Technoculture and Science Fictions: Exploring the Web of Narrative and Figuration

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If we would discover the little backstairs door that for any age serves as the secret entranceway to knowledge, we will do well to look for certain unobtrusive words with uncertain meanings that are permitted to slip off the tongue or the pen without fear and without research; words which, having from constant repetition lost their metaphorical significance, are unconsciously mistaken for objective realities. In the thirteenth century the key words would no doubt be God, sin, grace, salvation, heaven, and the like; in the nineteenth century, matter, fact, matter-of-fact, evolution, progress ...

—Carl Becker, *The Heavenly City of the Eighteenth-Century Philosophers*, 1932

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Abstract

This thesis explores the function and politics of various narratives of technoculture. In particular, the focus is on how these narratives help articulate and sustain various figurations of technologically-implicated identity. The most important of these is Man; a hybrid figure made up of the legacy of the modernist project, the Enlightenment, and evolutionary narratives, and who has an interest in sustaining his dominion over the Other. This work traces the recuperation of these conservative narratives in the technocultural realm, a realm characterised by both desires and fears towards machines. While logocentrism describes the philosophical guarantee on which many of these narratives and figurations rely, this logocentrist system is challenged by new technological artefacts and practices. This causes the feminist historian of science Donna Haraway to suggest hopefully: 'Perhaps we can learn from the fusions with animals and machines how not to be Man, the embodiment of western logos'.[1]

Like the trope of the cyborg, science fiction is a boundary-crossing genre with its intermingling of traditionally distinct generic categories: science and fiction. It provides, in this way, a particularly rich source of anxious and desiring narratives about technologically-mediated change which I will use as my primary lens into this technocultural realm.

Most of the texts I examine do not provide rich new cyborg figurations, or ones which have learnt to be other than Man. On the contrary, they are good at recuperating conservative metanarratives about humanist individuality, agency, the relationship to Otherness, the relationship of the mind to the body, to name just a few. Many technocultural texts such as *Gattaca, Metropolis and Blade Runner* problematise technologically-mediated change as a movement toward disorder, before resolving this crisis in a corresponding movement towards order in the services of recuperating logocentric taxonomies.

However, the extreme rewriting of all orders, locations and of the body, does not offer a promising solution, as both William Gibson's *Neuromancer* and Samuel Delany's *Stars in My Pocket Like Grains of Sand.*

Introduction

> And instead they watch the machines multiply that push them little by little beyond the limits of their nature. And they are sent back to their mountain tops, while the machines progressively populate the earth. Soon engendering man as their epiphenomenon.
> —Luce Irigaray. *Marine Lover*

The word, "technology" instantly evokes an overwhelming number of competing ideologies, fears, desires, and histories. It is an understatement to say the word is loaded; rather, technology is so intertwined with social and cultural practices and so pervasive in its representations and functions that some critics refer to the cultural subconscious of the late twentieth century as being built on a technological imaginary. As Teresa de Lauretis comments in 'Signs of Wo/ander':

> Technology is now, not only in a distant science fictional future, an extension of our sensory capacities; it shapes our perception and cognitive processes, mediates our relationship with objects of the material and physical world, and our relationships with our own or other bodies. Technology is inseparable from labor, abstract knowledge, art, daily activities, and fantasy .... Technology is our historical context, political and personal[2].

This imaginary is based on deep institutional and ideological watersheds in which technologies are intrinsic factors. The polemics of these social and cultural frameworks contextualise our numerous daily interactions with technologies. If we consider the space age, the machine or information age, the age of late-capitalism, of consumerism and mass-communication, of apocalyptic second millenarianism; the age of smart bombs and weapons of mass destruction, of bioethical crises such as are inherent in the Human Genome Project or the cloning of Dolly the sheep, the age of freedom movements such as feminism and antiracism, or the age of postmodern aesthetics; each indexes a host of technological desires, fears and histories. The commonplace functioning of institutions such as hospitals,

classrooms, governments, the media, banks, airports, prisons, supermarkets, factories, cinemas and universities are all dependent on technologies which have radically altered human relationships with them and their institutional practices and ideologies. The braindead patient in Intensive Care kept alive on a life support system, the investment broker dealing with huge sums of capital in different currencies flowing through information webs, the airtraffic controller guiding one hundred jets into a busy airport, the taken-for-granted security cameras filming us in daily life, the drug testing programmes in international sporting events catching out the illegally-enhanced athletes, gender-reassignment patients undergoing surgery: all of the concepts these practices embody are specific to a high-technology, post-industrial society. This does not deny the historicity of these practices; rather such historical concepts as 'aliveness', 'capital' and 'gender' are radically challenged by technologies, and some new practices are only comprehensible in terms of these technologies.

Perhaps the most salient factor of these recent technological practices is their challenge to the old and familiar western logocentric orderings of the world by oppositional categories; where one term is described by its juxtaposition and differentiation from the other. The guarantee of order, harmony and naturalness provided by western oppositional categories strains to secure these new social practices. Whereas, for instance, 'aliveness' was once guaranteed by its opposite of 'deadness', for a patient in Intensive Care, lack of aliveness must be tested with sophisticated machinery and even then we are uncertain when to turn off the respirator. Yet technologies are persistently contextualised within these dualisms which inevitably posit nature and culture, self and other, male and female as mutually constitutive, yet separate and hierarchised categories in spite of helping to erode the certainty of many of these and other metaphysical distinctions. When is our patient alive or dead, male or female? How is money real and its worth gauged when it is so light, fast and virtual? What is a 'natural' athlete when athletes are so reliant on technologies? And technologies are intrinsic to the process of discovery of other technologies, hidden in the bloodstream of society. What do 'distance' or 'time' mean with instantaneous communication? What constitutes privacy and aloneness when we are increasingly monitored by technologies

in daily life? How can ontology deal with the technological challenges to the self-defining, discrete, humanist subject?

Given the impact of technology on modern cultural and social life, its intimacy with our bodies, and its huge presence in the western cultural imagination, it is hardly surprising that technologies are couched in passionate narratives. As these narratives are promulgated by various competing powerful interests, they offer a rich, contradictory, worried and excited template for the potential cultural and social advantages, disadvantages, and implications of technocultural change. As a result, technologies have become both appealing and frightening within a culture that falls in thrall to their associated promises. The cultural logic which produces them is difficult to avoid. This cultural logic often produces poor descriptions of technologies and culture characterised by mainstream oppositional politics and narratives inherited from the modernist project. Mainstream oppositional politics make it difficult to talk about technoculture in subtle ways. Perhaps the clearest expression of this is in the way the subtleties of arguments about technology and culture are so often erased by the creation of an antagonistic and artificial dialectic comprised of 'technoutopians' (those for whom, broadly speaking, technologies are positive and intrinsic to social 'progress') and 'technophobes' (signalled by a suspicious and paranoid attitude towards what is seen as the unrelentless juggernaut of technological 'progress'). These categories are often accompanied by 'speaking rights' insofar as the field is divided into experts and nonexperts, scientists and nonscientists; those who are allowed to comment on complex expert systems and those who are not. The terms 'technophobic' and 'technoutopian' are used with real critical suspicion: their artificiality is signalled by the fact that no-one seriously calls herself technophobic or technoutopian. Just as the expression 'political correctness'—with all of its connotations of self-sati sf ied moral rigidity and unthinking adoption of cultural regulations—is used as a powerful invalidatory rhetorical strategy by diverse, interested groups, so the terms technoutopian and technophobic are used as stock dialectical fodder to advance the arguments of diverse groups, keen to erase objecting or dissenting view points, keen to maintain hegemonic power structures. Nonetheless, the existence of these rhetorical strategies powerfully signals deep societal concerns about technoculture. These concerns are shot through with symptoms of

technocultural euphoria and angst, and make technologies, a hot topic for academic critical enquiry, popular culture media extravaganzas and advertising industry utopian narratives alike, a passionate, ambivalent and complex social and cultural field.

I will base part of this critical enquiry into technoculture in science fiction. The technological imaginary is expressed well in science fiction texts which offer rich resources for revealing cultural anxieties and desires inherent in technological change. Additionally, many of the favourite tropes and narrative ideologies from science fiction bleed over into more 'mainstream' technocultural texts about technocultural or technoscientific 'reality'. (Or alternatively science fiction's favoured tropes are implicit in broader culture; tracking the direction of influence is unimportant here.) What this does emphasise is that technoculture is a realm where facts, figures and fantasies are all implicit in one another. Additionally, sf offers a mode of perception of the world which makes more readily explicit the conjoining of fact and fantasy implicit in the epistemological, generic categories of science and fiction which are usually treated as distinct and separate cultural productions. However, this work will show the discursive realm of technoculture is full of instances where science and fiction are deeply intimate bedfellows. A science fictional mode of perception offers a useful critical practice in re-visioning our current technocultural moment for its cultural fusions and fault lines which are often sealed over by legitimating narratives. According to the critic Istvan Csicsery-Ronay, sf is premised on 'a pair of gaps': 'the gap between belief in the immanent possibility (and perhaps inexorable necessity) of those tran sf ormations on the one hand and reflection about their possible ethical, social, and spiritual interpretation (i.e. "their embeddedness in a web of social-historical relations)[3], on the other. Useful critical practices aside, the success of this mode of perception as put into practice in sf texts, depends heavily on dominant ideologies and their concomitant fears and desires which sf texts promulgate. In this way, many sf texts recuperate and disguise dominant cultural narratives rather than exposing the constructedness of notions of science and fiction. Mark Jenkins describes the movement as 'the paradigm of fragmentation and recapture,' where the sf films initially represent a more socially fragmented world but, as they move towards narrative resolution, the subject is reintegrated into stable and reassuring logics of unitary identity. Hence these films recapture

conservative, modernist ideologies. This notion will form part of my critique of three dystopian sf films, *Metropolis*, *Blade Runner* and *Gattaca.*

Taking into account the epistemological and technological challenges posed to these conservative politics, it is surprising the degree to which 'mainstream' or dominant technoculture recuperates highly conservative ideologies. This, in spite of technoculture being perceived as a vanguardist realm, where cutting edge technologies and practices are hacked out in a spirit of constant innovation. As logocentrism describes not only a taxonomy, but also a process, it is able to resist denaturalisation and politicisation even within the technocultural realm.

