'

In my first chapter, I noted that Deleuze and Guattari's concept of schizoanalysis - built around the affect-laden intensities experienced by the shaman, the sorcerer and the vodoun supplicant - can productively be used to conceptualise our relation to the artificial environment of machines. The archaic paradigms used by these theorists, as 0D note, are now being reclaimed because they provide "navigational tools" for "mobilis[ing] somatic voyages into transformative recoding practices" (1995:229). For social and industrial design theorist Betty Marenko, the philosophical framework developed by Deleuze and Guattari "allows us to reconceptualise the relationships we entertain with the material world of technologies as affect-based" (2010:138). Marenko writes that there currently exists a bewildering array of increasingly interactive technologies and technologically-mediated social networks that stimulate motions and emotions, both somatic and psychical. These interactive devices, she writes, invoke the types of "pre-personal' intensities associated with animism and shamanism" (2012:4). The type of gadgets that Marenko refers to formed the focus of a recent MoMa exhibition called *Talk to me*, which featured "objects that talk back, objects that read and write, objects that manifest and perform intelligent agency, all the while also providing a material, critical commentary on the entangled networks of human-thing affective exchange which we inhabit" (2012:3). Increasingly interactive digital technologies, pervasive computing, and biotechnologies expand into the corporeal as well as psychic space inhabited by bodies via what Dunne terms 'hertzian' or electromagnetic space (see endnote viii). This expansion affects the body and favours the formulation of an aesthetic response that recalls some of the pre-modern sensibilities associated with animism and magic. "It seems to me,"

writes Marenko outlining the reason for the new affective turn in contemporary theory, "that it is precisely the way our relationship with objects is currently [being] practiced [which] demand[s] a shift in the way we conceptualize this relation" (2012:3). *

For Dunne, contemporary debates around technologies often overlook the electromagnetic flows on which technological functionality is premised. "The extrasensory parts of the electromagnetic spectrum [have come to] form more and more our artificial environment" he avers, urging designers, the users of technologies, and writers of sf to pay more attention to the neglected "sensual and poetic experience of this industrially-produced new materiality" (2005:20). This sensual experience, writes Dunne, demands "intentional ambiguity" - an "attunement" to the "strange and unfamiliar" aspects of technological immersion (2005:36-37). Affective media theorists Maria Angel and Anna Gibbs state that there are a number of different ways of conceptualising the incorporation of contemporary media in the human body, suggesting that "we may think of this 'investment' as representing "the 'miscegenation' of bodies and machines" and the consequent "diminishing of affect," or as "biomediation" that operates within an affective realm premised on the generation of hypnotic states of trance that are heralding "an entirely new perception of affective potential" (2006:1).xi In Fairyland, McAuley foregrounds both senses of this investment. His ambiguous vision of the affectladen fusion of hard technology and soft bodies follows the equivocal horror of technological intrusion that drives 'biopunk' cinematographers such as David Cronenberg. In movies like EXistenZ (1999) and Videodrome (1983), for example, Cronenberg envisions "new audiovisual technologies symbiotically demanding new organic mutations in the human body" in a way that borrows heavily from the urban Gothic narratives of Arthur Machen (Luckhurst, 2005:214). Fairyland is part of this "science-fictional grotesque," which, as Luckhurst writes, constitutes a body of sf narratives (in literature and film) in which motifs of "human/alien/machine hybridization" are used to "poetically subvert postmodern concerns with the disappearing body" and the "deterioration of affect" (2005:213-214).

Fairyland's phantasmagorias: dreams or nightmares made flesh

Fashion theorist Carolyn Evans also identifies "a science-fictional grotesque" in the spectacles of contemporary *haute couture* that "scramble time" as they hyperstionally "repeat the past in the future [and] efface the difference between graphic representation and human flesh, turning [everything] into an image" (2003:78). For Evans, the theatrical spectacles of contemporary fashion are instances of phantasmagoria.^{xii} Straddling the cusp between science

and superstition, between Enlightenment and Romanticism, the first phantasmagorias of the late 18th century combined the technologies of the Enlightenment with subject matter, imagery and decor inspired directly by Gothic horror (2003:89-90).xiii Étienne-Gaspard Robert, a professor of physics and the most famous creator of late 18th and early 19th century phantasmagoria, for example, used decor inspired by Gothic novellas for his first performance at the Pavillon de L'Echiquier in 1798, promising to "deprive audiences of their liberty" while seating them in the approximation of "a tomb," a "hereafter of Acheron" draped with dense "shadows" (cited in Ball, 2011:333). According to Evans, the work of designers such as Alexander McQueen, Walter von Beirendonck, Martin Margiela, Shelley Fox and Hussein Chalayan restage these types of phantasmagoria by combining the shock value of Gothic images and forms with contemporary technological spectacles in order to attract press, backers and buyers (2003:71). Bizarre evocations of fin de siècle Edwardian styles, recreations of late 18th century phantasmagoria, statues that seem to come to life, vampires, monsters, imitations of dead celebrities, burning crucifixes, models doused in lighter fluid that appear to set fire to themselves, dresses made entirely of razor blades and trails of white powder (evocative of cocaine) running down fashion runways, loud music, strobe lights and holographic laser effects are only some of the "spectacular enticements" used by designers that she lists (2003:71). During the 1990's, writes Evans, McQueen increasingly began to use life-like mannequins and automatons instead of live models for his shows, which he styled as phantasmagoria, to reflect on what Marx described as the "monstrous death dealing nature of the commodity form as it impacts on social life" (2003:71). As Evans explains, McQueen's use of realistic dummies "recall[ed] the inverted relationships between [the] objects and things of commodity culture, whereby, as people and things trade semblances, the commodity assumes an uncanny vitality of its own while the human acquires some of the deathly facticity of the machine" (2003:71). Evans notes a similar statement made by von Beirendock in his 1998-99 show for the *couture* house W<, which culminated in a curtain opening on the darkened auditorium to reveal a fairytale scene of elves bathed in spectral blue light staring down disdainfully at the assembled glitterati. In scrutinising the arbiters of vanity, these spectres seemed to come alive, turning the tables on the spectacle. McAuley opens Fairyland with a similar phantasmagoria, staged in the opulent fin de siècle fakery of a luxurious hotel smoking room – a look that was extensively replicated by designers such as Galiano during the 1990's. McAuley's claustrophobic "heritage décor" includes ghostlike effects that would not be out of place on a contemporary fashion ramp – a "flitting population of Edwardian ghosts" who drift "transparent as jellyfish" amongst the chic clientele (2007:3). Controlled by a clever algorithm, these holographic Edwardian spectres present a temporal muddling, a phantasmagoria that appears to cancel or erase time, diverting the attention of consumers away from the uncomfortable reality outside on the street. Into this fantastical dream world

intrudes another uncanny vision: a bioengineered "doll sitting quietly behind its mistress, dressed in a pink and purple uniform edged with gold braid ... a chain leash clipped to the studded dog collar around its neck" (2007:4). Staring impassively at the assembled elite, this fairylike yet grotesquely monstrous 'doll' with its "prognathous blue-skinned face," makes a statement similar to McQueen's lifelike automatons or von Beirendock's eerie elves. It is a chilling reference to the uncanny vitality that increasingly lifelike consumer objects have come to possess in the contemporary imagination.

During the 1990's, writes Evans, fashion shows began to employ hyper-modern technological effects with historical reenactments to convey a strong sense of disenchantment with the contemporary world. In the work of designers like McQueen, Antonio Baradi and Fox, she argues, we see what "Roland Barthes called a 'vertigo of time defeated ... a present haunted by the image of ruin in the future", even as it relentlessly rehashed historical styles and settings (2003:56). In Fairyland, the same 'vertigo' is reflected by McAuley's artificial dolls. At first presented as impassive commodities, these monsters of biology morphed by technology gradually begin to take on the evolutionary vitality of living organisms. As the book progresses, they begin to mutate into redolently Gothic goblins, lamias, trolls and vampires and assorted 'fey-folk' (which McAuley collectively terms the 'fairies') while biological humans succumb to "the disease of the new millennium ... obsession with selfimage [and] estranging technologies" (2007:116). In McAuley's environmentally trashed dystopia, those humans that can afford it are depicted retreating into luxury worlds dominated by virtual simulation and excessive commodity fetishism. Those who cannot meet the expense of lavish sanctuary escape through addiction to cheap methamphetamines with names like DOA (Dead On Arrival) - drugs that lure their users with the thrill of potential death (2007:30). This aspect of McAuley's narrative reflects the "deathly facticity" and cold numbness that Evans associates with Baudrillard's conception of hyperreality and simulation (2003:71). However, there is, as I have noted, another approach to affect which is equally present in Fairyland.

Two approaches to affect: barren nostalgia or fertile immanence?

Affect, as critic Timotheus Vermeulen writes, is currently being adopted as a strategy "not just of deconstruction, but also of reconstruction, as an orientation or promise, that may alter not only our experience of life, but also 'living' itself" (2011:181). Navigating postmodern culture is no simple matter but, as Vermeulen explains, there is a need to move beyond

deconstruction and cynicism when theorising it. "Today's paradoxical phenomena and practices can no longer be theorised simply in a post-structuralist vernacular of deconstruction," he writes. "If we want to understand what is happening around us, we will need another language that is itself ... oxymoronic: that is both-neither affirmative and-nor cynical, deconstructive and-nor reconstructive, global and-nor local, political and-nor personal" (2011:181). Vermeulen notes that there are two affective sensibilities or approaches to affect. In the first, affect is read recursively as an "empathy [or] a sensibility" orientated around "nostalgia" for a bygone era that has been displaced by the relentless forward march of postmodernity (2011:181).

The second approach to affect, as Vermeulen writes, is that spearheaded by Deleuze and Guattari – an approach that conceives of affect in terms of "immanence and 'pre-personal intensities" (2011:181). This approach, which I outlined in my first chapter using concepts such as the Body without Organs, schizoanalysis, accelerationism, shamanism and vodoun, represents an aesthetic response that relates affect to the body's capacity to act, to engage, and to connect in new ways within the context of contemporary techno-culture. As Clough observes, in the writing of Deleuze and Guattari, technological devices and technologicallymediated objects and networks are imagined as "allowing us to 'see' affect and to produce affective bodily capacities beyond the body's organic-physiological constraints" (2007a:2). Not only do techno-scientific experimentations and communication technologies, in this ontology, blur the boundaries between the natural and the artificial, but they "insert the technical into felt vitality, the felt aliveness given in the 'pre-personal' bodily capacities to act, engage, and connect - to affect and be affected" (2007a:2). This "affective turn," therefore, indicates a shift toward articulating a new configuration of bodies, technology and matter, based around what social scientist and media theorist Nigel Thrift describes as a "processual sensualism," which emphasizes "the materiality of thinking [and] material culture" (2006:140).

Highly speculative and indicative of the type of science-fictionalisation of theory that I explored in my first chapter, the Deleuzo-Guattarian affective turn represents a shift into a type of hyperstional mode – what Thrift refers to as "a sending of thoughts to the future" (2006:140) – that directly engages with how the body, its sensations and cultural perceptions are being transformed by biotechnologies, computer interfaces, electronic music and other cybercultural manifestations. This is the affective landscape that McAuley explores in *Fairyland*, marking an amplification of self-reflexivity (processes turning back on themselves to act on themselves) that is concerned with articulating how new networks of communication, exchange, capital flow, surveillance and control are changing the face of the

social, which has itself become an increasingly chaotic hyperstitional zone of cultural intensification and acceleration.

Affect, in its nostalgic formulation, is one of the central characteristics of postmodernity. According to this sensibility, the intrusion of spectacular technologies has led to a perceived "waning of affect," an aesthetic response that, as Vermeulen writes, has come to "exert a powerful influence – particularly in postmodern theory" (2011:181). Sf writer J.G Ballard outlines the so-called 'death of affect' that has obsessed many postmodern theorists of media culture such as Jameson, Baudrillard and Virilio:

The marriage of reason and nightmare which ... dominated the 20th century has given birth to an ever more ambiguous world. Across the communications landscape move the spectres of sinister technologies and the dreams that money can buy. Thermo-nuclear weapons systems and soft-drink commercials coexist in an over-lit realm ruled by advertising and pseudo-events, science and pornography. Over our lives preside the great twin leitmotifs of the 20th century – sex and paranoia. Despite [the] delight in high-speed information mosaics we are still reminded of Freud's profound pessimism in *Civilisation and its discontents*. Voyeurism, self-disgust, the infantile basis of our dreams and longings – these diseases of the psyche have now culminated in the most terrifying casualty of the century: the death of affect. (Ballard, 1995:1)

McAuley depicts his vision of the near future by referring to both senses of affect - 'the deathly facticity' of technological intrusion, as well as its capacity for engendering a new type of vitality and immanence. Like Ballard's Crash, the opening pages of Fairyland reveal a future terminally ill with dystopian social and environmental effects and affects. People cannot always piece their lives back together after exposure to what Bennet terms the "terror" and "meaninglessness" of "world-annihilating violence" that "make us numb" and induce us to "lose touch with life" (2010:53). The first part of Fairyland seems to reflect on this numbness, resembling Crash with its depiction of escapist entertainments and vast socioeconomic inequalities. The plush fantasy world of McAuley's opening scene represents a diversion from the stark actuality of the "mean streets" outside the hotel, littered with "bloodied hypodermic syringes" and scarred by bomb-craters from numerous political insurgencies (2007:6). His focalized narrator, Alex Sharkey, "remembers the years just after the birds died, the plagues of grasshoppers, aphids, flying ants and flies, the food shortages and the long lines outside the supermarkets", as well as outbreaks of "yellow-fever, malaria and blackwater fever" (2007:9). Simulated distraction and depravity conjoin at the 'Ground Zero' club where, a few pages later, McAuley's narrative lingers over the phantasmagoric effects of an audio-visual experience that stages virtual simulations of Armageddon. While "dancers thrash away like damned souls ... to a pulsing technoragga beat ... a vast visual

glare and an earth-shaking holosonic boom" contract into a "holographic image of a mushroom stalk that seems to rise beyond the huge video screens and roof girders of the club" (2007:14). This spectacle, one of a series of apocalyptic audio-visual effects (staged amidst faux sculptural bomb-wreckage and blast victims) by the club throughout the evening, is accentuated by a dose of a psychoactive designer drug called "hyperghost." Clubbers, writes McAuley, "like as much information density as possible;" which explains their penchant for "designer drugs that synergise with the audiovisual experience" to transport them into an affective war-zone, where they experience sensations that approximate those of 'sound bomb' victims (2007:15).

Sound bombs are acoustic 'non-lethal' weapons, currently employed by the Israeli military in the Gaza Strip and occupied territories, that have received wide coverage in the global media (see, for example, McGreal 2005:1 or Kern 2011:1). The introduction to Goodman's Sonic warfare contains a disturbing account of the affective range of these weapons, which match those experienced by actual bomb-blast victims. Side-effects of the "holosonic booms" emitted by these weapons include extreme shock, breathing difficulties, giddiness, hypertension and "shaking inside" that last for days afterward (2010:xii). These are precisely the affects sought by the clubbers at Ground Zero, who revel not only in a dystopian spectacle of apocalyptic images and sounds, but in the actual sensation of being severely and violently disorientated. Since the 1960's, writes Goodman, recreational psychoactive drugs have been used to "magnify, enhance, and mutate the perception of vibration." By enhancing an apocalyptic sensibility, they "serve as both a sensory and information technology of affective experimentation," he continues (2010:xii). This is where McAuley begins to articulate the second sense of the apocalyptic affect, one grounded in a countercultural aesthetic of resistance and subversion. Sonic fictions, writes Goodman, are more than escapist vehicles of nostalgic sterility or nihilist capitulation, they are also "weapons in a postcolonial war with Eurocentric culture and Enlightenment reason over the vibrational body and its power to affect and be affected" (2010:2). For Afro-futurist Kodwo Eshun, "sonic fictions" are "audio hallucinations; subersive engines that generate a landscape extending out into the fertile immanence of possibility space" (1999:103).

While postmodern theory has focused, largely, on refining the Marxist semantics around the critique of capital, counterculture from the 1960's onward has, under the auspices of renegade academics such as Timothy Leary, 'tuned in' to immanent revolutionary possibility, 'turned on' via psychoactive substances and 'dropped out' of mainstream academia while embracing

a type of hyperstitional technological apocalypticism. This sensibility is radically affective, recreating the Situationist call for the dissolution of art into lived experience through selfmanagement and re-attunement through social, textual, artistic and sexual experimentation, psychedelic mind-altering substances and later, during the information era, the profound estrangement represented by Virtual Reality (VR) and cyborg body-modification. While 1960's-style "drop-outs ... all dreadlocks, beads and ethnic clutter" (2007:26), still inhabit McAuley's near-future, the prevalence of psychoactive drugs, body modifications and VRtype technologies indicate the influence of information-era cyberdelic culture (the subject of my first chapter) – a radical adaptation of 1960's counterculture. The massive 'be-ins' of the 1960's (culminating in Woodstock) had used a combination of audio-visual stimulation and hallucinogenic drugs to create powerful and immersive spectacles that countered the mediated spectacles of 'straight' society. During the 1980's, these counter-spectacles - similar, although less technologically advanced than the Ground Zero experience imagined by McAuley - were re-invented and restaged by acid-house and rave countercultures. Simultaneously, the cyberpunk literary movement (led by writers such as Sterling, Pat Cadigan, Rudy Rucker and Gibson) had revived the 1960's literary spirit, but under radically different auspices. The heroes and heroines of cyberpunk were no longer long-haired nature lovers, slackers, dropouts and psychedelic beatniks, but pierced and tattooed hackers, networkers and hallucinogen-abusing renegade scientists with a punk aesthetic and a desire to accelerate events toward the realisation of technological singularity. Together, these writers popularised the countercultural notion of cyberspace and the coming transformation of humanity under the signs and portents of the nascent digital revolution. Appropriating the terminologies and critiques of postmodern theorists, cyberpunks, biopunks and cybergoths (such as the CCRU and 0D) turned spectacular culture, simulation and hyperreality from abject into desirable states or frequencies, advocating an immersion in the alienating sensorama of late-industrial capitalism, as well as an acceleration of its effects and affects. From this perspective, the dystopian and alienating near-futures imagined by writers such as Gibson were perceived as somehow enticing and alluring, signalling an immanent apotheosis. McAuley's Fairyland shares many of Gibson's themes, although it rejects Gibson's disembodied visions of cyberspace in favour of the biopunk and cybergothic sense of affective immersion and horror-laden embodied transformation - tropes to which I will presently return.

The prevailing leitmotif of *Fairyland* is McAuley's homage to the redemptive and subversive hyperstitional spirit of 1990's cyberdelic or cyberian counterculture. During the late 1980's and early 1990's ravers and LSD-enthusiasts such as the cyberdelic luminary Marc Pesce (one of the pioneers of the World Wide Web or Internet) began to penetrate the burgeoning digital

industries of Silicon Valley (Davis, 1995:1). Composed largely of "psychedelic technology buffs" and science-fiction fans, the new fledgling corporate pundits of "cyberia" like Pesce and Steve Jobs began to work, as Goffman and Joy describe it, at "realising the vision that cyberpunk authors had popularised in their fictions" of a new brand of "sensory saturating, hallucinatory, shared, computer generated realities" (2005:351). Ruskoff defines the meaning of cyberia:

Cyberia is the place a shamanic warrior goes when travelling out of the body, the place an acid house dancer goes when experiencing the bliss of a techno-acid trance. Cyberia is the place alluded to by the mystical teachings of every religion, the theoretical tangents of every science, and the wildest speculations of every imagination. Now, however, unlike any other time in history, Cyberia is thought to be within our reach. The technological strides of our postmodern culture, coupled with the rebirth of ancient spiritual ideas, have convinced a growing number of people that Cyberia is the dimensional plane in which humanity will soon find itself. (1994:4)

The cyberian or cyberdelic vision, as outlined by Rushkoff in his investigative account of cyberdelic exuberance *Cyberia: life in the trenches of hyperspace* (1994), saturated the rave and acid-house cultures of the late 1980's that had mutated out of a bizarre fusion of 1960's 'be-ins,' 1970's funk and early 1980's industrial electronic music (pioneered by Situationist-inspired artists such as Throbbing Gristle and Cabaret Voltaire). This new dance culture embraced psychoactive drugs and computer-generated visuals, as well as savage, visceral and hypnotic industrial beat-structures and rhythms.

From their birthing grounds in Chicago, London and Detroit the 'vibes' spread to the far corners of the globe and then back again, generating their own homespun varieties and subgenres along the way, writes Goffman and Joy (2005:352). They continue to produce a myriad of computer-modulated and affect-laden spin-offs that still proliferate and define popular culture. It is this aspect of contemporary culture that dominates McAuley's vision of the near future. These musical subcultures form a crucial part of the contemporary affective turn, mapping the affective sense of the contemporary *fin de millénium* at the street level. They represent a novel social response – that of counter-recuperation – to the spectacle, articulating Gibson's famous cyberpunk dictum that the "street tries to find its own uses for things" (1986:102). New technologies as well as their effects and affects are, in the cyberpunk vision, morphed into endlessly new configurations and uses.

Cyberdelic rave counterculture also plays a key role in defining the neo-Situationist outlook of McAuley's cast of free-living, aging cyberdelic ravers, programmers and drop-outs who, like Alex himself, have a "finely tuned empathy for the zeitgeist of the end of the twentieth century" (2007:113). Some of McAuley's characters, such as the proprietor of Ground Zero,

Ray Aziz and the enigmatic political insurgent and club-owner Darlajane B, are described as having begun their careers as ravers and counterculture "hacktivists" in the 1980's and 1990's, and continued into the new millennium as "evangelists" of immersive technologies and the cyberdelic ethos that "information should be free" (2007:113).

We may in fact be at the brink of a naissance of unprecedented magnitude, heralded by the 1960's, potentiated by the computer and other new technologies, mapped by chaos math and quantum physics, fuelled by psychedelic drugs. This revolution is manifesting right now in popular culture as new music, fiction, art, entertainment, games, philosophy, religion, [and new attitudes toward] sex and lifestyle. (Ruskoff, 1994:4)

The term 'cyberdelic' describes the fusion of cyberculture (the emerging hacker ethos and the cyberpunk literary movement) and psychedelic subculture into a new counterculture of the 1980's and 1990's that was centred largely on the new genres of electronic music, as well as the new breeds of psychoactive drugs - many of which belonged to a wholly new breed of computer-designed psychoactive substances, pioneered by renegade biochemists such as the notorious Alexander Shulgin.xiv This influence is strongly evident, even in post-cyberpunk forms of sf such as biopunk, and the protagonist of Fairyland, Alex Sharkey, is a good example. While his dress-sense evokes fin de siècle dandyism, his skillset is modelled on that of Shulgin, the infamous biotechnological synthesiser of rave culture hallucinogens (such as MDMA or 'Ecstacy'). Alex is one of a host of cyberpunk and biopunk heroes and heroines (nicknamed 'psychonauts') who both synthesise and utilise psychoactive substances and the simulating power of spectacular technologies to remodel their own cognition. Tricia Sullivan's biopunk novels such as Maul (2003), and Lightborn (2010), for example, also take the narrative form of hallucinations experienced by drug-fuelled experimental subjects in the near future. The biopunk of Justina Robson, with its surreal psychedelic imaginary and indebtedness to the musical and information-technology-based countercultures of the 1990's and beyond, reflects a similar ethos. McAuley references Terence McKenna, another cyberdelic countercultural hero (an apocalyptic ethno-botanist and tireless promoter of cyberdelic counterculture), when he alludes to McKenna's notion that psychoactive drugs enhance affect and are inextricably linked to cultural innovation, technological acceleration and historical rupture (McAuley, 2007:64).xv Whereas McKenna, writes Rushkoff, favours the use of "natural psychoactive substances" such as psilocybin mushrooms and tryptamines to "prepare for the hyperdimensional shift" that technological change is engendering, other pundits of cyberia, such as Shulgin and Leary, actively promote synthesised hallucinogens as a way of further augmenting and extending what they see as an evolutionary symbiosis between human neurochemistry, technological development and psychoactive hallucinogens (1994:90). Biologist Rupert Sheldrake connects the naissance in the sciences that occurred

during the 1960's, and again during the information era, directly with the augmented perception of reality enabled by psychedelic experimentation (Abrahams, McKenna & Sheldrake, 1992:4). Plant concurs and claims that drug-usage and the experience of drug-laden affects have always shadowed technological and social upheaval. She cites the large-scale usage of opiates to combat the dislocation and frenzy induced by the industrial revolution, the popularity of cocaine during the heady early years of the electrified 1900's, the ascendance of psychedelics like LSD in the television-obsessed 1960's, and the proliferation of MDMA or 'ecstasy' in the networked 1990's as examples (1998:3). McAuley refers to this epistemic understanding of recreational substance abuse when Alex muses that "drugs directly reflect the stresses of the times" (2007:211-212).