This study will draw from such excellent criticism as written by Andrew Ross and Donna Haraway who each emphasise that technologies are 'a fully cultural process, soaked through with social meaning'. These cultural processes help disguise and sustain privileges and practices of power which are difficult to critique as they have become so absorbed into the cultural bedrock as to be invisible and imply a commonsensical self-evidence. For this reason, anyone seriously attempting to deconstruct technocultural texts takes on the mammoth task of deconstructing culture itself: technoculture can be technoscientific, technofascist, technofeminist, and even technologocentrist; it can be about horror shows, eugenics, and fears about monsters, the military industrial complex, fantasies of power over life, the oppressed factory worker for whom life is determined by the movement of the machines, and the exaltation and transcendence of the sublime. So this analysis will dip into a variety of cultural meanings. Above all my stress is on the tension between the challenges to old metanarratives and logocentrism which are provided by technologies, on the one hand and, on the other, the ways in which 'troubling complexities' are often simplified, repressed and subsumed into a new metanarrative about technologies.[4]

My agenda does not involve demonising technologies or technocultural texts by leaving behind some of the passions, promises and delights of these potentially life-changing artifacts, but rather it subjects them to a cultural contextualisation that examines interwoven strands of narrative and figuration. As Donna Haraway and other feminists involved in this field urge for more nuanced accounts of mediation, rather than more narratives which further

shore up dominations and hierarchies. These accounts should not baulk at the prospect of partial new ontologies but should have a commitment to situating knowledges; a feminist practice of objectivity. In Joanna Russ's *The Female Man* one of the characters asks '*I know who I am, but what's my brand name?*'[5] Brand names are logotypes and, as such, can also be seen as the logos circulating according to principles of exchange in the technocultural economy. Just as a snake cell can be imprinted with a corporation's name in *Blade Runner* , soon 'our' genes will also be coded and patented and brand names will be of increasing importance. Asking what our brand names are may not sound as far-fetched or science fictional as may initially seem.

The first chapter will provide a general overview of some of the ways in which science and technologies are popularly represented and narrated within popular culture magazines. This work makes no claim of providing an exhaustive or thick summary of these narratives, rather the focus is on their historical contingency and the way in which disjunctions are registered through tropes and narrative palimpsests. From a Baconian colonisation of nature as a female body to the cloning of a marginalised aesthetic in *Wired* magazine, reading the cultural narrative implicit in these technologies enables a cultural contextualisation which factors out the logocentric process.

In Chapter two I will provide a theoretical basis to the critical readings. To examine the effect of these narratives on the construction of the self, various figurations of technocultural identity, identity formations, how they are constructed and performed and how they are shaped by dominant narratives. The most potent figure of Western culture is that of humanist Man. Logocentrism works in the services of maintaining this figure's ascendancy in the world in spite of the challenges posed by re-orderings, technological or otherwise. This identity is also a hybrid of parts, and contains such historical figures as Man the Enlightened Philosopher and Scientist with dominion over his world, separate and complete in himself, Man™, as Donna Haraway calls him, that creature who may soon fulfil millennial dreams to decode and patent his very genes as a perfect, untroubled picture of 'Life Itself', to *homo sapiens*, that creature from evolutionary narratives, to various other old versions of 'ourselves' as Man. Working in opposition to this are new figurations for complex, technologically-

implicated identity which, as Haraway proposes, might yet teach us 'from our fusions with animals and machines how not to be Man, the embodiment of western logos'

Chapter three begins with a detour into the space race and NASA's Star wars programme to show the degree to which popular narratives about science and technology are influenced by science fictional notions but in particular historically-derived American Technological Sublime. The technological sublime has been an important part of the securing of American power in the technological imaginary and has involved the conquering of land and the colonising of new territories, such as under the sea or outer space. The sublime, has thus, helped produce the reassuring logics of humanist Man's identity in his universe. Yet now genetic technologies allow Man to travel *into himself* and provides a challenge to this system to rethink his paradigms. The film manages this contradictory movement by creating a gap between 'good technologies' and 'bad' technologies into which the American individualistic figure of man may be reinserted..

In Chapter four, I discuss how the shoring up of the dominion over the rest of the world has traditionally involved using technologies for Man's benefit. However, the films, *Metropolis* and *Blade Runner,* show how hi-tech Woman is also used as an instrument, or technology, of Man's self-assertion. The anxieties associated with this process manifest themselves in anxious gender performances. I will discuss these issues by initially using the dual figure of Maria from *Metropolis* as a starting point into the deep misogyny in technoculture, and branching out to the female replicants in *Blade Runner* and a few other exemplary texts.

Finally, in Chapter five I look at two texts which do attempt to provide new figurations for identity other than those which 'recapture' Man and his attendant logocentrism. They also illustrate the problems of doing so, in terms of a postmodern loss of origins and any residual sense of authenticity left after the body as been thoroughly prostheticised. William Gibson's *Neuromancer* exemplifies cyberpunk's concern with prostheses, enhanced bodies, variable human-machine states, and loss of origins. Within the novel, he shows how 'place' is a technology which interpolates subjects into various figurations. Samuel Delany's novel, *Stars in my Pocket Like Grains of Sand,* explicitly articulates a dualism between located

knowledges and a disruptive radical relativism through the representation of Rat, a radically constructed cyborg figure. Both *Neuromancer* and *Stars in my Pocket Like Grains of Sand,* offer a postmodern response to the many modernist notions which underwrite the narratives of technology, science, and the figure of Man and form a part of my critique of technoculture. However, just as these texts present new ways of being in a new world, they also problematise these new ways and present various dangers implicit in the loss of a fixed embodiment.

Chapter One: Popular Culture TechnoScience

> If technologies ... might be partially understood as formalizations ... they should also be viewed as instruments for enforcing meanings
> —Donna Haraway, 'A Manifesto for Cyborgs'

In 1527 Francis Bacon published his utopian essay *New Atlantis* wherein voyagers who have travelled to the far reaches of the exotic South Seas find an uncharted island where sciences and technologies are foremost in the organisation of life. 'Among the excellent acts of that King,' writes Bacon, 'one above all hath the pre-eminence. It was the erection and institution of an order, or society, which we call Saloman's House, the noblest foundation, as we think, that ever was upon the earth, and the lantern of this kingdom'. In this House all kinds of sciences are practised and governed by the notion that: 'The end of our foundation is the knowledge of causes and secret motions of things; and the enlarging of the bounds of human empire, to the effecting of all things possible.'[6] The whole tale, read as a trope for our historically-derived view of science and technology, is rich in the narratives of human progress, epic and heroic adventures, Enlightenment philosophy, Christianity, and gendered notions of the world, amongst others things. In this didactic tale, Bacon portrays science as a hallowed realm. It is practised with the attention to ceremony, orders and hierarchy like a religion. And like religion, science increases our understanding of secret things and motions which in turn secures and increases Man's[7] dominion over the natural world. To complete the picture, Bacon stresses the ethical adherence to Truth where the clear ideas distilled from these scientific processes must find their expression, as 'we do hate all impostures and lies, inasmuch as we have severely forbidden it to all our fellows, under pain of ignominy and fines, that they do not show any natural work or thing adorned or swelling, but only pure as it is, and without all affectation of strangeness'.[8]

Bacon's hugely influential claim—that science is about truth-telling and the finding of secrets, that it is outside the cultural process from which it arises, that it is a hallowed realm commensurable to a religion, and that to get to this realm involves heroics and conquest of the

natural world—is also the claim that science inhabits a fantastic realm which Haraway has referred to as the 'culture of no culture'. As feminist and historical rereadings of science become more common, it becomes clear not only the degree to which Bacon's method and beliefs about science have influenced our own, but also how they disguise many repressed ideologies; left submerged beneath scientific practice and explanation. Like Bacon, technoscientific texts, as well as many other kinds of texts, commonly contextualise nature as an uncharted territory, with implicitly deep secrets to be revealed by the probings of adventurous men. This representation buys into deeply logocentric, sexist and colonial explaining narratives, the world as an ordered, stable place where progress may take place. Complexity is consistently subsumed into these organising principles.

The feminist historian of science Evelyn Fox Keller discusses the recurrent theme of conquest in relation to objects of study and, in particular, toward Nature which is often described as an exotic, eroticised female body. She calls this rhetoric process the 'genderisation of science'[9]:

> To see the emphasis on power and control so prevalent in the rhetoric of Western science as projection of a specifically male consciousness requires no great leap of the imagination. Indeed, the perception has become a commonplace. Above all it is invited by the rhetoric that conjoins the domination of nature with the insistent image of nature as female, nowhere more familiar than in the writings of Francis Bacon. For Bacon, knowledge and power are one, and the promise of science is expressed as 'leading to you Nature with all her children to bind her to your service and make her your slave', by means that do not 'merely exert a gentle guidance over Nature's course; they have the power to conquer and subdue her, to shake her to her foundations'.[10]

This kind of Baconian rhetoric is evident in a special 'Discovery Issue' of TIME magazine (summer 1997/98). Entitled 'The New Age of Discovery': 'From asteroid to ocean floor, from genetics to gamma rays—a celebration of mankind's urge to explore', the cover shows a superimposed photo of a giant baby orbiting diminutive planet earth. The picture conflates three concepts into one: not only is the baby in outer space, and seemingly crawling over earth as he might over an inflatable beachball (here space is the 'old' playground of technoscientific progress), he is also happily 'swimming' in one of the new uncharted territories which takes man back from whence he has come in his history of evolution. Behind him the sun is rising symbolising the dawning of this new age. This young (man) child of the late second millennium, the cover suggests, is 'going where no man has gone before.'[11] But

what kind of a celebration of discovery is implicit here? Are these new lands really so blank that they may be effortlessly appropriated into the scientific discourse? What kind of narrative is on sale? What kind of identities fit into this narrative? The baby's whiteness, his symbolising new birth and hope and his pre-lapsarian wonder and innocence, are neatly conflated with 'discovery' in the image. Just as it is natural for a baby to wonder at the world around it and explore, so the practices of technoscience are natural and, hence, inevitable. Mankind's [inherent] urge to explore is being celebrated. According to the editorial, the new age of discovery will chart 'evolution, genetics, computing and cosmology'. These areas are the technoscientific playground in which mankind may 'discover' new immutable laws. And just as this issue of TIME is an implicit celebration of (white) 'mankind's urge' to explore, out of the seventeen special contributors, only two are women. Diane Ackerman, a self-described 'poet, essayist and naturalist', (that is to say, she is not a *real* scientist like most of the other contributors and writes, therefore, from the margins) marvels at 'the wonders of everyday life' in her article, and voices concerns traditionally associated with femininity and nature. Yet she offers arguably the most insightful analysis of technoculture within the magazine. She writes: 'There's bound to be a simple answer to everything, we insist. Maybe not. Maybe complexity frightens us. Maybe we fear becoming as plural as all we survey.' (11) Ackerman is right, and the issue of TIME magazine to which she has contributed is a case in point.

Her comment runs directly counter to a quotation by staff researcher Sian Best in the editorial: 'I was struck by how important the camera is as an instrument of enlightenment'. It is a comment evocative of Enlightenment ethics, where vision (the camera) was an instrument (a social technology, even) for containing and ordering the world. The feminist Rey Chow goes further in characterising vision and the twentieth century's 'preoccupation with the "visual"' and 'the perfection of technologies of visuality such as photography and film' which she sees as indicative of a 'dominant discourse of modernity [which] reveals epistemological problems that are inherent in social relations and their reproduction. Such problems inform the many ways social difference—be it in terms of class, gender, or race—is constructed.'[12] Reminiscent of Chow's argument, Descartes' famous dictum 'I am lord and master of all I survey' invokes similar ethics to 'mankind's [natural] urge to explore' which reveals, as Chow

rightly points out, the dominant discourse of modernity reproducing social relations. In the TIME article, the notion of 'lord and master' carry authority historically, while here the authority of 'mankind' is in his genes. Overlaying this notion is the powerful image of the innocent child which by infantilising also detraumatises the menacing undertones of this historical shift.

It is difficult not to notice the Baconian rhetorics of colonisation, racism and sexism—and other logocentric metanarratives—inherent in many of the articles. For example, in an article on the 'cornucopia of secrets' Amazon rainforests are tellingly described as Kurtzian 'untamed Edens', 'dark and mysterious', the 'last frontiers', 'fecund', 'treasure trove[s]' whose secrets need to be 'bioprospected' and stored in 'comprehensive computer databases' despite the 'perilous climb to the canopy' necessary to study them. (Pp37-9). Another story reveals the dominance of scientific discourse in suppressing complexity. The TIMEline plots a history of 'mankind's' achievements in the realms of discovery and inventions. There is not a single female philosopher or scientist present. In fact, the only inclusions of females—both representing 'mankind's' conquest over nature—are Louise Brown, the first test-tube baby and, remarkably, Dolly, the first cloned sheep. Thus TIME's narratives may be read as technologocentrist: contingent, arbitrary and non-innocent (unlike the 'baby' symbol which by representing uncultured innocence so powerfully, enacts symbolically its own process of repression). While technoscientific ideologies did not simply appear out of the primordial ooze with Man's ancestors, the facile assumption guaranteeing the authority of TIME's analysis of nature amounts to the same thing. Nature and its corresponding naturalness in the world is immutable, essential and, hence, beyond questioning. It is all there if we can just discover it. The philosophical guarantee that modernity provides enables these narratives to seem true and self-evident[13].

The trope of the baby is recycled to powerful effect in *New Scientist*'s 1998 'Evolution is Dead' issue.[14] The cover shows a small naked and white baby boy solemnly throwing up his arms in protest at the approach of a menacing pair of gloved hands which grasp a huge wrench in one hand (which seems to be on the point of cruelly pinching the baby's soft arm) and a giant hammer in the other. The photo is darkly lit with atmospheric shadows that create more of the aura of a horror show than the aseptic world of biotech laboratories. Surrounding

the baby is an array of various limbs and organs; body parts which, presumably, the gloved hands may choose to attach to the baby after wrenching off his 'natural' ones. The large title 'Evolution is Dead' evokes the immensity and trauma of a Nietzschean 'God is dead' in terms of cultural and social watersheds. In contrast, the subtitle 'The Germline Gene Therapy Debate', superimposed over the baby's body, seems to be in contradiction to what is going on in the picture. These hands look more like those of a killer (somebody who would 'murder' evolution, perhaps) than someone who is going to perform 'therapy' on the child. The picture expresses repressed cultural fears which are more resonant of the anxious term 'genetic engineering' than in its hygienic replacement 'genetic therapy' which is used in this article. It is perhaps for this reason that the word 'gene' of the subtitle half-covers the baby's penis like a fig leaf. In this world where evolution is dead, the penis is no longer the primary vessel for the tran sf erence of life or the seat of 'natural' reproductive power. If we read this as the gene replacing the symbolic penis, or a threat to phallogocentrism in the cultural order of things, then it offers a powerful trope for technologically-mediated social change. So if the semiotics of the picture represent the protest by the sovereign, stable subject towards the technological invasion of his power (symbolised inexorably by the replacement of the phallus by the gene), then this is in surprising contradiction with the contents of the article itself. The article begins:

> If you put your ear to the tracks, you can hear the train coming.
> In conference halls around the world, geneticists and developmental biologists have been gathering to discuss what was once unthinkable—genetically engineering human embryos so that they, and their children and their children's children, are irrevocably changed. These experts are talking with remarkable candour about using germ-line engineering to cure fatal diseases or even to create designer babies that will be smarter stronger or more resistant to infections.[15]

Although the cultural anxiety on the magazine's cover suggests invasion, menace, horror shows, the erosion of power of the subject as represented by the phallus, the article nevertheless only partially addresses these fears. After all, this technology is as exciting and sublime as a train rushing full speed ahead into a brighter future. The problems the author presents are mainly technical ones; for instance, of finishing the gene sequencing begun by the Human Genome Project, of finding better ways to insert switches into the genetic code which can be manipulated later in life. These sequencings are problematic, he concedes, and will have to be extensively cross-referenced to all types of personality functions. Hence, the

difficulties are principally described as a problem of cryptography—a problem of discovering the right code. Socially, the article concedes that the pressure of the market may also cause a problem, too, the article concedes. Parents may want designer babies 'to give them an edge over the child at the next desk, or to stop them from being homosexual.' Hence, the article's latent homophobia finds its casual expression in this way. The question of 'being something', whether a homosexual, or a blue-eyed blond, becomes a question of social codes which are either violated or confirmed by the genetic choices parents make. However, parents who want 'designer babies' are ultimately applauded as forward thinkers who embrace 'the future'. Even though the article attempts to justify the need for these technologies in terms of disease prevention, this is shot through with symptoms of a drive to suppress diversity and thus complexity; to (re)produce the Sacred image of the Same, albeit through 'unnatural' means.

Thus the challenge to the humanist subject is how to resolve the desire for the perfect re-creation of unity and sameness with 'unnatural' means. In this article the rhetorical strategies which implicitly justify this desire derive from the interwoven strands of technological progress and the technological sublime (which will be a crucial part of my analysis in chapter three). These are powerful legacies of modernity and the Industrial Revolution and are implicit in many writings on technoscientific research.

Ultimately, these narratives allow the article to side-step addressing fraught ethical and philosophical questions which would be required to explain the cultural anxieties represented on the cover. In order to expel these anxieties, the author Robert Taylor uses a popularised technological determinism to its fullest potential combined with an evocation of the sublime. Accordingly, the article ends with: 'It no longer makes sense to shy away from discussing what we're going to do when all the technical obstacles are overcome, and genetic engineering offers us the profound power to sculpt our children--and the future of our species'. This final authorial comment contains both an appeal to common sense and echoes other quotes in the body of the text, like that of Gregory Stock: 'There is no way to avoid this technology. The knowledge is coming too fast and the possibilities are too exciting.'

Another TIME special issue, focuses on 'The Future of Medicine: How Genetic Engineering will change us in the Next Century'.[16] Once again the cover offers a rich source of

cultural comment. A beady-eyed green snake hisses from the cover, its body wrapped around a stumpy tree trunk which, together with the emblem of the spiralled DNA helix, indicates that genetics bears the indelible stamp of western religion and its fears. As is the picture, the snake is inseparable from the representation of the helix. Inside the magazine is a picture of a 'real' DNA helix, subtitled 'Life Itself'. After all the talk of codes and switches, its lack of rigid geometry seems surprising. This tiny shape, revealed to us by powerful microscopes, is our new trope for life itself found through technology. The helix represents the longed-for dream of the 'foundation of unity and diversity', where certainty of artefacts and organisms is tantalisingly held out for millennial hopes and anxieties. There is an artificial neatness in the tran sf ormation of the Modernist Project into the Human Genome Project in terms of cultural history. Rey Chow points out that there are 'globalized and popularized usages of terms such as "modernity" and "modernization," which pertain to the increasing technologization of culture.'[17] She argues that modernity is culturally embedded in modernisation, or technologisation. In this case, the transmogrification of the genome into the site of secrets which can sati sf y the centuries-old cultural longing for foundational answers about 'Life Itself'. This is taking place amid the hyped corporate hunger for profit from biology and biotechnology. The materialized hopes of the Enlightenment: to look inside the human and discover *all* his secrets, of finding the Master Code, of discovering other aberrant codes linked to thicker, more problematic dy sf unctions, finds expression in this way.

It is telling that the TIMEline of the evolution of the gene in science and culture focuses on disease, forensics and commerce which, in turn, become the semiotic in which this new symbol, a metonym for life, circulates. In terms of the various Human Genome Projects, the work at present is one of scientific cryptography. The stem, *crypto-* meaning the reading of secrets, hidden and concealed, which form 'cryptography'; the science of deciphering codes. This cryptography is not about transmitting wartime secrets, strategies, and orders, although it may as well be as this code, 'the code of all codes', is the code of 'Life Itself' on planet Earth and has the potential power to radically tran sf orm lives in inconceivable ways. The narratives that are important to deciphering the Genome Project are those which are implicit in technoscientific research, the notion of progress and of a 'race', the demands of capitalism

and social ideologies which are latent in the private sector's interest in, what TIME calls, 'the most intriguing genes'. It would appear that not all genes are equal. Government-sponsored scientists are left to work on sequencing the less intriguing. Some genes are more intriguing in the eyes of private sector research precisely because social interests and their extant commercial interests are not all equal. In the face of these developments, legal codes must also be developed. The sole reason for private biotechnology films spending large sums of money on sequencing the genome is to gain patents in order to have a captive and monopolistic market. Having patented some small part of the puzzle, they will be able legally to own part of this vision of 'Life Itself'. To have definitively conquered part of nature the process of genome mapping is looking, probing, sequencing, discovering, competing, and, finally, patenting the map. The next stage is reading the codes and finding out what they mean. Like any research and development, the secrecy within which the mapping of 'Life Itself' is shrouded is similar to that surrounding state secrets. Discovering 'Life Itself' is based in the fusion of old-fashioned Man, Man™ as a genetic commodity, and *Homo sapiens,* the creature of science with his history of evolution.

Although I am not in a position to critique the scientific methodology of the Human Genome Project, the various assumptions and practices that go into the translation of life into informatics, into commerce and its re-visioning in cultural narratives are framed by cultural codes which are deeply evocative of historical ethics, ideologies and conceptions of the category of humanness. Donna Haraway explains how the Project itself is possible only by the fact that 'Much of the history of genetics since the 1950's is the history of the consolidation and elaboration of the equation "gene = information." Data Bases are not epistemologically neutral creations, she shows. They also have their codes which are manifest in various design features, structures, factors, coefficients and queries that meet specified conditions. Databases are part of the logic of informatics. All of these choices have their functions and limitations. They do not provide a crystal clear outlook on the world, not a unifying and foundational picture as these articles suggest.