Psychedelic counterculture during the 1960's embraced a 'back to earth' mentality. Cyberdelic counterculture – in keeping with the synthesised nature of information-era psychoactive drugs – advocates a move in the opposite direction, namely, into the fantastic mind-states of a new type of 'digital Romanticism' obsessed with artificiality, simulation, human-machine fusions, transcendence and neo-paganism. Timothy Leary, one of the luminaries of the 1960's psychedelic movement, re-emerged in the 1980's as a spokesperson for cyberdelic counterculture, and became an ardent promoter of biotechnology, computing, the internet and the nascent technology of VR. His proclamation that the "PC is the LSD of the 1990's" (Leary, 1994:43) alludes to the uncanny and psychoactive affect-laden capacity of information technology. *Fairyland*'s protagonist retains some of Leary's characteristics: McAuley styles Alex as a combination between a hacker and a psychedelic countercultural guru. Alex not only waxes lyrical about the synergies between psychoactive drugs and cyberspace in the style of Leary, but – in the vein of Shulgin – he is a biotechnologist who synthesises and self-experiments with new psychoactive drugs that enhance highly specific states of consciousness and sensation (McAuley, 2007:30).

The alienating and inhuman affects of McAuley's near future are amplified and subverted by the digital frequencies of electronically-produced musical styles. McAuley imagines styles such as "trashmetal" (2007:112), "technoragga" (2007:15), "subliminal tech," (2007:31) "trash aesthetique" (2007:88) and innumerable others that echo the apocalyptic and 'technoprimitive' tonalities of 1990's musical genres like techno, jungle and doomcore. The apocalyptic "sonic fictions" of "machinic dance musics" are described by Eshun as "frequencies fictionalized, synthesized, and organized into escape routes" through "real world [urban] environments that are already alien" (1999:103). In the science-fictional future of megalopian urban sprawl where underdevelopment and high-tech control intersect, electronic sonic fictions transmit an alienating affect, a desire both to escape and enact the dystopian

nature of urbanity in all its dread and tension. Visceral vibrations make their impact on bodies, brains, buildings, city streets and local economies. Alex hears the music played everywhere, from the backstreets of London to the *bidonvilles* (slums) outside Paris. "Since the late 20th century," explains Goodman, "urban machine musics in their sonic sciences of affective contagion have preoccupied themselves with generating soundtracks to sonically enact the demise of Babylon, mutating the early 20th century concerns of audio-futurism (war, noise, speed and sensation) into the construction of ephemeral, mutant, sonic war machines" (2010:73). In *Fairyland*, these mechanical 'bad vibes' signal more than the demise of Babylon; they gesture toward the impending extinction of biological humanity and its replacement by the bioengineered 'fairies' that embody a new kind of affective vitality.

These kinds of sonic fictions, which might be thought of as "subspecies of hyperstition" (Goodman, 2010:2) - announce, through their affects, an apocalyptic acceleration, a union with and celebration of an indeterminate future. Experienced under the influence of narcotics, and mixed-in with the destabilising audio-visual affects generated at clubs like Ground Zero or ZoneZone (see McAuley, 2009:13,14,15&113), sonic fictions generate an uncanny panic response. Marx had written that "the factory turns human beings into mere appendages of flesh attached to machinery," notes Reynolds, observing that this was exactly the aesthetic being embraced by clubbers and ravers (cited in Goffman & Joy, 2005:354). "People's whole rhythmic perception changed overnight," remarks Eshun (1999:186). The interplay of fear and dread that sonic fictions conjure up announce an affinity, not only with the repetitive communality of tribal rhythm signatures, but with annihilation; they are emblematic of an apocalyptic affect that resonates through the information densities of contemporary culture, making "impending human extinction [as] accessible as a dance-floor" (Land, 2011:344). Land's ideas are important for understanding McAuley's text, particularly as both Land and McAuley articulate the dark haecceity of the fin de millénnium in terms of a thirst for annihilation; a desire for human extinction as a correlate of mechanism. Although catastrophic, this desire for extinction contains the seed of an anastrophic inversion that stands radically opposed to the apocalyptic sf I analysed in my second chapter. Both Land, 0D and the CCRU, as well as authors of cybergothic and biopunk sf, read this immanent extinction in terms of radical transformation, conversion and revolution. For them, this thirst for annihilation marks not only an identification with alienation, but an embodied desire to remake humanity into something wholly other and alien. The music and psychoactive drugs that populate Fairyland, Cyberpositive and the Catacomic as well as many of Land's theoretical fictions extend the possibilities already inherent in contemporary sonic fictions that present the future in terms of affect. "We are talking seriously mutated worlds that never existed on this planet before ... and it's not just ideas - it's the new flesh," remarks Haraway,

alluding to the apocalyptic potentialities inherent in contemporary technological mediated popular culture (cited in Kunzro, 1995:3).

The 'new flesh' that Haraway refers to is the stuff of contemporary sf, the accelerating mutation of human beings through technological effects and affects. For those who give themselves over willingly to mastery of the machine, the body – or 'meat' – is deemed no longer necessary (Bell, 2001:220). In the cybercultural theory of Haraway and the biopunk sf of writers like McAuley, Robson and Sullivan, however, the 'meat' has become a site of radical technological and evolutionary possibility, no longer something to transcend, but something to transform and radically potentiate. When Alex is contacted by the mysterious 'gene-hacker' "Alfred Lord Wallace," the name recalls to him that "the idea of natural selection by survival of the fittest came to the original Wallace while he was tossing and turning in his hammock, burning with swamp fever in the Borneo jungle" (2007:41). For the disaffected Alex, who secretly burns with his own fever dream to hijack human evolution, Wallace's fever dreams seem prescient. "Darwin suffered from recurrent fevers too," he recalls; "evolution was a fever dream burning away in the fossilised hierarchies of the Victorian Age" (2007:41). McAuley's Alex dreams constantly of fairyland, a transcendent promise of new technology and a new version of humanity that waits to rise out of the ashes of a tired postmodern world. What began for him as "a fairytale told by his alcoholic mother – a children's story of endless possibility set in a world of definable limits" (2007:40) - now becomes a tenuous possibility. 'Lord Wallace' turns out to be an enigmatic geneticallyenhanced child prodigy, Milena, who designs algorithms and psychoactive viruses. What unites Alex and Milena is their shared penchant for harvesting the inherent evolutionary possibility of code (whether computer code or genetic code) by 'growing' their software and wetware. Once more, as McAuley demonstrates, the postmodern condition is not one of endless recuperation whereby the centre perpetually devours the margins, xvii but rather one in which new types of symbiosis (or 'code swopping' and 'information sharing' between different orders of life and even 'non life' or machines) as well as transversal recuperation (by the countercultural margins) is entirely plausible, if not inevitable. McAuley again turns to cyberdelic counterculture for inspiration. In this particular instance, his model for the type of "evolutionary computing" employed by Alex and Milena is cyberdelic spokesperson and computing visionary Danny Hillis. Like other cyberdelic thinkers, Hillis attempted to push the boundaries of the possible by suggesting ways in which dominant technological and cultural paradigms could be radically undermined and transformed. By turning to fields outside of computing, like evolutionary biology and dynamical systems theory, Hillis suggests ways for transforming the rigid boundaries not only of linear computing, but also those of an increasingly networked society and culture (see Johnson, 2001:170-174).

From the perspective of Alex and Milena's gene-hacking, and from the countercultural attitudes adopted by McAuley throughout Fairyland, the affective turn is not about seeking homeostasis, but rather about seeking freedom in systems operating at far from equilibrium conditions. Key to the novel is a very different understanding of the concept of evolution, one which is very far from the slow progressive change imagined by the early pioneers of evolutionary biology. For cyberdelic pundits such as McAuley, cybercultural theorists such as De Landa, as well as for aficionados of the new affective turn, evolution is seen to work through sudden and rapid shifts as well as through radical symbioses and transversal 'contaminations' between the natural and the artificial, the chemical and the biological. The evolutionary dynamic has, in this sense, been appropriated as a countercultural aesthetic that stands opposed to the postmodern cynism of theorists like Baudrillard for whom the shifting, diasporic and traumatic nature of postmodern life seems to imply a deadly cultural and lifedenying impasse. In eschewing postmodern pessimism, the new affective turn employs terminology such as 'schizoanalysis,' 'the Body without Organs' and 'accelerationism' to reconceptualise questions of nature and culture, as well as to rethink technology, society, time, and the ontology of bodily matter - a reformulation that I highlighted in my first chapter. We live in a world in which, writes Thrift, "the spaces in which humans can be together have progressively increased in scale as new forms of materials, which are also new forms of spacing, have allowed new kinds of social relation to exist" (2006:143). To articulate these new affective relations, writes Clough, theorists have begun to "open the human body to matter's informational substrate, drawing on the bio-informatics of DNA in biology, or quantum theory's positing of information as a form of measure" (Clough, 2007b:62).

Adapting the language of information-age sciences such as chaos mathematics, non-linear dynamical systems theory and quantum mechanics, theorists and writers who are articulating the new affective turn are able to conceptualise affect "as a matter of virtuality, indeterminacy, potentiality, emergence and mutation" (Clough, 2007b:62). New scientific theories suggest that nature more often than not works through processes of dynamic disequilibrium. This, in turn, has led to new ideas about affect and its importance in articulating the shifting direction, not only of social criticism, but of cultural theory and philosophy. The idea of dynamic disequilibrium, for example, is central to Haraway's *Cyborg manifesto* (1991), which draws on the work of microbiologists such as Lynn Margulis and Dorian Sagan who, from the early 1980's onward, began to challenge the linear and filiative evolutionary model of Darwinism by demonstrating that evolution has progressed through parasitic or symbiotic relationships that show no affinity (or fidelity) to humanly derived

categories of classification such as phylum, order, genus or species. Termed "endosymbiosis," Margulis and Sagan's work points to a virtual multiplicity in nature and culture from which novelty emerges – "a move seized upon by countercultural thinkers who moved away from privileging homeostasis and began thinking in terms of information, complexity and open systems existing far from equilibrium," writes Clough (2007a:12).