However surprising and disappointing it may seem, the narratives that TIME and *New Scientist* use in abundance, are also those used by the United States Department of Energy in

its official public access homepage: 'To Know Ourselves'. This web page was created in 1996 to explain the Human Genome Project to the rest of the world and as an 'account of work' sponsored by the U.S Government.[18] 'Account' is an interesting term to use as its references are so wide. It has origins in both calculation and narration, but accountability also implies responsibility through location and transparency. 'To know Ourselves' does not seem to fulfill this promise of responsible narration. The homepage begins by explaining how the project initially began as a 'promised tool for assessing mutation rates of survivors of the Hiroshima and Nagasaki bombings and their descendants.' The project is a direct descendent of horrific wartime devastation and the search for gene mutations that resulted from exposure to radiation. However, the remapping of origins the project undergoes is quite surprising. Under the rubric 'Ethical, Legal, and Social Implications', the writers wax lyrical in a way that is strongly reminiscent of Bacon and is worth quoting at length:

> The Age of Discovery was the Age of da Gama, Columbus, and Magellan, an era when European civilization reached out to the Far East and thus filled many of the voids in its map of the world. But in a larger sense, we have never ceased from our exploration and discovery. Science has been unstinting over the ages in its efforts to complete our intellectual picture of the universe. In this century, our explorations have extended from the subatomic to the cosmic, as we have mapped the heavens to their farthest reaches and charted the properties of the most fleeting elementary particles. Nor have we neglected to look inward, seeking, as it were, to define the topography of the human body. Beginning with the first modern anatomical studies in the sixteenth century, we have added dramatically to our picture of human anatomy, physiology, and biochemistry. The Human Genome Project is thus the next stage in an epic voyage of discovery—a voyage that will bring us to a profound understanding of human biology.

So while the Home Page begins by explaining the project's origins in research into mutant genes of survivors of the Hiroshima and Nagasaki bombings, (where mapping was critically important to succes sf ul bombing), it ends with a comparison to the mapping of the New World. This is a cleaned-up version of mapping suitable for a heroic and Baconian scientist. The narrative map the writers create of the Project mythology does not include histories of devastation: these histories have become the new 'uncharted voids' on the map of technoscientific progress. Science, in this picture of the world, is the 'unstinting' taskmaster who is both outside 'us' ('*its* efforts') and is 'us' ('*our* explorations'). This explanation also reveals who is excluded from 'us' in this scientific fantasy: those from the 'Far East' are not 'us', they fill the 'voids' on 'our map'. Mapping, then, is a powerful metaphor for power that

cannot be disassociated from colonialism, from bombing, from political practices and their material consequences. Yet mapping is what the Genome Project is all about. It is extraordinary that this state funded 'exploration' into the heart of cultural notions of identity is not more self-conscious about its troping and extant cultural narratives. Even if this web page is only a very small portal into the more detailed research being done by the US Department of Energy, as the official account it creates an authoritative narrative map that influences how this important work is thought about in culture.

Writing about boundary figures which are traditionally off the map, the realm of monsters and lab rats, poses few rhetorical problems here. In another page entitled 'Mighty Mouse', the writers explain the experiments on transgenic mice which have designer mutations in their genetic structure to allow researchers to study the effect of defects that mimic those found in human patients. Once again, the practice is cleaned up of its potentially fearful overtones, replete with anxieties surrounding border crossings, death, and monsters. Mighty Mouse, the article seems to suggest, is as All-American, hopeful, and innocuous as his rhetorical companion Micky Mouse. By this move, the historical space of the laboratory morphes into the postmodern hyper-real space of Disneyland where visitors may leave their worries behind. The laboratory space, which Haraway refers to as a 'theatre of persuasion,' is also a theatre of the culturally unnatural, the uncanny, the transgressive, and transgenic, where monsters and vampires coexist. 'I am drawn to the laboratory for this essential narrative of epistemological and material power. How could feminists and antiracists in this culture do without the power of the laboratory to make the normal dubious?'[19] The opposite strategy, of making the dubious normal, even heroic, is the rhetorical move of the Human Genome Project homepage, symbolised so potently in the choice of the Mighty Mouse figure as mascot.

Finally, it is deeply revealing of this ethical system that the only potentially negative social implication to which the Project homepage draws attention is the problem of privacy and ownership of genetic information. Genetic privacy is something which must be safeguarded warns the Project. While it is clear that this is an issue which demands serious consideration, more profoundly, it is revealing of the kind of social system that the Project

assumes. This social system is fervently individualistic, Western and 'First World' where property rights are immanent in social identity and, now with the age of the patented gene, property rights are also immanent in ontology also: this is the commercial patented heart of Man™.[20] In the 'Cyborg Manifesto,' Haraway describes this system: 'The proper state for a Western person is to have ownership of the self, to have and hold a core identity as if it were a possession. That possession may be made from various raw materials over time, that is, it may be a cultural production, or one may be born with it .... Not to have property in the self is not to be a subject, and so not to have agency.'[21] This lack of agency is tied to the ability to exercise property rights which is linked, in turn, to literacy, class, race, in short to access to various power formations. It is a fraught uneven ground. The Human Genome Project does not consider a social system where groups matter, rather society is a collection of property-owning individuals, who each own and have the responsibility of guarding their own genetic information.

These dominant ideals of technoscientific progress yield interesting contrasts with the more cynical and self-styled 'countercultural' perspective as represented in the pages of *Mondo2000* and *Wired* magazine. What these representations do share is an understanding of technology's embeddedness in commercial interests and its relationship to individualism and private property. Perhaps nowhere are these three concepts more securely fused and celebrated than in the pages of *Wired* magazine. Both *Wired* and *Mondo2000* carry technology-love to the level of fetishism and the slick, ultra-hip rhetorics favoured by these publications are highly seductive. While *Wired* is clearly more mainstream than *Mondo2000,* they each borrow from technoculture's hip, beatnik underbelly to sell their cultural narratives. The result is a perverse reading. Film critic Vivian Sobchack, despairingly confides her love-hate relationship with *Mondo2000,*: 'I am drawn to *Mondo2000*, I realize, because it appeals to the worst in me, the laziest in me, the cheapest in me. In my sober and responsible moments, I bemoan our culture's loss of gravity and fear the very real social dangers of disembodied ditziness, but holding this Christmas present to myself, all I want is a head shot.'[22] *Mondo2000*'s heady mixture of postmodern irony, consumerism, easy indulgences, disaffection and jokiness makes it difficult to critique as it backs away from any firm

commitments, political or otherwise. Yet beneath the surface of the slick pages—featuring articles proselytising synthetic hallucinogens, the future of teledildonics, brain implants, hackers and crackers, and the music of DNA, all edited by R.U. Sirius and Queen Mu— hides 'privileged, selfish, consumer-oriented, technologically dependent libertarianism [and] irresponsible individualism', invects Sobchack. (18) The dark fantasies offered by cyberpunk may well provide the necessary glamorous beatnik narrative, but, as a contributor on the WELL has noted, 'I don't think there's really a subculture of smart-drugged, outlaw UNIX programmers listening to M.C 900 Foot Jesus and Boiled in Lead and going out to multimedia performance installations every night'.[23] While this contributor is primarily interested in disproving the reality and authenticity of cyberpunk pretenders, his referencing of the technologically literate to 'UNIX programmers' is telling of the kind of people who have technological access and buying power. So even while texts like *Mondo2000* embrace marginality and countercultural urges, and, while the people who consume these technologies may like to think of themselves as emanating the disaffection of the cyberpunk console cowboy, it is important to remember that this is a disguise for a very real privilege, a market customised for a one-size-fits-all Western capitalist consumer. UNIX programmers are usually middle-class, well paid, white, and in high demand on the job market. They are generally not fighting for their lives on mean street as these representations suggest.

Wired magazine offers a guide to what is happening and hot in the high rollers' game of technological research, development, and marketing. *Wired* is not, as it would like to pretend, a hip mag for unorthodox, anti-establishment, marginalised whiz kids; rather it is the preferred publication of many top-end earners who are generally university educated and working in Information Technology. And, hence, its recurrent tropes of contamination are the voice of the logos creating new borders. Although *Wired* loves to hate Microsoft and chairperson Bill Gates (presumably because Microsoft represents the 'logos' in the field of information technology products and power, *Wired* would like to position itself as a counter-cultural voice speaking out for backyard operations), hating Microsoft, being hip and having the slickest design pages hardly classifies it as radical even though it has an aura of that sort of chic.

This donning of a marginalised aesthetic seems particularly absurd and inappropriate considering the ways in which so many are genuinely excluded from the march into the bright new age, and also how technologies act to fortify their own exclusivity. [24] In keeping with the recurrent trope of mapping, poet and webmaster, Olu Oguibe, describes the creation of new 'forsaken geographies' inhabited by 'New World Others': 'Electronic mail and the web browser ... become veritable tools for the construction and fortification of an other world, outside the borders of which everything else is inevitably consigned to erasure and absence. In connective South Africa the majority of the population fit most perfectly into that category of the inconsequential revealingly known in cyberspeak as "PONA". They are, indeed, a people of no account'. These 'silent territories' must serve to remind us, argues Oguibe, of 'dominions which, though left behind in our march into a new age and a new millennium, nevertheless remain to invalidate our claims to progress'.[25] The fascist implication of the PONA are quite clear; after all, cyberspace, as an example of 'progressive technologies' is only available to those who have computers, modems, and the necessary literacy to work them. Any rhapsodising of technological progress must take into account the very real technological social stratification that often reinforces existing social fault lines. Hence, *Wired*'s sense of authoritativeness is partially derived from an unwillingness to engage sufficiently with technology's complex relation to social formations and privileges.