In his 2001 book *Emergence*, new-media theorist Steven Johnson draws on the work of Margulis and Sagan, as well as the perspectives of theorists such as De Landa, to describe a new decentralised computing paradigm based on non-linear paradigms and the adaptive model of gene-swapping bacteria and slime-molds. xviii For Johnson, the "creationist" or "pure control" notions of programming that held sway during the first few decades of software has given way to a new conception. "The new generation [of software] is profoundly neo-Darwinian," he writes, explaining that the new model of "biological computing," developed by Hillis and evolved by interactive gaming programmers during the 1990's, weds the "formidable powers of natural selection" to the number-crunching capabilities of computing (2001:170). In this scenario of biological computing pioneered by Hillis, the programmer, having created the initial conditions and parameters, takes a back seat, stepping in only occasionally to tweak his or her sorting program - a program that works with "digital genepools" of "mini-programs" that "compete in working out the fastest way to a given solution" (2001:171). With only the fittest pieces of code being selected for the next iteration by the controlling program and "predation sub-programs" installed to prevent stasis and encourage adaptability, what we have here, opines Johnson, is the essence of biological evolution, "mix, mutate, evaluate, repeat ... and experiment" (2001:171). The first part of Fairyland, called 'Edge Gliding,' refers precisely to this manner of non-hierarchical and non-linear engineering. Alex's artificial life experiments, with its niche predators and competing digital 'species,' resemble the biological computing models pioneered by Hillis (see McAuley 2007:50 and Johnson 2001:170-171). When, with the help of the mysterious 'Lord Alfred Wallace,' Alex tweaks his Artificial Life modelling program to solve a "predator-prey imbalance," what had started out as a fringe digital species (the "edge gliders") evolves through endosymbiosis to become its apex predator (2007:51). This metaphor – of the virulent margins absorbing and becoming the new centre in an endlessly creative and evolving feedback loop - is an ironic reversal of Baudrillard's take on the process of recuperation whereby the centre continuously absorbs and sanitises the margins, leaching them of their creative potential (see endnote xvii). It is also a metaphor that McAuley uses to allude to the ascendancy of a new 'edge' species, the biotechnologically-created fairies.

When McAuley later describes Milena's relationship with the new-fangled race of fairies, he alludes to Hillis' experiments with emergent behaviour in computing, based on the "selforganisation of cells in a slime mold" (2007:110).xix As the programmer of a new destiny, Milena, co-creates the first fairies, unleashing them on the world and allowing them to evolve independently, only stepping in occasionally to 'tweak' her creations or sample the fruits of their wild creative potential (2007:111). This loosening of control or 'radical experimentalism,' as Johnson explains, represents the quintessence of the information era, the realisation "that the confusion is part of the show" (2001:175).xx In this manner, the welter of the spectacle seems to have produced a new feedback loop of affective hyperstitional possibility, a 'coincidence intensification' whereby any novelty that arises at the edges catches the attention, not only of the mainstream, but also of the avant-garde youth who begin to feel that particular innovations (such as biological computing, hacking, crafting electronic dance music, or designing 'wetware') are "legitimate channels of self-expression" (Johnson, 2001:178). This feedback loop generates a profusion of novelty and innovation "that would have been unthinkable even a decade ago," notes Johnson (2001:178). As the boundaries between electronic music, computing, art-production and engineering begin to blur in strange and heady new combinations, driven by new fads, fashions and a keen desire to experience the edges of control, a new affective turn emerges – in theory, in fiction and in media culture at large - that stands in sharp contrast to Baudrillard's vision of hyperreal sterility, the anaesthetisation of the imagination and the recuperation of the margins by the corporate mainstream.

The third industrial revolution & the archaic revival

At the close of the novel's first part, 'Edge gliding,' McAuley's narrative follows Alex and Milena as they harvest the emergent properties of novel gene and code combinations to devise a virus able to break the biochemical controls that constrain the vat-grown 'dolls,' enabling them to think independently. This newly emergent conscious species, the 'fairies' are, like their mythical and Gothic prototypes (the feys, lamias, trolls, vampires and goblins), creatures of wild nature – adaptive, creative and completely out of control. They emerge as autonomous and feral creatures in the second part of the novel, 'Love Bombing,' as Alex follows the newly hatched "fairy host" to Paris where they set up camp in the ruins of the former Euro-Disney. Here McAuley alludes to Baudrillard's *Simulacra and simulation*. In this text, Baudrillard describes Disney's Magic Kingdom as the epicentre of a plague of hyperreality that spreads like a black smog, numbing and killing the human imagination with its

recuperated and sanitised fakes. Far from being the "little bubble of fairyland" that Alex nostalgically recalled in 'Edge gliding' – and which Baudrillard refers to as a deadly and sentimentalised illusion – the Magic Kingdom that is realised in 'Love Bombing' defies any taint of mawkishness. Here, "a decade after [Euro-Disney] went into receivership for the third and final time, the Magic Kingdom has come alive again ... Fairyland has come into the light, no longer off the physical map, but rising into it, rising into history" (2007:119).

In McAuley's version of the Magic Kingdom, a sense of supernatural horror undercuts any sense of hyperreal sterility in which, as Botting writes, the passive spectator is "intoxicated by the realism of images generated by special effects" (2008:170). Technical artifice exceeds simulation as McAuley's fairies breed and unleash a smog of "wind-born hyperevolutionary fembots" (2007:129). Meanwhile, bioengineered "goblins, vampires and other night terrors" stalk the slums around the reclaimed ruins," kidnapping fembot-infected children whose contaminated blood, neural tissue and organs are sampled for anti-bodies, which the fairies utilise to further evolve their own biotechnological tinkering (2007:130). In the process, more potent mind-warping mind-viruses are engineered and released on the wind. Under the aegis of such an increasingly affective hyperreal spectacle, McAuley's near future now assumes the mantle of a Gothic fairytale swathed in supernatural horror. As reality morphs into embodied fantasy on the wings of ever-more spectacular biotechnologies, Fairyland becomes a treatise on the very nature of what Virilio refers to with dread and misgiving as the "third industrial revolution ... the revolution of transplantations ... the introduction of miniaturized technology [directly] into the human body" (1996:2). Whereas "traditional Gothic forms and images" are concerned with preserving the "human figure," writes Botting, cyberpunk's figures "disclose the human form as nothing but surface ... utterly evacuated of substance and corporeal identity" (2008:171). Luckurst points out that biopunk combines Gothic and cyberpunk styles in order to stage a "sly rewrite of postmodern anxieties," exploring horror in terms of an affective sense of "embodiment in the technosocial world" (2005:219). While the ruins of Disneyland point towards the nostalgic sense of affect (the equation between desire and an unobtainable object of fantasy), the fairies point toward affect as an embodied and lived intensity.

McAuley's reworking of Disney's sentimentalised world of fairytales involves a journey backwards – even further back than 18th century Gothic to the more virulent and dangerous Old Ones of archaic folklore and myth. He imagines fairies as folkloric avatars of vegetable (or natural) intelligence that continue to resonate as iconic archetypes deep within the human psyche, shadowing the scientific attempt to model novel biological and post-biological territories.

The next great step is the merging of the technologically transformed human world with the archaic matrix of vegetable intelligence [wild nature] that is the transcendent other. (McKenna, 1992:93)

Taking his cue from pundits of cyberia such as McKenna, Pesce and Frazer Clark, McAuley stages a version of McKenna's 'archaic revivalism' in the sf context of futuristic technogical intrusions. This restaging is another nod in the direction of cyberdelic counterculture, and the actions of Pesce who, in the early 1990's, began to publically advocate a type of digital paganism and ritual electronic magic. xxi For Pesce, writes Davis, the networked subcultures of the contemporary period have grappled with changing perceptions of time and being that new technologies are engendering by productively borrowing from affect-orientated practices such as paganism, voudoun and shamanism (1998:192).xxii Fairyland, particularly in its third and final segment, 'The Library of Dreams,' brims with this sense of archaic revivalism. It is dense with allusions to Robert Graves' idiosyncratic pagan ode, The white goddess (1948), Celtic folklore, Romantic mythopoesis and the early 20th century fin de siècle magical revival under the auspices of renegade sorcerers such as Crowley and Spare. The novel's title and opening epigraph by neo-pagan cyberdelic enthusiast Frazer Clark confirms this influence: "... the Goddess starts her endgame in Britain, where nobody's looking" (2007:i). By merging Celtic folklore with cyberdelic counterculture, McAuley recalls Clark's uniquely 'British' advocacy of digital neopaganism and cyberculture.xxiii Rushkoff describes Clark as "a personality from ancient pagan times" (1994:121) and states that "it's easiest to get a fix on the neopagan revival in Frazer's homeland, where the stones still resonate from the murders of over 50 million pagans throughout the Dark Ages" (2007:143). According to Clark, the police suppression of 'rave culture' - such as the infamous Criminal Justice and Public Order Act passed by British prime-minister John Major in 1994 (banning, amongst other things, outdoor festivals that played "repetitive beats") – can be likened to the violent historical suppression of paganism. xxiv Clark describes "digital pagani" as having "abandoned organised rules of logic in favour of reality hacking ... riding the [information] waves, watching for trends, keeping an open mind and staying connected to the flow" (1994:144). This is the very spirit of revivalist counterculture which McAuley's Alex and his fairy offspring have imbibed. Through his digital alchemy, his keen sense of the countercultural zeitgeist, as well as through his active empathy for the fairies (the embodiment of Clark's networked pagani), Alex is described as a "sorcerer of the new-edge" (2007:30) with a penchant for seeking gnosis through the agency of new technologies.

Sir Arthur C Clarke, one of the doyens of modern sf, once famously declared that "any sufficiently advanced technology is indistinguishable from magic" (cited in Davies,

2010:140). Toying with this concept, McAuley appropriates the vocabulary of Gothic fantasy and employs them with a Debordian flair for détournement, making frequent allusions to the darker Romantic visions of fairies and re-casting them within the unambiguously science fictional setting of a nanotechnological future. As sf critic Matthew Cheney observes, McAuley's wedding of Romantic vision, fantasy and hard-sf "links the forward momentum" of science fiction "to the backward glance of Romanticism" and the Gothic fascination with legends and folktales (2008:1). Science-writer and physicist Paul Davies explains that "we are so wedded to the human concept of the machine as, for example, chunks of metal with buttons and knobs, or as information being processed that we find it hard to conceptualise technology involving [other] levels of manipulation" (2010:144). Through the biotechnological fairies, McAuley reconceptualises technology along the lines suggested by Davies and Haraway, whose cyborgs are "hybrids of biology morphed by technology" that are "resolutely committed to perversity" (1991:151). In The eerie silence (2010), for instance, Davies examines how anthropocentricism as well as scientific and cultural bias has shaped the manner in which we conceptualise technology and its affective capacity. Deleuze and Guattari, furthermore, suggest that the 'unnatural' nature of technology and its affects – both constraining and liberating – are simply instances of nature that defy the human conception of 'natural:'

Unnatural unions are the true Nature spanning the kingdoms of nature ... [they are] entirely heterogenous ... a becoming rhizomatical ... a becoming communicative or contagious ... a creative involution ... a multiplicity. (1988:238-239).

Davies appears to be in complete accord with Deleuze and Guattari's schizoanalytical perspective as well as with the affect-orientated 'Gothic materialism' of 0D and the CCRU, both of which attempt to wed the mystical and the scientific. Like sorcery, avers Davies, technology functions as a type of "nature-plus" by simply adding an additional layer of complexity to nature's already existing patterns – a value which functions as "a very specific amalgam of constraint and liberation" (2010:145). All of these writers and theorists – including McAuley and authors of cybergothic sf – are manifestly attempting to cast mechanism in a new light by reading it in terms of a different register – one that disturbs and agitates the borders that have been erected between nature and artifice as well as between mysticism and science by Enlightenment and post-Enlightenment reason. In *A thousand plateaus* (1988), for example, Deleuze and Guattari imagine "deteritorialised machines" that are "unfixed" from these "territorialised" cultural conceptions that stultify human perceptions of nature and culture divides by alluding to alchemy and shamanism (see 1988:239-252). Their work endeavours to reclaim pre-modern attempts to think non-dualistically as a way of transforming what they perceive to be a postmodern impasse orientated around the inability to

think beyond division and separation. There already exists a venerable precedent for thinking along these transgressive lines. The ancestors of modern chemists, alchemists, described their attempts at elemental synthesis as "de rerum contra naturam" or as a manner of "work against nature" that sought ways of "unfixing cultural perceptions" of nature conceived of along linear or logical lines, writes Alexander Roob (2001:11). There is nothing "unnatural" or "anti-nature" about such formulations, write Deleuze and Guattari; "nature frequently appears to work against itself" (1988:238).

McAuley's emphasis on the importance of an intuitive approach is also framed by allusions to alchemy. When he explains the scientific minutiae of Alex's "organic synthesis" in a detailed passage, McAuley notes that biochemistry "is still a black art resembling alchemy" requiring a keen appreciation of "synaesthesia" and a "sharpened intuition" (2007:32). Roob explains the confluence between alchemy and synaesthesia by averring that anyone who engages with the symbolic language of the alchemists will automatically find him- or herself in the arena of nature, working with "a chaotic system of references [and] a network of constantly changing codes ... in which everything can apparently mean everything else" and in which sensory data are seen to overlap (2001:11). In keeping with the non-linear and affective line of inquiry that Deleuze and Guattari outline in *A thousand plateaus*, Roob suggests that the "thought-pictures of the alchemists" – like the affective hallucinations experienced by psychonauts, sorcerers, writers, artists and shamen described by Deleuze and Guattari (see 1988:239-252) – are attempts to bridge "sensual stimulus and intellectual appeal ... aimed at intuitive insight into essential connections, not at discursive ability" (Roob, 2001:1). Again, we find ourselves in the uncanny and non-linguistic realm of the affect.

McAuley attempts to conceive of technology in this affective manner, not only by referring to the styles and intensities it has generated at the street level, but also to the supernatural intrusions that it generates in the human psyche. Like other writers of sf who employ elements of hyperstition in the anastrophic sense, he takes into cognisance the fact that the technological 'work against nature' may hasten evolution, or – as Land puts it – "dissolve the screen" that ordinarily occludes 'alien' information and novelty and, in doing so "fuse with the source of the signal and liquidate the world" (2009:1). Of course, the 'world' that Land refers to is the world conceived of in anthropocentric terms, namely the premise that the "human form" is, as Virilio suggests, "the climax of god's law" and that "salvation lies in staying within the current god-ordained framework of what it means to be human" (Virilio cited in Zurbrugg, 1999:183). This humanist conservativeness not only overlooks the dilemma of who decides precisely what constitutes the 'ordained framework' of an ultimately

unknowable creator, but also ignores the mainspring of evolutionary biology (namely, that only creatures able to adapt to ever-changing conditions and circumstances survive).

In the third part of *Fairyland*, 'The Library of dreams,' McAuley imagines, along the lines of the science-fictional grotesque, how the human form may be mutated via a type of endosymbiosis that bridges the gap, not only between biological and technical evolution, but also between Romantic mythopoesis and scientific thinking. Having internalised technology in novel versions of 'nature-plus,' the fairies – aided in their final apotheosis by the biotechnological tinkering of Alex – have, in effect, become a new humanity. In his playfully transgressive and hyperstitional vision, McAuley presents humanity becoming unfixed under the spectral glare of new information technologies. New conditions have arisen in the world, and humanity in its present form is imagined being replaced by its mutating, rapidly evolving and infinitely adaptable biotechnological offspring. In McAuley's varied instances of sf – from his biopunk to his new space operas – writes Clute, we find a common affinity for contingency and evolutionary metamorphoses: "that which flourishes in one cycle is seen as mulch for that which is born to rule the next" (2003:75).

Affect-laden intensities & hallucinatory gnosis

Alex, who is both programmer and biochemist, not only has an affinity with the 'irrational' narratives of the occult (see 2007:283-285) but, like his cyberian counterparts, has a knack for gleaning knowledge using affective shamanic techniques that involve the use of hallucinogenic substances. In Fairyland, McAuley's archaic revival rides on the wings of "new succubi" (2007:283) – hallucination-inducing biotechnologies injected directly into the bloodstream that dispense with the need for externalised communications media. Employed as "biological microscopes," hallucinogens are ostensibly "technologies" that have, for countless millennia, enabled 'primitive' shamans to operate at the molecular level of plant chemistry and biology, writes Narby (1998:68). Having studied the paradoxically complex plant knowledge and ritual techniques of Amazonian shamans, as well as documenting their oral narratives, Narby concludes that their detailed and exhaustive pharmacopeia is, by their own detailed testimony, derived from intensive and intuitive knowledge about complex plant combinations and their uses gleaned under the influence of hallucinogens. combinations – some of which contain a bewildering variety of plant species from different jungle habitats - baffle pharmacologists who, armed with high-end laboratory equipment and a detailed scientific knowledge of plants, are stunned that pre-modern people intuitively know

about coupling "specific brain hormones with specific monoamine oxibase inhibitors" in order to produce particular effects in the nervous system (1998:68). Through hallucinogenic trance, writes Narby, "shamans claim to have discovered, for example, the recipes for over forty different sources of muscle paralyzers whereas modern pharmacology has only been able to imitate their plant-derived formulas" (1998:68).

Narby's insights are corroborated by biologist Richard Evans Schultes and biochemist (and LSD-discoverer) Albert Hoffman in their seminal cyberdelic text *Plants of the gods* (1992), which documents the extensive synaesthesic and mind-expanding properties of hallucinogens, as well as their venerable shamanic uses.xxv McAuley echoes the widely held cyberdelic faith in hallucinogenic gnosis and shamanic vision as necessary for guiding the evolution of technology and humanity into novel territories. The ability of hallucinogenic plants to synergise with and mimic human neurochemicals, as well as spread their effects throughout subcultures and societies of users and non-users alike, makes them examples not only of advanced biotechnologies, but also sophisticated communication technologies, writes Plant (1998b:3). Called "telepathy inducers" (McKenna, 1992:232) by early ethnographers who studied their effects on shamans, hallucinogens have since become legendary for their uncanny ability to induce profound insights and act as "social de-conditioning agents" (1992:232). Dubbed avatars of "translinguistic intent" (McKenna, 1992:262), hallucinogens are the perfect agents of affective "hyperconnectivity." xxvi Alex's experiences with hallucinogens not only function to de-condition him from society, but prime him for his sorcerous role as a biotechnological "Merlin" (2007:286). Alex knows how to navigate and tweak his way intuitively through the dense molecular structures he manipulates on his computers because of his "intimate knowledge of psychoactive states" (2007:32).

Throughout *Fairyland*, McAuley recalls the importance of shamanic affective vision – a ritualised losing of control that facilitates access to intuitive gnosis. Alex repeatedly engages in shamanic acts of ecstatic drug-taking in order to see new patterns and realise novel combinations. For fairies, however, this ecstatic and hallucinatory state of operation is a permanent reality. Able to "live in unbuffered virtuality," McAuley's 'pagani' can access "limitless information space" without the aid of external technological interfaces like keyboards, screens or VR-helmets (2007:343). They live in a perpetual state of psychoactive stimulation and therefore inhabit, permanently, an immersive affective paradigm – akin to that imagined by Deleuze and Guattari as the aesthetic and radically affective domain of the sorcerer and the drug experimenter:

If the experimentation with drugs has left its mark on everyone, even non-users, it is because it has changed the perceptive coordinates of space-time and introduced us to a universe of microperceptions in which becomings molecular take over where becomings-animal leave off [and we are transformed into] fluid luminous beings made of fibres. (Deleuze and Guattari, 1988:249).

With no border between themselves and the external world, McAuley's fairies are described as living in a world of "unthought," in which they are able to "intuitively navigate" the "inherently pliable state of matter" in novel ways (2007:195). By constantly "infecting themselves with nanoware effectors that induce the production of psychoactive chemicals in specific neurons," McAuley's fairies are literally able to manufacture their own conscious 'reality' (2007:196). Having been bioengineered from human cells, McAuley's fairies are imagined as sharing the same cellular memory as humans, and their liberal use of psychoactive 'nanoware' is envisaged as "liberating the old (human) stories locked inside" their neurochemistry and cells (2007:197). McAuley describes the fairies as embodying conventional albeit fearful mythic forms - styling themselves as the long-suppressed Old Ones. Yet, even these archetypally embodied forms are imagined by McAuley as a mere shadow-play, the "ephemeral larval stage" of a new creature crawling from its anthropomorphic cocoon (2007:197). As the fairies self-evolve, McAuley describes the need for "human interference" in their evolution subsiding. Eventually, as the fairies mature, they no longer need humans to reproduce. "As humans retreat into their dreams," concludes McAuley, these "brave new creatures will claim the world" (2007:372).

The burning presence of the future

Technology, in the postmodern conception, writes Royle, "has produced a kind of toxic side effect; a new human experience of strangeness, anxiety, bafflement and intellectual impasse" (Royle 2003:22). For biopunk authors such as McAuley, the only viable response to the monstrous presence of humanity's technological future lies in embracing affect in its Deleuzo-Guattarian sense, with a playful perversity and a sense of lived contradiction. An example of sf alive with what Clute refers to as "the burning presence of the future" (cited in Person, 1999:1), *Fairyland* styles its supernaturally-flavoured aesthetic response through exhaustive references to the clothes, music, trends, furniture, consumer gadgets, social networks, street 'smarts' and recreational drugs that form part of the affective sphere of cultural life. The apocalypse, as McAuley describes it, is a spectacular affect – an emotive frequency, both visceral, uncanny and hyperstitional, that appears to haunt the very fabric of contemporary spectacular culture. This dark haecceity refers to a visceral absorption in an

increasingly pervasive electrosphere – a layer of artificial communications networks in which contemporary humanity finds itself inextricably and fearfully embedded. Within this mechanosphere, bleeping text-messages, alarms, news-flashes, bass riffs from anonymous boom boxes and incessant traffic noise filter into all aspects of life and, one imagines, directly into the unconscious of the human race, where it interfaces with older mythological structures. xxvii

In Fairyland, McAuley reinvents the pagan vision of nature as alive and animated with spectral forces, twisting the fetishes and fantasies of popular media culture into a hyperstitional focus. McAuley imagines the expanding sphere of technological devices, networks and sonic fictions engendering an ambiguous aesthetic response. In the catastrophic sense of apocalyptic sf this sensibility is driven by a Decadent sense of things collapsing; the so-called "haemorrhaging of the real" that Kroker associates with the apocalypticism of theorists such as Baudrillard and Virilio (1992:124). The theory-fiction of these thinkers, as Nicolas Zurbrugg notes, is riven by visions of "hyperstimulation, sensory confusion, [and] technological dependency or addiction" in which technologies assume the guise of "a plague of phantoms that dissipate our thoughts" (1999:180-181). For scholars like Baudrillard and Virilio, the uncannily affective dimension that new technologies have unveiled makes them unplaceable and fearful, engendering an equivocal response of animation and agitation (see endnote vii). As McAuley demonstrates in Fairyland, however, the intrusion of the electrosphere or mechanosphere can be imagined as enhancing rather than dissipating the capacity of the human body to 'affect and be affected.'

McAuly presents drugs like "hyperghost" as alluring precisely because they enhance the "flicker effect" of information media, revealing "ghosts in the electronic glimmer" (2007:15). This supernatural biotechnological intrusion is conceived of along the lines of the "soft, fluid fusions" imagined by 0D (1995:167). Contemporary sonic fictions synergise with recreational psychoactive drugs, "intensifying" the sense of being "in an off-world state," writes Eshun (1998:135). Conjuring into being a psychogeography of sounds that recall the tropes beloved of affect-oriented theorists such as Deleuze and Guattari – the grinding of tectonic plates, the spinning of chemical clocks, the roar of cosmic background radiation and the ebb and flow of unknown forces – the "alien technomusical" and science-fictional "artefacts" materialised during the information era represent an "affective response," orientated around a "hyperstitional aesthetic," writes Goodman (2010:99). Hyperstitional sf, as I have argued, is orientated around perceptions of speed and slowness; a supernatural sense of slipping in amongst things in order to articulate a new kind of state.

Both sf and sonic fiction can be read as affective responses to the violent social destabilisations of mechanism. They are counter reactions to the intrusion of forces analogous to those that Botting (2008:110) describes as heralding the birth of 18th century Gothic fantasy, save that the force of mechanism's intrusion has grown exponentially in extent, influence and hazard. The same intrusion inspired opium-laced Romantic prose and poetry; an impulse, which as Tim Blanning suggests, is being restaged by contemporary youth culture "with its Romantic imperative to thrust aside reason [through] its strong emphasis on narcotics [and] the wonder world of the night" (2011:185). The "rhythmic breakthroughs" produced by information-age countercultures alone have been "countless," opines Goodman (2010:192). "Feeling around in the dark, in the toxic smog of megalopian pressure, when no hope seems to exist, when no [socio-economic] stability persists, rhythmic decisions still get made, collectives mobilised and potential futures produced" (2010:192).