In 'The Killer App: Wired Magazine, Voice of the Corporate Revolution', Keith White, condemningly writes: '*Wired* is technology's hip face, an aggressive apologist for the new information capitalism that speaks to the world in the postmodern executive's favored tones of chaotic cool and pseudo-revolution.'[26]Among posturings that White lances in his wholehearted condemnation are the tendencies for *Wired* to create technoanxiety in its readership, to pen 'gooey appreciations of Silicon Valley CEOs,' its lauding of 'macho individualism'. Of course, *Wired* is a lifestyle magazine and, as with all lifestyle magazines, it is in the business of selling envy and ideology as well as technologies. Its interests are apparent in the frequent blurring of the line between editorial, advertisement, and their strange hybrid, the infomercial. This reveals the corporate interests at stake which are partially disguised under a postmodern, disaffected, macho cool. *Wired* also demonstrates the way in which technologies are capitalist

fetishistic objects: to own the brand shiny new and state-of-the-art is also to accrue cultural capital. However, just as the fetish is an expression of displaced desire, the belief in the actual utility of many of these technologies is a manufactured and displaced desire. Because they express a displaced desire, the Critical Art Ensemble (CAE) argues that technologies do not really affect us in the way we think they do, but are the material result of the production of superfluous needs through capitalism which plays itself out in the acquisition of essentially useless objects. [27] These objects are not jerry-rigged up performance enhancing machines, as the cyberpunk mythology goes, but rather show their lack of utility in their very short lifespan. Certainly it is true that a relentless teleological narrative of obsolescence and progress does structure the frenetic, accelerated market of technological consumables. However, while the observation that the utility of some technocultural artefacts is marginal, to go as far as saying that they are all 'useless', as CAE does, is not helpful in delineating why culture needs them. The life-changing powers of these common objects may not be made explicit in their instruction manuals, but culture's 'use' of these objects is where their 'usefulness' lies. And as White disparagingly comments; the use of some of these objects has the power to turn their owners into 'rebel consumers'.

Of course CAE's complaint is not really new and, in fact, could be seen as a rewording of the critical practice this work espouses: things are not really what they seem, and the realm of facts and artefacts, fantasy and science, narratives and mythologies are all fused despite scientific culture's attempt to shut science fiction out of the laboratory. Science is simply not understandable without the cultural mythologies that create its dominant knowledge claims. In terms of the various representations of the world, ourselves, and its relation to knowledge making, we can do better in finding thicker and more consequential ways of describing and analysing technoscientific practices and artefacts: ways that radically eschew distilling out the political, that take into account commercial interests and benefits, and their power in shaping the popular imaginary's view of science which in turn has a profound influence on knowledge-making. If marketing is the privileged form of commercial knowledge transmission, then there must be a greater awareness of its non-innocence, its lack of transparency, and of its power in shaping the world of biotechnology. In short there must be

more questioning of how and why the new age of discovery and progress carries with it Man's desire for the ultimate domination of nature and other cultural others.

Chapter Two: Technoculture: Narratives and Figurations

> Technology - pertaining to art or a craft, a tool.
> Logos - 1 Philosophy. Reason, regarded as the controlling principle of the universe. 2 the divine Word; the second person of the Trinity. [C16:Gk : word, reason] a guarantor, keeper of the knowledge.[28]

As my critique of popular culture technoscience texts makes evident, technologies are embedded in a nexus of cultural narratives. These narratives do more than merely offer interesting representations of, or responses to, relations between practice and artefacts. Thinking about technologies in this way is thinking about them as tropes, whose resonances have become so naturalised into our socio-linguistic economy that their latent content has been forgotten or no longer registers. Reading technologies as tropes and narratives also enables us to politicise them, to situate their knowledge claims, and to denaturalise and unhinge the self-guaranteeing system of logocentrism. Unsurprisingly, this kind of allegorical reading represents a form of discomfort to logocentrism. This is because the process of logocentrism is bound up with privileges and practices of power. As part of a fraught semiotic economy, narratives are highly contingent and non-innocent and the way we are socially articulated as subjects is informed by this process of logocentrism. In this chapter, I will discuss the conjoined critical practice of reading narratives and figurations as a kind of brief theoretical overview to the critical practice of the whole work.

As the most influential aspect of culture's organising urge is to establish secure foundations and principles through a central, unmediated, true point, the *logos,* logocentrism provides a resistance to the process of denaturalisation. '[B]eyond signs and representation', the logos is, 'the real and the true, the presence of being, of knowing and reality, to the mind', the feminist philosopher Elizabeth Grosz [29] argues. It is defined as the 'controlling principle of the universe' in philosophy, and the divine Word spoken by the son of God. [30] In keeping with the outcome of a grounded system of knowledge, logocentrism functions by positing a unified conceptual system that equates an innocent and impartial, or a mimetic, relationship between an 'objective' outer reality and a privileged, 'objective' system of representation. For this,

logocentrism relies heavily on a Cartesian logic of identity that is organised around hierarchised binaries such as self-other, male-female, God-man, presence-absence, nature-culture, mind-body, human-machine. In its complete rejection of a mediated reality, this system problematises the politics of identity through the fraught relationship the logos has to Otherness. This fraught relationship is problematised by the fact that the binaries are hierarchies, and not real opposites. The process of logocentrism makes the 'weaker' term in the binary serve as a site of excess and cultural repression in order for the stronger, positive term to expel its unwanted difference, and so constitute itself as unmarked. This makes the negative, weaker term (such as female, absence, culture, body, monster) an attenuated, derivative term containing both 'too much' description and 'too little'[31]. This attenuated, derivative term is, then, a paradoxical site of deficiency and excess which threatens to disrupt the stability of the positive, stronger term unless the process of logocentrism is constantly reenacted and confirmed; whether through representations, narratives, politics or institutional structures. This creates a need to constantly retell the same stories as allegories of such things as the Baconian relation of Man to Nature, or of Science to the world, for example, in order to maintain stability.

However, with the crisis of modernity in which technologies have played a significant part, challenges are posed to the logocentric system. Donna Haraway explains this:

> Certain dualisms have been persistent in Western traditions; they have all been systematic to the logics and practices of domination of women, people of colour, nature, workers, animals—in short domination of all constituted as others, whose task is to mirror the self .... The self is the One who is not dominated. . . High-tech culture challenges these dualisms in two intriguing ways. It is not clear who makes and who is made in the relation between human and machine. It is not clear what is mind and what body in machines that resolve into coding practices. [32]

So just as technologically-mediated change makes technoculture a powerful subset of dominant culture, also creates troubling identities and narratives which disrupt the stability of the received logocentric notions. Even though most of technoculture's privileged terms are similar to broader western culture's, it does have its vanguardist fringe. Yet in spite of this fringe and the close association of the fringe with 'the cutting edge', 'innovation', 'progress' and constant change, it is clear that technoculture quintessentially reflects mainstream cultural priorities. The process of logocentrism I am describing here is an important feature of the

stabilising process. However, the association with the culturally inscribed fringe or marginal practices does problematise easy representations and creates a sense of discomfort. On the cultural maps, positive and negative terms must not become mixed or contaminations result in the metaphors of technoculture.

One way in which this discomfort is commonly registered is through metaphors of contamination and disease. For example, *Wired* Magazine is redolent with the metaphors of contamination and, accordingly, features cyberterrorists attacking data security through virus attacks, the civilian economy's need to be safeguarded and protected from data contamination, the fear of chaos and entropy which must be kept out of data perfection as 'cellular DNA degrading into cancer [is]... like a recording of chaos'[33]. In a very similar way, the discursive realm of technoscience, is laden with latent cultural anxiety in the metaphors of miscegenation. (The 'unnatural' birthing from the mixing of orders, black with white, one species with another etc.)[34] Shot through with the symptoms of cultural repression, these cases are represented in metaphors of contamination of 'natural' orders, of violence against purity, or of monsterishness. Even though *Wired* attempts to be countercultural, the process of logocentrism still functions by sorting out privileged terms from non-privileged terms. This is because logocentrism is a process, not a taxonomy. For example, if certain historical Others are accepted into the mainstream, then it is through the process of their being distinguished from even more repugnant Others: this is the way the process of logocentrism always reproduces its binary hierarchies through difference. Anything outside these codes of normality are writings of difference.[35]

Similarly, the entrenched logocentrism of science and technology ensures that scientific and technological artefacts and practices are heavily influenced by what Donna Haraway describes as 'the god trick'. This 'trick', Haraway explains, involves the 'separation of expert knowledges from mere opinion to the legitimate knowledge for ways of life, without appeal to transcendent authority or to abstract certainty of any kind .... It is the founding gesture of the separation of the technical and the political.'[36] By removing the understanding of technologies from a subjective human reality fraught with desires, prejudices, and politics, and placing it in the realm of the highly technical and 'objectively' scientific with its own

transcendent laws, scientists are able to say that they are 'on the side of the objects' at the location of 'the culture of no culture', as Haraway describes this elevated discursive realm.[37] Science contains its own invisible self-generating transcendent authority which has become institutionally naturalised and has allowed it to become promoted to the status of preferred spokesman, chief historical censor, and common social measurer of human achievement and progress without qualification.

In spite of this elevated status of science and technologies, logocentrism does not achieve its 'god trick' easily or manage to place an hermetic seal over the complexity that is repressed in order for this 'culture of no culture'[38] to generate its generally unquestioned transcendent authority. Even though technologies themselves pose challenges to traditional logocentric dualisms, new ways of describing these artefacts and practices to maintain their discursive authority often rely on the process of logocentrism even though its terms have been altered. These technological challenges to logocentrism are both ontological and epistemological as, for instance, the defining characteristics of being human blur with machine being, the traditional powers of God are shared by the powers of technologies, the limitations of time and space are pushed back and old categorisations of knowledge become meaningless. There is a lack of ease in this process of technologically-mediated change which is manifested by the mingling of excitement of technology's possibilities with the huge cultural discomfort inherent in so much change.

When artefacts and practices are represented by culture in such a way that denies their allegorical, tropic value, then the hidden ideologies which authorise them have the greatest investment in sustaining their logocentric Truth. However, reading them as allegories reveals their contradictions and ambivalences. As stories symbolising some 'other' (*allos*) level of meaning, there is always an implicitly ironic element in allegory insofar as stories may be based on radically different sets of assumptions which challenge their coherence and stability. How these allegories and ironies are read and lived depends on the kind of interpretative strategy employed: what is at stake, and from what position they are viewed. Both are inherently perspectival.

Consequently, reading technoculture and technocultural artefacts as allegories is quite different from reading them as symbols (which is the logocentric world view). A symbolic reading of culture will create a coherence based on beliefs in referentiality and discreteness and a belief in representation's correspondence to reality. The wonderful (and terrible) thing about stories is that you can never really get to the end of them or entirely grasp them. The ethnographer James Clifford bases his critical practice on reading and writing culture as allegory: ethno-*graphy*. In his article 'On Ethnographic Allegory', Clifford makes a crucial distinction between symbols and allegories which is worth quoting at length:

> Allegories draw special attention to the narrative character of cultural representations, to the stories built into the representational process itself. It also breaks down the seamless quality of cultural description by adding a temporal aspect to the process of reading. One level of meaning in a text will always generate other levels. Thus the rhetoric of presence which has prevailed in much post-romantic literature (and in much "symbolic anthropology") is interrupted .... In ethnography the current turn to rhetoric coincides with a period of critical and epistemological reevaluation in which the constructed, imposed nature of representational authority has become unusually visible and contested. Allegory prompts us to say of any cultural description not "this represents , or symbolizes, that" but rather, "this is a (morally charged) story about that"

Allegory and irony are frequently juxtaposed in the discursive realm of technoculture, as one person's allegorical truth is another's ironic judgement. For Haraway, irony carries a sense of embodiment, location and contingency.