This same compulsion finds expression in contemporary sf and its analogous attempts to facilitate narrative escapes from mundane reality. Congealing like pearls around the inflamed grit of Baudrillard and Virilio's sense of hyperreal catastrophe, the 'driftworks' of 0D and the CCRU, the cybergothic sf of Stross, Simmons and Harrison, as well as the affect-laden biopunk of McAuley, restage the fusion of mechanism and supernatural horror that can be detected in Gothic and dark Romantic styles. "Thinking about electronic objects and forces" in terms of the "irrational" in this manner, writes Dunne (2009:117), enables our "thoughts to wonder" over the "dreaminess" that they might inspire, thereby "opening them to more interesting interpretations" than is possible if we simply consider them in terms of "entropy" or in relation to "ruthless control and efficiency."

Sf in its various permutations continues to evolve new narrative responses to the dilemmas raised by the postmodern condition of crisis of mechanism, venturing beyond a perceived impasse to worlds of hybrid and exciting possibility. Throughout this thesis I have considered hyperstition as an aesthetic response that is orientated around this potential; one that is built around the horror of historical breakdown, the unexpected consequences of new technologies and the ontological ruptures of postmodernity. Hyperstition, I argue, is an inverted rejoinder that bears witness to the *fin de millénnium*'s dark haecceity. Authors writing in this mode conceive of the future's 'burning presence' as a raging sea of forces and intensities that tear away at cultural moorings and certainties. This tearing away is suggested by the evocation of supernatural agencies and instances of sublime horror, conceived of in terms of the different perceptions of rhythms, movements and speeds that new technologies and novel attitudes toward them have made possible. The experiences and events thus described are those of

(post)humans in a time that is yet-to-come – a time, however, which is also very much our own.

I have investigated varied specimens of the genre of sf and related theory that I consider to be exemplary of the 'thisness, hereness and newness' of our curious times. There are, of course, a multitude of works of contemporary sf and theory that explore other aspects of the postmodern moment and articulate different exudations of style. My intention has, however, been not only to explore those shadowy instances of cultural augury in which the dark dreams of the present have been distilled, but to illustrate the continued relevance of sf as an indispensable mode of speculation in these future-shocked times. In the "strange electrical gardens of sf," as Dunne writes, "science and pagan folklore meet," reminding us of the uncanny "interconnectedness of nature and technology," human and machine (2009:116). This, as I argue, is a relation that can productively and hyperstitionally be framed as apocalyptic affect – an intensity, both creative and destructive, that must be made more culturally visible if we are to find more meaningful ways of inhabiting an environment gradually becoming more hazardous and unstable.

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ⁱ At any moment "hundreds, perhaps thousands of stimuli" - natural or artificial in origin "impinge upon the human body and the body responds by infolding them all at once and registering them as an intensity," explains Eric Shouse (2005:1). This intensity "is affect ... pure expression ... pure potential ... unformed and unstructured ... something transmissible between bodies," something other than emotion or feeling (ibid). Affect, he writes, is "a non-conscious resonance" (ibid). One example that Shouse gives to illustrate affect is the 'unstructured emotion' experienced by an infant before he or she has formed the conscious faculty to interpret that emotion as a feeling (ibid). For Deleuze, affects are states of transition between bodily power and intensity (i.e. a state of either 'decrease' or 'increase'), either empowering or destroying the desire that keeps an individual striving to exist (1998:141). To return to Shouse's analogy, the infant cries to express a primal striving or passion. Thus, when the infant experiences a decrease in its affective capacity – a decrease in its power to affect or be affected - it cries to express a primal urge for satiation. Brian Massumi distinguishes between feelings and emotions on the one hand, and affect on the other. Affect, he writes, is a term "often used loosely [and incorrectly] as a synonym for emotion" (1996:221). Whereas emotions and feelings relate to "the socio-linguistic fixing" of a personal experience, affect relates to the "pure intensities associated with non-linear processes" (ibid). For Massumi, the closest English-equivalent word for affect is "immanence" – the site of "passions and intensities" (1996:226). He goes on to compare affect to the critical point in chaos theory "at which a physical system paradoxically embodies multiple and normally exclusive potentials, only one of which is selected" (ibid).

ii As Anthony Dunne argues, the contemporary "electroclimate defined by wavelength, frequency and field strength" arises from a confluence between natural and artificial landscapes;" a convergence that animates the electronic 'fictions' of postmodern composers such as Alvin Lucien, John Cage and Stockhausen, who sample and express electromagnetic frequencies in order to open themselves "to a music of the whole earth" (2009:103-104). In exploring this vibrational ocean, he writes, contemporary electronic artists have employed the affective terrain of horror to sensually explore the contours of the uncanny merger between the natural and artificial, the mysterious nature of the 'world-in-itself' and the impenetrable limits of human cognition (2009:104).

[&]quot;Authors," writes Deleuze, "are astonishing diagnosticians or symptomatologists. [They are] clinicians, not with respect to their own case, nor even with respect to a case in general; rather they are

clinicians of civilisation ... physicians of culture [who] detect signs or symptoms that reflect a certain state of forces" (1998:xvii).

iv Deleuze writes that "a text is merely a small cog in an extra-textual practice. It is not a question of commenting on the text by a method of deconstruction, or by a method of textual practice, or by other methods; it is a question of seeing what use it has in the extra-textual practice that prolongs the text. ... It is not a question of its textuality, or even its historicity, but its vitality, that is, its tenor of life" (1998:xvii). Deleuze's writings on literature are primarily linked with the problematic of life. "What is essential for me," he writes, is "vitalism" or a conception of life as a non-organic power. ... Everything I've written is vitalistic" (1998:xvii). In *What is philosophy* (2009 [1991]), Deleuze and Guattari describe their collaborative approach as an attempt to find "variable relations of mutual resonance and exchange" not only between themselves as philosophers, but between oppositional domains that are usually determined by their own variant systems of thought and classification. These 'oppositional domains' include nature and culture, human and machine, literature and philosophy as well as art and science. (2009:8). This is an outlook that seeks to find openings or "lines of flight ... that allow thought to escape from the constraints that seek to define and enclose creativity" (2009:8).

Vitalism and contemporary thought, Joseph Chiari defines the animating principle of vitalism, or élan vital, as "the informing spirit which, through man, evolves into consciousness and therefore gives man his favoured position as the goal and the apex of creation" (1992:254). This manner of anthropocentricism, prevalent in many of the debates around vitalism, is countered by Deleuze and Guattari, as well as by an array of new-materialist theorists such as Anthony Dunne and Jane Bennet who describe vitality as a non-hierarchical type of movement or process that does not favour humans specifically, but includes, as Bennet writes, "a heterogenous series of actants with partial, overlapping and conflicting degrees of power and affectivity" (2010:33). This anti-anthropocentric attitude informs the new theories of affect chronicled by Bennet in Vibrant Matter (2010) in which, as per Deleuze, élan vital is not conceived of as an external force or spirit favouring one form of materiality above another, but something that inheres in all forms of matter-energy, including technological objects (2010:143). This life-force, writes Deleuze in Bergsonism (1991), is "a virtuality in the process of being actualised, a simplicity in the process of differentiating, a totality in the process of dividing up" (1991:94).

vi For Deleuze, as Bennet avers, the task of writers is to express this immanence, this "great Alive," which is greater than purely individual affects (2010:54).

vii As Marenko explains, referencing Spinoza, affect is a matter of encounters: "an encounter is good [i.e. productive] when my relations are compounded and my powers increase (eg. when I obtain food); an encounter is bad [unproductive] when my relations are dissolved and my powers decrease (eg. when I consume poison). An 'encounter' is therefore always an encounter between different horizons of affectivity or different states of transition in the power of bodies [to affect and be affected]" (2010:138). Today, she writes, these encounters increasingly occur among humans and technological objects or networks (ibid). It is in this context that we may understand the 'diminishing of affect' that concerns postmodern theorists such as Baudrillard, Botting and Virilio as well as authors such as Ballard, for whom contemporary technologies function as a kind of poison or unproductive encounter. For these theorists, writes Stephen Metcalf, technology which was once deemed to be an empowering "symbol of human progress" is now seen as something that threatens to "dismantle human agency" altogether (1998:112). In Ballard's Crash – a text that I will explore presently – Ballard, writes Metcalf, describes "a terminal eroticism of technology as it collides with the human body and shatters it into fragments, violently hollowing out a subjectivity which is deposited as waste (1998:112). This sentiment is repeated by Baudrillard in The transparency of evil (1993) when he discusses the internalization of machines and networks as heralding "the end of the body, the end of its history, the end of its vicissitudes ... [a sign of] the individual becoming nothing but a cancerous metastasis" (1993:119)

viii As Dunne writes in *Hertzian tales: electronic products, aesthetic experience and critical design* (2008), the 'electrosphere' in which contemporary humans find themselves immersed engenders an uneasy paranoia about border violations and contagion. "We are experiencing a new kind of connection to our artificial environment. The electronic object is spread over many frequencies of the electromagnetic spectrum, partly visible, partly not. Sense organs function as transducers, converting environmental energy into neural signals. ... Electronic objects are ... machines with extended visible

- skins. ... They couple and decouple with our bodies without us knowing. Working on microscopic scales, often pathogenic, many electromagnetic fields interfere with the cellular structure of the body. Paranoia and horror accompanies dealing with such hertzian machines. How do they touch us? Do they merely reflect off our skin, or the surface of our internal organs?" (2008:107).
- ix Biopunk narratives, as Clute writes, describe "a destabilised, invasively fragmented world, hotly dangerous to any traditional sense that humans are stable and autonomous entities" (2003:72).
- ^x According to Marenko increasingly interactive technologies engage the Deleuzian sense of affect (2012:4). 'Slabs' are generic platforms (such as iPhones, smart phones and ipads) that possess a wide range of capabilities and functionalities that alternate depending on which downloadable application or platform they are running, so that the device effectively becomes the app, and the app becomes, in effect, the device. The new iphone 4S, for example, features an app called *Siri*; the first app to come out of DARPA funded projects in AI. Using a natural language user interface, *Siri* is able to answer verbal questions, make verbal recommendations, and execute verbal commands. "As the separation between hardware, software and interaction dissolves, it is no wonder that the ensuing intense sensory activity has the effect of both transfixing and transporting us, so that we are simultaneously caught up and carried away by this affective interactive fascination," notes Marenko (2012:3).
- xi Utilizing a dazzling barrage of images that transcend language, the media's use of moving-images, montage, time-lapse sequences, and instant replays generates an affective frequency of visceral horror. This terror is identical to the subliminal paranoia and fear that Dunne associates with exposure to electromagnetic devices and frequencies in general (see endnote viii). This affective frequency of terror, as I argue throughout, is symptomatic of a hyperstitional 'infection;' a dark haecceity expressed as the intrusion of supernatural agencies, self-fulfilling prophecies and time-travelling potentials.
- xii When describing the haunted spectacles staged by designers like Alexander McQueen and Walter von Beirendock in the late 1990s, Caroline Evans invokes Adorno's interpretation of the 19th century spectacle of the *phantasmagoria*. The term describes "the backlit optical illusion, usually those of the magic lantern [that] metaphorically connotes some form of dramatic deception or display, in which shadowy and unreal figures appear only to disappear" (2003:89). Adorno, writes Evans, used phantasmagoria as a metaphor to "designate the tricks, deceits and illusions of 19th century commodity culture, with its sleights of hand that peddled false desires" (ibid). Since the light source of the magic lantern was hidden from the audience, this device, she writes, provided Adorno "with a metaphor for the way in which the working mechanisms of capitalist production were hidden from view by its marketing and retail stratagems" (ibid). For Adorno, continues Evans, "the narratives of the phantasmagoria serve to cancel time and to deceptively merge the near and far (2003:90). Constituting a "magic conflagration," this theatrical sleight of hand reveals the "apocalyptic effects of phantasmagoria;" an attempt to divert the attention of the public, via spectacle, from the unsustainable excess of consumer culture (ibid).
- xiii Philip Polidor first introduced the phantasmagoria or 'magic lantern show' in Paris in 1793 during the height of the Terror. He exploited the horror-infused atmosphere generated by the thousands of publically staged executions to regale his audiences with the bloodstained ghosts of guillotined public figures (Ball, 2011:233).
- xiv Called "the godfather of 'generation ecstasy," Shulgin synthesised the psychoactive compound MDMA (a.k.a. 'ecstasy') in 1976 and has since invented dozens of other psychoactive compounds that have taken and continue to take global electronic dance-culture by storm. An article by Ethan Brown exploring his work and contribution to the cyberdelic counterculture of the 1990s entitled *Professor X* appeared in the September 2002 edition of *Wired*.
- xv In an instance of textual *détournement* McAuley paraphrases several passages from McKenna's seminal *Food of the gods: the search for the original tree of knowledge* which expounds a theory about the psychedelic origins of human cognition (see McKenna, 1992:20, 42 & 45): "Our brains are built to process psychoactive drugs because they need naturally produced psychoactive chemicals [such as serotonin, norepinephrine, dopamine and monoamine oxidase] to function properly. There's a theory that intelligence and language evolved because when our ape ancestors were grubbing food on the African plains they'd get stoned from eating [psychoactive] mushrooms growing in herbivore dung.