As both a symbolic and visceral site of located identity, then, the body provides an important political metaphor which is hotly contested by notions of cyborg figurations, as I will discuss shortly. Irony depends on knowledge, position, and, hence, embodiment. The more culturally literate, the greater the awareness of cultural location and the greater the possibility for the perception of irony. Paul de Man tries to capture the experience of allegory and irony meeting. He writes:

> the two selves ... are simultaneously present, juxtaposed within the same moment but as two irreconcilable and disjointed beings .... irony comes closer to the pattern of factual experience and recaptures some of the facetious of human existence. Essentially the mode of the present, [irony] knows neither memory nor prefigurative duration, whereas allegory exists entirely within an ideal time that is never here and now but is always a past or an endless future. Irony is a synchronic structure, while allegory appears as a successive mode capable of engendering duration as the illusion of a continuity that it knows to be illusionary[39]

Hence, the implicitly allegorical component of logocentric tropes reinforce hegemonic cultural narratives but, as de Man says and is made clear in the reading of cultural narratives in this way, there is an unreality about allegory, it yearns toward some 'ideal time' which posits it with 'the illusion of continuity', sustaining the illusion of a coherent representation. Irony attached to allegory disrupts the illusionary sense of time and representation, and better captures the 'inherent fictitiousness' of negotiating discourses, the material world, or, more specifically here, the politics of experience and of identity formation within complexly narrated hi-tech environments.

So even while hegemonic narratives are constructing and reinforcing themselves within systems of representation, they are also simultaneously undermined at the semiotic level. Where logocentric cultural narratives differ from de Man's or Clifford's allegories, though, is that they make full claim to an empirical truth value: there is no 'illusion of a continuity it *knows* to be illusionary'. Technologocentrisms, as I will call them, take themselves far too seriously for that level of self-reflexive deconstruction, and this is part of the violence they sustain, and the desire they reveal.

Roland Barthes explains the result of logocentric desire in *Mythologies* as 'the reality of the world [becomes] the image of the world. History into Nature.' [40] To create a distinction between history and nature so that they are mutually guaranteeing concepts is the fraught relationship of representation to reality. Whereas in the past, as James Clifford points out, symbolic readings of culture were unquestioned, it is more common now to have allegorical readings where we can say 'this is a morally-charged *story* about that'.

Redefining these relationships and factoring out the logocentric process is needed to recontextualise identity. One way of achieving this recontextualisation is through accounts of nuanced mediation rather than inherently violent logocentrism. Brian Opie postulates a number of comparative ratios between the terms android and human, textual and real, which are pertinent to this work. I will focus on these relations in chapter four. Usually these terms sit on opposite sides of the western foundational divide as a result of the distillation of the mimetic from the authentic. According to this process of distillation, the android is implicitly posited as a 'fake' human and the textual as a 'fake' reality. Both the textual and the android

lay claim to an 'ontology' which can only belong to the essential terms of the real and the human. The representational terms 'android' and 'text' have some of the qualities of the primary terms 'real' and 'human', but none of their essence, or so our traditional logocentric way of thinking about these concepts goes. But if we forget the essence and the divide of logocentrism and instead concentrate on a mediated figuration the resulting nexus of relations between identity and textuality might be, as Opie proposes:

> As the android is to the human, so the textual is to the real; or
> As the android is to the real, so the textual is to the human; or
> As the android is to the textual, so the real is to the human.[41]

By offering relatively unspecified *comparisons*, (unspecified to the extent that we could look at each one in terms of metaphysics, ontology, epistemology or a variety of others) the usual binary system of *differentiation*, upon which logocentrism depends, is disrupted. Instead the mediated process through which each term functions in relation to each other term is stressed.

Looking at these kinds of creations of identity, it is clear that we would not have such a defined notion of the human without the scary monster marking out the border where the human ends. Similarly, the notion of normality is inconceivable without the abnormal, the mentally ill, the monster, the vampire; and so on, endlessly. These dualisms are indicators of Western culture's problematic creation of Otherness. It is also indicative of culture's need to create these mythic sites for holding contradictory fears and desires together, as Roland Barthes has so acutely elaborated. Although technologies are helping us to redefine these boundaries, all too often this is achieved by the creation of an even more repugnant Other differentiated from the privileged terms.

As a mythical site containing contradictory desires and fears, the monster is the ultimate negative term. With its associated fears and fascinations, its unstable, unacceptable *lack* of ontology, the monster often haunts boundary crossing figurations in many popular culture texts. Similarly, as concerns about transgression and order become increasingly of concern within a culture in rapid tran sf ormation, technology has become a rich source of images of monsters. Freud's expression 'polymorphous perversity,' meaning a mal-integrated personality which is both too diffuse and too inclusive of the outside and of otherness, applies

precisely to the monster with its lack of a real ontology as a non-valorised term. Typically, the monster embodies a certain pathos in its desire and failure to be figured as human. What makes the monster and the cyborg so eloquent in the critique of logocentric cultural narratives and ideologies (consider, for instance, the impassioned and thoughtful pleas of Mary Shelley's monster), is the location of the monster on the cultural margins. Speaking from a place of despair, a geographical, social and psychological borderland where all monsters eventually go in these tales, the monster always de*monstr*ates the violence of logocentric cultural hierarchies.

Complexities are raised within this system by the postindustrial, postmodern new world ordering. The cultural shift described by postmodernism, for instance, favours pluralism, decentralisation, the undoing of high and low cultural boundaries and, to a degree, atomises cultural metanarratives. Its proximity to technology is such that the postmodern world is often symbolically represented by postindustrial technologies; such as the flow of information age data within webs, the system of satellite-linked media, simultaneous communication and the putative lack of hierarchy on the hypertexted internet. Similarly in criticism the cyborg is a favoured figure for postmodern, techno-inscribed subjectivity while hypertext often stands for postmodern semiosis. Broadly speaking, though, in spite of the overt celebration or, at least, a tolerance of a cultural politics of postmodern complexity and diversity, it is important to stress that logocentric metanarratives do not simply vanish. On the contrary, cultural narratives attached to new practices and artefacts are often simply new versions of old stories, even though they may appear to be freshly minted from a new technocultural economy.[42] Postmodernity and technoculture, in this way, talk a lot about gaining new freedoms and democracies within an atomised culture. However, as we shall see in some representative texts, hidden orders are present which are particularly attached to historical cultural metanarratives

In the spirit of locating knowledges, it has become a critical commonplace for cultural critics writing on technoculture and technoscience to stress their position of speaking from outside scientific knowledge and training. With respect to this practice, it may be seen to be a move which secures the knowledge claim or as a celebratory fact (in accordance with the

belief that speaking from the margins often provides a better perspective on canons of knowledge). In response, many 'scientific' critics see this as an embarrassingly easy target for cultural critics' 'defamatory' claims against the canons of technoscience. Andrew Ross' *Strange Weather* is, in this way, dedicated to 'all of the science teachers I never had. It could only have been written without them' [43]. If taken seriously, Ross' claim may seem a little unfair in suggesting that those who have training in the canons of science are so blinkered with modernist or other logocentric systems that they are unable to see outside its prescriptions and methods. However, as a more gentle rebuke toward the scientific establishment's anathema toward criticism coming from anywhere but from within its own ranks and, also, its fiercely guarded narrative forms and power, Ross' acknowledgment ironically prefigures the critical lashing his work would receive in the hands of, for instance, Gross and Levitt in *Higher Superstition*[44].

Even more dramatically, the much publicised attack on the journal *Social Text* by physicist Alan Sokal threw up all of the anxieties surrounding fraught claims of speaking rights and emphasised the position of privilege narratives of scientific knowledge inhabit, and their powerful system of philosophical guarantees which is so upset when it is exposed. Typical of a culture in thrall to the promises and authority of science, in the media coverage of the event, physicist Sokal was heralded as a brave sceptic who debunked the superstitions of the academic left and their poststructuralist mumbo jumbo of the kind Gross and Levitt also describe in their *Higher Superstition.* Hence, when cultural critics write on science, the accusation that they simply do not have the technical expertise to comment is seen as a perfectly valid invalidatory strategy. However, when scientists write on cultural criticism, their technical expertise is seen as an eminently suitable qualification, at least as far as the popular media coverage is concerned, for valid criticism. So from any perspective, the scientific claims to knowledge are ascendant, and the importance of position within the technocultural web is stressed.[45] Reading this controversy as a conflict of located, juxtaposing cultural narratives, and their associated powers, makes evident the ironies which exist within what counts as knowledge.

The feminist critic Susan Bordo writes extensively about the (re)investment of power in a supposedly flattened out, postmodern culture. In her article 'Material Girl', Bordo uses the cultural critic John Fiske's reading of power within postmodern culture as an example of the kind of postmodern reading which she is contesting. Bordo quotes from Fiske, where he emphasises that: 'The subordinate may be disempowered, but they are not powerless. There is a power in resisting power, there is a power is maintaining one's social identity in opposition to that proposed by the dominant ideology, there is a power in asserting one's own subcultural values against dominant ones. There is, in short, a power in being different'. Bordo contends that this, as a misreading of power, is one which implies that 'all forces have become "resources"' and that this misreading is sustained by 'a very common postmodern misappropriation of Foucault'. This misappropriation of Foucault, according to Bordo, acknowledges that power is implicit in all kinds of social and cultural interactions, however, it also implies that power is 'in the *possession* of individuals or groups, [it is] something they "have"—a conception that Foucault was at great pains to criticize' [46]. In terms of technoculture, however, it is Fiske's kind of reading of postmodernity which is commonly celebrated and pushed by such diverse power groups as advertisers, consumers of hi-tech, corporations such as Microsoft, Netscape, and popular culture texts. Technologies become resources of self-expression and self-empowerment.