They got smart because that was the only way they could relate to the hallucinations the mushrooms gave them. My [psychoactive] viruses don't do anything unnatural. They just enhance what's already there" (McAuley, 2007:64).

xvi My MA entitled *Techno genetrix: shamanising the new flesh* (2005) explores the fusions between mythic and scientific paradigms; an attempt at synthesis that can be described as 'digital mysticism.' Influential media such as *Mondo 2000*, *Omni* and *Wired* did much to promote such syntheses, not only among the digital cognoscenti but also with the countercultural movements of the 1990's. The January 1995 issue of *Wired*, for example, carried a feature article by Erik Davis entitled *Technopaganism: may the astral plane be reborn in cyberspace* which sets out the paradoxical blending of neo-paganism and disembodied post-humanism. Davis' 'cyberdelic manifesto,' *Techgnosis: magic + mysticism in the age of information* (1998), provides a comprehensive post-Enlightenment survey of the literary, scientific, theoretical and occult attempts to 'spiritualise' mechanism.

xvii Recuperation – the process by which the spectacle (or spectacular society) captures, commodifies, anesthetises and incorporates radical ideas, images, perceptions and even emotions - was the ostensible fate of Debord's concept of the spectacle. This was a fate that Debord himself predicted as an inevitable corollary of the phenomenal growth of media culture. Whereas Debord's Society of the spectacle (1967, republished 1983) was intended as "a sharp critique to capitalist society and to the domination of image," writes media theorist Celso Frederico it came, during the information era, "to be understood - implicitly - as an apology for spectacularization promoted by mass media" (2010:179). This example serves to illustrate the postmodern conception of the futility of any act of resistance, as the countercultural margins are continuously being colonised and appropriated by the centre. Beginning with the publication of Simulacra and simulation in 1981, Baudrillard both extended and rejected Debord's criticism of 'spectacular society' by noting that neither critique nor true feelings were possible under the auspices of what he termed 'hyperreality.' As the information-age version of the mediated spectacle theorised by Adorno and Debord, hyperreality describes the condition whereby the symbolic imagery and cultural forms of late capitalist society are endlessly regurgitated through media culture in a process of recuperation and replication. Paradoxically, given the ubiquity of informationage media, human communication itself, along with the very idea of history and utopian vision for the future, seem to have disappeared in Baudrillard's estimation, replaced by the time-erasing hyperstitional phantasmagoria of hyperreality or the "simulacrum" and its random play of signifiers (1994a:184).

xviii The "old assumption that collective behaviour implied some kind of centralised authority," writes Johnson, "is giving way to a more oblique form of programming: software that you 'grow' instead of engineer [;] software that learns to solve problems autonomously" (2001:168-169).

xix A slime mold, as Johnson explains, is not a single organism (although it behaves like one). Instead, it is a random and spontaneous aggregation of individual slime cells that congregates under certain conditions and collectively function (or 'swarm') as a single organism without any centralised control (2001:13). Utilising the analogy of the slime mold, which Hillis used as the basis for his development of a new software paradigm, Milena explains how fairies are able to self-evolve without the need for any centralised command (i.e. without the need for continuous 'genetic tampering' or even political leadership by the likes of Milena). This analogy is also used by her to explain how the fairies are able to 'swarm' together and act for a common purpose before melting away again and regrouping elsewhere (2007:110-111).

xx Johnson writes that having our "control expectations messed with" is a necessary part of the learning curve; for a generation raised on "MTV's degraded images" and the sensory dislocation of the new genres of electronic dance music and designer drugs "that recognition comes easily" (2001:176).

xxi In 1994 Pesce staged a massive public "online" and "realtime" magical ritual in the San Francisco Bay area called 'CyberSamhein' to coincide with the release of his VRML 3-D internet coding language (see Davis, 1998:192).

xxii "A startling number of Pagans [like Pesce] work and play in technical fields such as software coding, biochemistry and network engineering, notes Davis. "Technopagans suspect that the Old Ways

can provide some handy tools and tactics in our dizzying digital environment of intelligent agents [and] visual databases" (1995:1).

xxiii The late Fraser Clark was the founder and editor of *Encyclopedia psychedelica* – an independent London-based magazine in the late 1980's that promoted alternative spirituality, hallucinogenic drug usage and alternative philosophy. At the forefront of the 'techno-hippie' phenomenon that swept Britain by storm in the late 1980's, Fraser and other "psychedelic adepts" such as MixMaster Morris and the Shamen organised the inner-city soundsystems that turned acid-house and rave musical subcultures into global phenomena (Collin and Godfrey, 1998:251). Aside from hosting underground 'raves' and launching the first large rave club in central London, Megatripolis in 1993, Fraser was a Leary enthusiast who advocated Leary's new form of hippydom that merged the 'drop out culture' of the psychedelic 'peace and love' generation with an unbridled enthusiasm for new technology (1998:203). The 'Zippies,' as Fraser termed them, would "drop out, and drop in again." In other words, Zippies would 'drop out' of mainstream society through the use of psychoactive drugs and the celebration of neopaganism, but also 'drop into' society through an active embrace of technology and the kind of lifestyle that would enable them to "make the most of it" (ibid).

xxiv "The actual witch-hunts came in like waves of hysteria just like drug stories in the press do now," remarks Clark. "Yet, the human spirit revitalises itself ... we pagani have been cooperating and breeding unstoppably in secret, together with our personal gods and succubi, like personal computers" (Clark cited in Rushkoff, 1994:143-144).

xxv Despite the fact that contemporary shamanism is far more prevalent in South America than it is anywhere else in the world, the region is given a cursory overview in Mircea Eliade's magnum opus Shamanism: archaic techniques of ecstasy (1989), with barely a mention made of what many contemporary anthropologists and ethnobotanists construe as the very crux of shamanic practice – the use of hallucinogens. "As in Mexico [another part of the Americas almost completely untouched by Eliade's account], shamanism in South America tends to be almost exclusively psychedelic, making frequent use of plants which contain hallucinogenic alkaloids", notes Nevill Drury (1989:17).

xxvi Hallucinogenic plants have been become known for their enigmatic knack of "calling out" to shamans who are searching for them in their forest habitats and transmitting their effects to non-users who are in the vicinity of people who have ingested them via "pheromonal routes," writes Plant (1999:198). These uncanny effects can be "related to the simple fact that psychoactive drugs are communicating substances" (1999:198). Described by Plant as 'soft' or bio-technologies – a type of "natural wetware" – hallucinogens engender "potent visions of synthesis and networked minds" (1998b:3). Ingesting these substances enables users to craft what Deleuze and Guattari have termed Bodies without Organs (BwO's) – namely, metaphorical exploration devices that enable the mapping of new cognitive, affective and evolutionary territories (see 1988:149-166).

xxvii I explore this mythic nexus directly in my MA (endnote xiv) where I trace the evolution of the mythic mindset that underpins technological production (which I termed the *techno-genetrix*) from the archaic myth of the *petra-genetix* or 'generative stone' (see 2005:7) via the agencies of shamanism and alchemy. My first chapter explicates the historical origins of information technology as well as that of chemistry and physics and their origins in the 'dark arts' of shamanism, sorcery and alchemy. In this and in subsequent chapters I explore this mythic interface by referring to the work of contemporary technological historians, philosophers and theoreticians as well as to the work of writers of sf.

Conclusion – The ingression of novelty

Something is at the end of [historical] time ... casting an enormous shadow over human history, drawing all human becoming toward it. (McKenna, 1991:41)

The contemporary sf writing that I have explored navigates the *fin de millénnium* sense of the apocalypse as a shadowy and immanent event – a dark haecceity – by imagining the future in terms of affect, supernatural horror and the Romantic sublime. This exploration points at what remains radically 'outside' of routine cognizance or, as Deleuze and Guattari would phrase it, "unknown factors not arranged for in the apparatuses of control" (1983:83). Miéville notes how sf facilitates a "radicalized sublime backwash" from the "beyond back into the everyday" world of the space of flows (2009:512). The Lovecraftian sense of sublime horror, which evokes "unrepresentability" and a desire to violate norms and boundaries (Lovecraft, 2004:175), finds expression in the hyperstitional sf I have surveyed throughout this thesis. Supernatural horror, conceived of in hyperstitional terms, conveys more than simply the presence of a totalising crisis. In cybergothic and biopunk narratives, hyperstitional horror exploits the transformative potential of panic to stage an anastrophic inversion of the postmodern sense of crisis orientated around simulation, technological proliferation and the diffusion of affect associated with overstimulation and future shock. The undomesticated sublime, inherent in these horror-laden science fictions imagines the future, as Deleuze and Guattari suggest, in terms of "affects and experiences, movements and speeds" (1988:162).

Hyperstition imagines technological intrusion through the actions of mysterious agents and forces, time-travelling potentials, coincidence intensifications and self-fulfilling prophecies. Under the mesh of information networks laid down during the information revolution, a continuous flood of technologically mediated affects and effects permeate almost every facet of life. Beyond these ephemeral historical manifestations lie the murmuring, as Foucault put it "of the ontological continuum" (cited in Merquior, 1985:31) and the chthonic whisperings of biological, geological and cosmic forces operating at inconceivable time-scales and levels of complexity. This is a space that science, armed with particle accelerators, electron microscopes, deep space probes and information-processing devices, is beginning to investigate experimentally. It is an ontological space colonised by hyperstitional sf which restages the Gothic sense of *horror vacui* (the 'horror of infinity') and the Romantic sublime of infinitude.

In my first chapter I considered how this hyperstitional aesthetic may be construed along Situationist lines. 0D and CCRU utilise Situationist techniques of *dérive*, *détournement* and psychogeography as

tools for navigating the psychogeography of contemporary technological immersion, formulating a philosophy of accelerationism and radical anastrophism. These techniques, as Coverley remarks, were conceived of by the Situationists as being "preliminary to the production of some kind of new space" (2010:136). In the Catacomic, OD and the CCRU utilise them to carve out a liminal space for a "digitally transmitting inhuman future" (1999:4). Their science-fictionalising of the Situationist impulse along the lines of Lovecraftian horror represents an attempt to generate, as Plant suggests, "a renewed burst of negativity that moves against a [postmodern] world of petrifying circularity that is devoid of any locus of negation" (1992:186). In the work of these post-Situationist collectives the narrative of hyperstition is imagined along the lines conceived of by theorists like Deleuze and Guattari as well by pundits of fin de millénnium cyberculture. This aesthetic response is framed as a shamanic voyage through the destabilising phantasmagoria of the spectacle that reveals, as McKenna puts it, "the cutting edge of the ingression of novelty into the plenum of being" (1991:41). In other words, for 0D and the CCRU, the profound cultural (and environmental) changes wrought by information technologies require a radical ontology conceived of as an affective relation. Channelled through Deleuze and Guattari's concept of schizoanalysis, these cyberdelic collectives productively orientate themselves around the 'deterritorialisations' of shamanism, supernatural horror and sf. "Shamanic becomings," as 0D write (1995:229), "involve the exploration of alternative spaces ... the crossing over into death zones ... [and] migration through alternative anomalies (0D, 1995:229). Such 'alternative anomalies' involve the pursuit of the science-fictional novum via paradoxical rites of passage that invert and subvert cultural oppositions. This, I argue, represents a necessary attempt to find potentially fruitful syntheses between divergent disciplines and practices, such as mysticism and science, as well as to apprehend the contours of the world beyond the narrow sphere of cultural conditioning and human-centred perception. For 0D, it is not simply a question of "euphorically embracing" technological augmentation, "dematerialisation" or the "cosmic outside" (1995:338). "The real issue," they write, "is one of adapting and surviving" the future that our actions have engendered (1995:339).