In his *Technologies of the Self* Foucault elaborates four different social technologies which he characterises as the technologies of production, of sign systems, of power and of the self. The last two are of particularly interest here. Foucault writes: 'Technologies of power, which determine the conduct of individuals and submit them to certain ends of domination, and objectivizing of the subject' and, secondly, the technologies of the self, which Fiske might see as crucial, 'permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies, thoughts, conduct and ways of being, so as to tran sf orm themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality.'[47] Like the concept of the technology of gender, the technologies of power seem really to be technologies of domination, regulation and control. It seems typical of Foucault to stress the extent of control rather than the potential for freedom and so even the

imagined state of happiness is set within a context of permission rather than of possibility. Certainly, it is clear within his work that power is not in the possession of any individuals, or even organisations but rather is immanent in their functioning. Although Foucault's concept of technologies is an expanded sense, as Mark Jenkins rightly points out 'his language indicates a conception remaining firmly within a scene in which machines dominate bodies'.[48]

Figuration, as Foucault and others describe it, offers a way of talking about the articulation of the subject through technologies or other systems of power. At a most basic level, what distinguishes figuration from theories of subjectivity is the way figuration stresses the multiplicity of choices available to identity formation and the blending of the imaginary with the material. However figuration is not a theory of ontology which is specifically oppositional or distinguishable to subjectivity. In fact, some theories and narratives of subjectivity could be said to provide various figurations for identity. In *Modest_Witness* Haraway describes figurations as:

> performative images that can be inhabited. Verbal or visual, figurations can be condensed maps of contestable worlds. All language, including mathematics, is figurative, that is, made of tropes, constituted by bumps that make us swerve from literal-mindedness. I emphasise figuration to make explicit and inescapable the tropic quality of all material-semiotic processes, especially in technoscience .... The chip, seed, or gene is simultaneously literal and figurative. We inhabit and are inhabited by such figures that map universes of knowledge, practice and power.[49]

Hence the 'process of ontology' (as I referred to figuration earlier) is performative, yet also real and imaginary, fictive and material, science fictional and quotidian. Broad markers such as gender, age, race, ethnicity and a whole host of other complex interwoven markers, technocultural or otherwise, code us just as we use these codes for our figuration. Because we inhabit figurations, we can never be outside them (that would be like trying to get to some 'real' outside representation). The cultural map is all around, interpolating us into its symbolic and material systems. From theories of subjectivity, figuration works potently through language and the multitude of other symbolic systems; and, in this sense, it is equally caught up in the dramas of Oedipus and identity formation. However, in distinction to the psychoanalytic subject, there is no *Aha-erlebnis* for figurations, or shock of alienation and identity formation after the gaze travels through the mirror. This is because figuration is multiple and recursive.

While stressing choice to the individual on the one hand, on the other, figuration also draws attention to the fact that the world is a structured place where access to certain technocultural figurations is utterly denied to some, yet accessible to and encouraged in others. The unequally structured relations within technoculture ensure that some figurations are much more powerful than others. Building on Foucault's concept of biopower as the conglomerate of institutionalised practices of regulating and producing 'docile' bodies, Haraway calls these structured relations technobiopower. Just as Foucault suggests that biopower produces and regulates the privileged figures of the Malthusian couple, the masturbating child, the hysterical woman and the homosexual pervert,[50] in her most recent book Haraway suggests a host of privileged figures that inhabit the realms of technoscience. The major figures which she uses to shape her critique of technoscience are the Modest_Witness, the FemaleMan© and the OncoMouse™. But these figures are always held in tension with their implicit relation to Man™— the figure of Man 'enterprised up'[51]. The theoretical concerns that these figures embody, are spawned from her most famous figuration for complex technologically-implicated identity, the cyborg.

Since 'A Manifesto For Cyborgs' appeared in the *Socialist Review* in 1985, both the figure of the cyborg and the manifesto itself have become of central concern to academic debate on technology, identity, and feminism. With Haraway's seemingly user-friendly concept of the cyborg—which is, at the most basic level, a hybrid of animal and machine—it was now possible to talk about a new kind of figuration for complex, technoculturally-inscribed identity. This cyborg is knowingly implicated in its technological embodiment and, with its dynamic of blurred and flexible identities, attempts to deconstruct the politics and power of hegemonic modernist identity within technoculture. This work is a manifesto and, as such, it clearly contains a utopian impulse grounded in Haraway's 'blasphemous faith' of socialist feminism. While this utopian impulse urges for pleasures in the confusions of traditional boundaries—of animal, machine, nature, culture—the Manifesto is nevertheless deeply committed to an awareness of the histories and practices of oppression that inform the genesis of a cyborg subject in the late twentieth century. In contrast to many of its cyborgian forebears and contemporaries (military, fictional, filmic), this passionate cyborg subject must knowingly

acknowledge its lineage with a multitude of things, such as the communications technologies of World War Two, the advances in bio-research which were made in concentration camps and which continue in technoscientific laboratories, Cold War nuclear technologies, icons of hard muscled masculine and military power: in short, this cyborg can never forget its intimate fusion with technologies and histories of devastation and oppression.

As Haraway argues in the 'Cyborg Manifesto,' the history of the cyborg in military technology is only one strand of its stories; or, as she describes it, this provides only a single vantage point:

> From one perspective, a cyborg world is about the final imposition of a grid of control on the planet, about the final abstraction embodied in a Star Wars apocalypse waged in the name of defence, about the final appropriation of women's bodies in a masculinist orgy of war. From another perspective, a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints. The political struggle is to see from both perspectives at once because each reveals both dominations and possibilities unimaginable from the other vantage point. Single vision produces worse illusions than double vision or many-headed monsters. Cyborg unities are monstrous and illegitimate; in our present political circumstances, we could hardly hope for more potent myths for resistance and recoupling. [52]

In spite of these histories, however, Haraway's emblematic cyborg remains hopeful and passionate. Eschewing a politic of ambivalence, the cyborg is passionate precisely because feeling in embodiment, or passion, is intrinsic to its politics of situating knowledges. Locating knowledges from the place of a mediated body is also how the cyborg overcomes the paradox central to its ontology. On the one hand, the cyborg represents multiple fusions which disrupt the stable modernist position as we have come to know it through our Cartesian inheritance of knowledge. Yet, on the other, through inescapably making explicit the tension of 'holding incompatible things together because all are necessary and true'[53] and the embodiment of its position within competing technological and cultural discourses, the cyborg potentially offers 'partial perspective and objective vision'.

Haraway's language is heavy with modifiers such as 'scary', 'troubling', 'monstrous', 'tricksterish', 'polluted', 'illegitimate', 'blasphemous', and 'dirty'. This places her figures at the margins of culture and society and does not try to recuperate the unity of the modernist subject in the service of technological progress or the machine as avatar. These ubiquitous monsterish modifiers and the dreamy-inspired tone her writing sometimes takes also

expresses the elusiveness of rewriting tropes and figurations, of retelling stories, and finding new ways of expressing things from the belly of the technoscientific monster. In this way, being a cyborg is being committed to subjectivity, to embodiment, to perspective, while also being connected to, or interpolated into, an ironic system.

Haraway's cyborg figuration as I have been describing it here is obviously a celebrated ideal: an imaginative utopian figure of the cyborg, who speaks a heteroglossia, lives in a heterotopia and is committed to embodiment and situating knowledges, can access, read and re-write the cryptography of the surrounding and internal technoculture. This cyborg offers the possibility, of learning 'from our fusions with animals and machines, how not to be Man, the embodiment of Western logos'[54]

However, this celebratory ideal is problematised by the fact that machines are most often *man*-made artefacts. Cyborgs are often narrativised as a part of phallocentric desire to create and evolve without the 'interference' of women's bodies. A quick browse into the cyberneticists' Clynes and Kline's research into cyborgs in the early 1960's is deeply revealing of this desire.[55] Unfortunately, it is difficult to recode highly coded figurations; it is a long process and so many military and sexist systems infuse the cyborg with meaning so radically different from Haraway's celebratory ideal. Rather than looking for an essential, premodern, earthy femaleness, 'the Cyborg Manifesto' is an inspired cry for engagement in technoculture and a hope for celebration. The majority of texts I examine in the following chapters confirm the difficulty of recoding this figure: popular cyborg representations hardly offer promising and liberating figurations for complex, contingent and nuanced technocultural identity. However, where these figurations are useful is in their embodiment of cultural narratives about the body, the self, the relationship of Man to Woman, and so forth. In short, of the anxieties and desires surrounding technological change.

Chapter Three: Anxiety and Nostalgia in the Future: Gattaca *and Man*™

As Manfred Clynes and Nathan Kline proclaimed in a paper at a Space Flight Symposium in 1960: 'Space travel challenges mankind not only technologically but also spiritually, in that it invites man to take an active part in his own biological evolution. Scientific advances of the future may thus be utilized to permit man's existence in environments which differ radically from those provided by nature as we know it'. [56] As Clynes and Kline were the 'designers' of the first cybernetic organism, their interest in improving upon Man for stres sf ul space flight missions was evident.[57] It is interesting that they talk about 'challenging mankind' both technologically and spiritually. Firstly, space flight enhances Man's power over nature, in the way Bacon talks about it, but, additionally, Man is able to take 'an active part in his own biological evolution', which also provides a challenge to him. These combined concepts; simultaneously challenging and strengthening Man; of technology and spirituality; of evolution and scientific advances of the future, form the major themes of this chapter. At the heart of this discussion are the various uses of the cultural narrative of the technological sublime. I will continue the theme of the cultural perceptions of space travel in the American imaginary and the degree to which it is underwritten by an adherence to the sublime.

In Andrew Niccol's *Gattaca* (1988) there is the utopian sense that through massive sublime technologies Man can transcend the limits of his Nature through 'unnatural' genetic technologies, which allow him 'to take an active part in his own biological evolution'. However, these technologies also challenge man and his social ordering. Finding a resolution for this paradox, is a central concern in *Gattaca*. This resolution lies in creating a gap between the massive technology of the sublime, and burgeoning genetic techniques that challenge the humanist narrative of Man.

As David E. Nye comments in American Technological Sublime[58], the Space **Race** of the 1960's provided some of the most potent technologically sublime images of this century. Describing Norman Mailer's famous coverage of the Apollo XI mission, he writes: 'Mailer

noted that the vessel that was to carry men to the moon was surrounded with the aura of religion, and that it seemed a sacred object .... here was the ultimate machine of the twentieth century taking on the trappings of a shrine, with its pilgrims, its mysteries, and its terrible, controlled violence.' [59] As this passage indicates, the potential for overwhelmed awe, desire, fear and transcendence that massive technological spectacles can invoke is comparable to a religious epiphany. Hence, Norman Mailer's memorable and inadvertent repetition of 'Oh, my God! Oh, my God! Oh, my God! Oh, my God' broadcast at the moment of the Apollo XI blastoff is in keeping with the spectacle of this technological sublime. As the rocket blasted up in a ball of fire the meaningfulness of the spectacle and the event as originally experienced by the one million people who gathered to see it, the many million more who saw it transmitted on television, and then, much later, generations like my own who would hear of it through its huge folklore, read of it in books chronicling 'great events' of the twentieth century, and see it as a symbol rebroadcast and used almost to banality on television, was already described in and circumscribed by, narratives of religion, humanism and the sublime.