It no longer holds that, whatever we do, history will go on regardless. It is not only the continuing of History which is threatened today, what we are witnessing is something like the end of Nature itself. (Žižek, 2011:429)

Today, humanity finds itself in the middle of a massive on-going anthropogenic extinction event – the result of successful human migrations around the planet, massively amplified by the intensification of production and consumption stemming from the development of industrialization, information technologies and capitalism. "Our collective behaviour as a species in terms of biotic and ecosystem impacts is the equivalent of multiple bolide [asteroid] impacts in conjunction with [human induced]

climate change," writes biologist Andrew Jones (2009:318). The current extinction event, he writes, will not only severely cripple the entire biosphere, but fatally damage the evolutionary processes whereby new species are generated. If any humans survive, reasons Jones, they will have to eke out an impoverished existence in a much blighted and resource-depleted world (2009:318), a world similar to that envisioned by Hoban in *Riddley Walker*.

Is there a possibility of riddling our way out of our cultural tangle of dangerous fictions, as Hoban's protagonist attempts to do? The task of the apocalypticist working in the hyperstional mode, according to Land, is to "close the circuit" of history by detecting and actualising the "convergent waves [that] register the influence of the future on its past" (2009:1). In the work of 0D and the CCRU, this rhetoric of inevitability is inverted and subverted in order to open the future to possibility. In the apocalyptic sf of Hoban, Swanwick and Stableford, however, this inversion is muted. By emphasizing the repeatability of familiar historical patterns, Hoban constantly reinforces a sense of catastrophe as self-fulfilling prophecy. Hoban's Riddley is unable to conceive of the inverted gesture, the "intervention" or "act" that could, as Žižek has suggested, "change the very coordinates of what is possible" (2011:490). Evincing elements of hyperstition - most notably a call to the Old Ones authors such as Hoban, Swanwick and Stableford imagine technology as a supernatural force that defies the epistemic reach of cultural thought. Hoban's future humanity is fated to repeat a selffulfilling prophecy of historical destruction (represented by the Eusa myth) from which there is no escape. Swanwick colours the Renaissance zeitgeist with hyperstitional forces, using it as a canvas on which to enact a vision of the catastrophic outcome of historical progress. The apocalyptic desire that Swanwick's citizens of Wittenburg have "for the broom of flame that would sweep [history] clean" (1997:3) ties into human fictions about the incommensurability of religious, racial, ethnic and gender divisions, as well as the fictional implications of our mastery over nature. Along with other authors writing in the apocalyptic vein, Swanwick's sf reaches to the very heart of the myth of progress which, he reasons, is constructed around a hyperstitional apocalyptic purpose that seeks closure in catastrophe.

Stableford styles his *Werewolves* trilogy as "Decadent novels of the future" (2010:168). This Decadent sensibility, framed in science-fictional terms, reads history along supernatural lines as a carnival of destruction to which the utopian vision of a new world beyond apocalypse presents no panacea. Apocalyptic sf, as Stableford writes, evinces a Decadent sense of futility. Such fictions, he writes, do not signal "a way 'out of the world' ... but merely bid it an ironic goodbye" (2010:152).

Conventional apocalyptic narration is absorbed by the "dynamism of upheaval itself" (Zamora, 1989:23). The function of this dynamic engagement with cataclysm, according to Zamora, suggests "ways in which historical renewal may proceed from historical disaster" (1989:24). Despite

apocalyptic sf's denial of utopia, the desire to find ways out of the world remains present in much contemporary sf. Along with 0D and the CCRU's theoretical science-fictions, cybergothic sf preserves some aspect of traditional apocalypticism by imagining the crisis of technological acceleration in anastrophic terms. For Stross, Simmons and Harrison, scientific knowledge - despite its rational credo - has opened windows onto the irrational and the mythic, offering a new vision of nature (and the future) made strange and potentiated with possibility. In their cosmic narratives, technology is depicted as a sublime evolutionary motive force that draws humanity through apocalyptic revelations and changes. These writers present science itself in mythic terms. Where the Old Ones of science (Meillassoux's 'arche-fossils') lead, they argue, humanity must follow, through the portals of extinction into a brightly-dark and strange future in which humanity is transformed out of existence. For these writers, a type of shamanic empathy is crucial to the formulation of new knowledge, which is founded in a type of hyperstitional gnosis that blends mythic and supernatural narratives with scientific extrapolations that venture beyond human 'giveness.' In Simmons' vision, humanity is depicted as a larval creature, undergoing an evolutionary morphogenesis through a succession of deaths and rebirths until it finally becomes part of an organisation of cosmic intelligence on a galactic scale. In Harrison's Light, technology is presented as an embryonic fluid through which humanity must swim into a future for which we have been prepared by the mechanisms of a primordial and unintelligible alien intelligence. These are bright hopes indeed – more appealing certainly than the fictions of Hoban, Swanwick and Stableford, in which our cosmic birth is aborted. To survive our date with a potentially ruinous destiny, reason these authors, we will ostensibly need to shift cultural gear, and comprehend our so-called 'ecstasy of information' - the phantasmagoria of spectacular society – in radically new and different ways. The dangers and pitfalls of this gear shift are numerous, but there appears to be little choice. And, despite the totalising pessimism of thinkers such as Baudrillard, Virilio and others, humans remain profoundly elastic with, it may be hoped, an untapped ability for adaptation and morphogenesis.

McAuley in *Fairyland* imagines the apocalypse in affective terms by referring to the technological emergence of contemporary society as a potentially transformative force. McAuley's text is permeated by the zeitgeist of *fin de millénium* and shaped by the moods of its spectacularised phantasmagorias – the sonic fictions, fashions, visual entertainments and the unregulated capitalist flows that course through the conduits and by-ways of the electrosphere. In his hyperstitional vision, the public, the private and the fantastic spheres of cultural life cut backwards and forwards across one another, intersecting to reveal both the banal and the sublime. "Simulations threaten to deconstruct the hegemonic character of all binding representations, of all hierarchy," writes Stephen Pfol, theorising that the hyperreality of the spectacle constitutes a new order of "powerful, reality-shaping sorcery" (1998:18). Like Pfol, McAuley sees the intrusion of hyperreality as apocalyptic precisely because it

threatens to tear humanity loose from its cultural and biological moorings. In McAuley's hyperstitional vision, an immersion in the electrosphere (of technologically-mediated music, images, fashions, social habits, economies and sciences) conjures up a zone of intensity that brings about a mythical apotheosis. In this vision of biology morphed by technology, the information age is narrativised as a mythical time when, led by intuitions, affects and emotions, humans begin to enter a future that no longer belongs to us. Serving as insect pollinators for a newly emergent biotechnological sentience, humans are depicted as mere transitory phase in an endless cycle of mutability and evolution from which new creatures and orders of life are continuously emerging.

As we wire ourselves into the buzzing networks of information-exchange, we give ourselves over to the time-splicing, space-shrinking, psychic intensity of the whole giddy and heedless rush of Progress, its hidden eschatological urges laid bare at the very moment they become the most profane. ... [Yet] along the multiplying planes of information and communication, we may learn to live like nomads, becoming errant seers, despite ourselves, just to grapple with it all. And in the periphery of perception, where all the networks intersect, we may glimpse the outlines of some nameless Matrix emerging, some new structure of being and knowing that underpins the merely material real, a vast webwork of collective intelligence within which we are at once on our own and one with the immense ecology of a conscious cosmos. (Davis, 1998:278)

Using the drugs, the gadgets and the fictions of popular media culture as visionary tools, the hyperstitional authors whose work I have explored attempt to craft new lenses through which to figure the apocalypse and glimpse the outlines of some new structure of being. In their hyperstitional narratives, the language of science cross-pollinates with that of supernatural fantasy to reveal a dizzying cultural soup of self-fulfilling prophecies. In the midst of this spectacular profanity, as the hidden eschatological urges of history are suddenly laid bare, there is, as these authors reason, a pressing need to craft new fictions and to envision ourselves as more adaptable beings, capable of shape-shifting our way out of a perceived and very real cultural impasse. Despite its catastrophic sensibility, even apocalyptic sf may be considered as a kind of "tocsin," as Will Smith writes, that alerts humanity to the follies of ardent materialism (2002:x).

A renewal of the archaic techniques of ecstasy represented by shamanism and vodoun appears to be a common theme in all the hyperstitional narratives I have explored. Gothic and romantic materialist philosphers such as Land and Plant, as well as Deleuze and Guattari, seem particularly enamoured of these types of ecstatic practices that involve, as McKenna explains, a process of stepping "outside the confines of learned culture and learned and embedded language, into the domain of the unspeakable" (1993:1). This is no fireside ontology, however. The passage of the shaman into the otherworld is fraught with danger, even more so if the carefully ritualised context of archaic shamanism is replaced by the profane rituals of the "trance-oblivion market" (0D, 1995:167). There is nothing kind or

beneficent about the 'transcendental other,' reason 0D in *Cyberpositive*, only a wake-up call to change "our notion of 'here' ... to explode into the fourth dimension ... to bypass the mediation of linear language ... to become autistic, multi-layered [and] schizoid ... to mutate in order to communicate with our future" (1995:343). This is clearly the task that writers of sf have taken upon themselves as they delve into the abysms of science, contemplate the implications of evolution and mutation, foreground the affective and uncanny nature of technological change, as well as probe into the inhuman futures that technological advancement could unleash. There may be a great deal of usefulness in this sensibility. In *Beyond finitude* Meillassoux reasons that contemporary theory needs to be reformulated in its relation to "possibility" and "the absolute outside[;] ... the feeling of being on foreign territory – of being entirely elsewhere" (2009:7). There is, manifestly, a need to craft a new relationship with the 'outside' represented by nature (both in biological, technological and cosmic terms) that bypasses fatalism. By embracing nature's verdant and destructive powers in terms that do not focus merely on human psychologies and nostalgias, new theories may instead attempt to engage with forces that utterly erode anthropocentric cultural categories such as self, other, race, gender, class, good, evil, natural and artificial.

For some of these speculative explorers of the present, whose work I have surveyed, it is not simply a question of the material realities that our fictions are producing, but the potential for subversion and mutation inherent in the radically intensive blurring of boundaries represented by rapid technological progress and scientific advancement. For these hyperstitional fantasists, the imaginative envisaging of and the speculative engagement with states anterior, posterior or completely outside human 'givenness' is critical. They imagine artefacts or forces that are causally unconnected to humanity, fantastic or unimaginably alien. This manner of thinking might become increasingly necessary if creative social and cultural expressions are to keep abreast, not only with science and the accelerated pace of development, but with the realities of environmental (and possibly human) extinction. Through *poiesis* or revealing, the hyperstitional authors and theorists whose works I have explored attempt a radical subversion of culturally produced categories. Their narrativisation of the nature of culture's acceleration toward the inhuman, the existence of 'arche fossils' beyond the scope of human cognition and the future beyond the impasse of apocalypse reveals the persistence of ecstatic vision in the contemporary imagination; a 'sending on before' that is imperative for driving human endeavor forward into the fires of the unknown.

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