For America, the meaningfulness of the spectacle derived from solid foundations in that nation's imaginary. In the tradition of what Nye calls the American Technological Sublime,[60] the iconography of such things as huge railways conquering vast distance with the new thrill of speed, the spectacle of manufacturing plants capable of an exponential increase in production coupled with later reorganisations of industrial labour that so-called Taylorism or Scientific Management ushered in, towering bridges, skyscrapers, and other huge architectural artefacts of massive nineteenth century American expansionary capitalism, provided scenes of brute machine force which filled the cultural imagination. This came to be seen, as Leo Marx describes it in *The Machine in the Garden* 'as the fulcrum of national power'.[61] Ranging from the perverse beauty, power and horrifying image of the atomic bomb's mushroom cloud to the quiet beauty and shocking strangeness of bluey-green planet Earth viewed from outer space, these exalted, sublimely technological spectacles, seem implicitly sanctioned by a divine force. The intensity of the experience of the sublime is such that technologies are tran sf ormed from materialised embodiments of reason to portals to a realm of potentially infinite power and possibilities. The critic Jonathan Bordo describes this

paradox: 'the sublime arises not from what reason has excluded and suppressed, but from the products of reason itself'.[62] Through this process, the sublime technological spectacle is shifted to a 'higher' plane both overwhelming to reason but an outcome of reason. The implicit struggle between emotional and rational perception plays itself out in the descriptions of technological spectacles.

Our historical understanding of the sublime is partly owed to the English philosopher Edmund Burke who in *Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful* (1757) made an important distinction between the merely beautiful and the sublime. The experience of the sublime, according to Burke, always involves terror, obscurity, solitude, power, darkness, and vastness: 'whatever is fitted in any sort to excite the ideas of pain, and danger ... or is conversant about terrible objects, or operates in a way analogous to terror, is a source of the sublime; that is productive of the strongest emotion that the mind is capable of feeling'.[63] These qualities are clearly inherited from religious experience. The result for many narratives of sublime technologies is a sense of euphoria that infects the machines with mystical qualities held in tension with the symptoms of angst that accompany technological change and are indicative of a certain fear of overreaching 'natural' limits.

The American Military-Industrial Complex also has a special interest in maintaining its historically-derived technological sublime through the associated ideas of the perfect, fail-safe, all-powerful machine, coloniser of the enemy and of outer space. These artefacts are products of rationality yet their representations are of a realm where artefacts, narratives and fantasy blend and fuse.[64] As Vincent Mosco points out: 'military aspirations and computer mythology have been symbiotically sustained, permeating the entire political culture with a systems discourse of omnipotence'.[65] Further, in terms of the pragmatics of military power, these narratives are crucial to the maintenance of perceived military strength: this is also called deterrence. The continuation of a large military budget depends on military power being considered necessary to the public. The hugely embarrassing, failed Strategic Defense Initiative (SDI), or 'Star Wars', as it became universally known, filled the technological imagination during the 1980's and epitomises both the fantasy of technological omnipotence and the discourses of the sublime.

Star Wars was a space-based defence of America from enemy ICBM's using X-ray lasers, particle beams, and other directed-energy weapons, which, in its narrative representations, could easily have fallen from the pages of a science fiction novel. Politically, however, it was as much based on President Reagan's pressing need to continue a nuclear freeze during the height of the Cold War, a strong faith that, with enough research and funding, these technologies could be developed, and an imaginative adherence to a Hollywood-supported American technological sublime.

Reagan's expensive and fantastic Star Wars dream was launched in 1983 with the famous to 'protect our people, not just avenge them' speech which was almost directly uplifted from Alfred Hitchcock's 1980 film *Torn Curtain*. It was appropriate to a realm where imagination and reality are fused. Complexities (and absurdities) of the Cold War aside, a clear factor in legitimating the programme as a massive spending priority was the mystique of computer technologies that increasingly came to dominate the cultural imagination of the West during the 1980's; the decade when computers suddenly proliferated and entered many homes and most workplaces. In accordance with this new societal tran sf ormation, the culture industry as a whole echoed Cold War politics. It became populated with science fiction, technology-based plots, and was often strongly based around the battles of good Americans against evil empires. The very style of Reagan's presidency, as a former Hollywood hero himself, was strongly characterised by these kinds of cultural narratives and dreams of idealised solutions. For this reason, the science fictional mysticism of Lucas' American-accented battle up in the stars is as good a resource as any for 'inspirational' defence policy as it fused the American Technological Sublime, and Hollywood simple solutions for a complex world with material policy. Coupled with the very real fear of nuclear attack, the strength of the institutionalised sublime fantasy was such that Star Wars eventually gained widespread public support for a few years at least. This was in spite of it being the largest spending programme ever proposed by any government at a time when the US had a massive government deficit, and a political commitment to reducing the budget with no further taxes. In the later context of both the Challenger and the Chernobyl disasters, the basic hardware required to make the Star Wars defence shield functional was emphasised as

inherently untrustworthy. Even this, though, paradoxically served to confirm the SDI's place in the sublime, where the 'dark promises of unimaginable violence'[66], were tragically fulfilled. Eventually, when the programme was decommissioned, the phrase 'technological hubris' was often used to describe its failure as if to try to achieve the sublime necessarily invoked divine punishment. In this way, even if in relation to technologies the sublime is thoroughly secularised, it still adheres to its religious origins. What is more interesting about this instance of the technological sublime though, is its illustration of how the desire for power yet transcendence, fear yet desire, can play itself out through technologies and cloud lucid judgment about their usefulness.

The dramatised conflict between these cultural narratives of the future and their associated practices and institutional structures brings about this crisis in humanist identity which *Gattaca* portrays. However, instead of resolving this conflict with a new and appropriate figuration for complex identity within this technocultural environment, *Gattaca* instead prefers to reinstate an essentialised, individualist, humanist identity set within a narrative resolution which is as reactionary as it is unimaginative.

Science fiction cinema has an established tradition of exploring hi-tech dystopian representations of an imaginary future. From *Metropolis*, to *Blade Runner* to *Gattaca*, usually these dystopian futures are clear extrapolations of contemporary social, cultural and scientific concerns which strongly resonate with the anxieties of their historically-specific moment of production. Because they are so entrenched in their present, the futures they represent quickly look dated; their visions of tomorrow made absurd, unfashionable, naive or simply inconceivable through the historical lens of today and the changed practices of social and machine technologies. Writing in the early 1990's on the then favoured hi-tech "period look" of the future, Andrew Ross critiques, on a political level, the wretched 'survivalist' future representations of cyberpunk. Ross.[67] argues that, while the dystopian cyberpunk future is replete with extreme historical anxieties, its absence of any hopeful pleasures or suggestions for alternatives, in effect, leaves the predominant writing of progressive social futures to corporate and military interests. However, there are many examples of sf imagining progressive social futures such as, for example, the very succes sf ul feminist sf series from

the Women's Press which published many highly political novels dealing with future representations. Entangled coporate and military interests certainly guide the technocultural narrative economy in very large part. Cyberpunk, which I discuss further in chapter five, can also be seen as reactive to these dominant interests rather than simply replicating or representing them. However, looking at "period looks" and "period concerns" is a useful way into the dominant narratives of the recent film *Gatacca*.

In terms of negotiating and remaking this accreted economy of technocultural stories, writer and director Andrew Niccol's recent film *Gattaca* provides a particularly stylish example. To create its strongly dystopian critique of technoscience, the future in *Gattaca* is created out of a number of twentieth century progressive—and failed—social impulses of the past. The favoured period look of the cyberpunk world, a world filled with filthy trashed machines coexisting with wrecked and cynical people who barely survive by their wits alone, gives way in *Gattaca* to a bright, clean, efficient and highly-regulated authoritarian future. While this highly stylised look—characterised by the ultra-clean modern lines of the 'International Style' in architecture and design—indexes a host of concerns and impulses from the 1960's Space Age, to the transcendence and optimism of the American technological sublime and the associated fears of technological determinism; these period concerns played out in *Gattaca* are overlaid with 1990's anxieties about genetic engineering and its tangled historical association with eugenics and social control. So even though the "period look" of the film indexes utopian impulses, from our historical perspectives and through the ideological filter of the film's representations, it is amply clear from the outset that these utopian impulses are to be read as prefiguring dangerously menacing possibilities. The clean modern lines of the *Gattaca* world, while invoking a seductive nostalgia for the older, more optimistic period future, serve to ironically underscore the anxieties of our age which inexorably tran sf orm this hygienic future representation into a deeply dystopian vision.

Gattaca is characterised by both an anxiety and nostalgia toward the technological sublime. Although set in an imaginary future, the film achieves its sense of nostalgia by indexing a host of twentieth century utopian and sublime impulses. Consequently, *Gattaca* presents the imagined future of the 'now', through the veil of yesterday's future. This

recognition of the differing ideologies of different times is also the mode of perception of which Cseray-Ronay speaks when he says, as I elaborated earlier, that sf is premised on a pair of gaps. Narratives of the sublime are inherently conservative because of their historical use of securing the location and ascendancy of humanist Man. However, in *Gattaca* the impulse towards a sublime world has paradoxically resulted in challenging this figure. However, instead of resolving this conflict with a new and appropriate figuration for complex identity within this technocultural environment, *Gattaca* prefers instead to reinstate an essentialised, individualist, humanist identity set within a narrative resolution which is as conservative as it is ultimately unimaginative. By making a clear distinction between good technologies and bad technologies the film allows the figure of Man to survive, or at least to escape. The dramatised conflict between these two cultural narratives and their associated practices and institutional structures brings about this crisis in humanist identity which *Gattaca* portrays.

In this 'not-so-distant-future', institutionalised technoscientific practices support an authoritarian power regime based on genetic identity. Here, genetic information provides the criteria for demographic divisions with the genetically high scoring, or 'valids', able to gain access to the most elite professions while the low scoring, or 'in-valids', are destined to boring, menial jobs. Consequently, the genetic body is politicised as a microcosmic representation of the wider social structure. In terms of this relationship, the film suggests, the more technoscience sees genetic 'perfection' as a goal, the more this translates over to a technofascist requirement for increasing demographic perfection and regulation. For individuals in this world, the instrumentalisation of life begins with their placement in the genetic, and, by extension, social taxonomy before birth when their DNA configuration is planned in the petrie dish according to the 'best possible matches' available from their parents. With the bright, clean and thoroughly ubiquitous technologies of measurement in *Gattaca*, the child's identity may be read straight from the genes and tabulated according to such things as the risk of disease, IQ, and life expectancy, but also eye colour, hair colour, height, sex, and so on. The cultural contingency of the concept of 'the best possible matches' and its ability to be measured is not discussed in the film in terms of its potentially racist,

sexist or homophobic politics, rather, I will argue in just a moment, it is dealt with in terms of the potential erosion of the sovereign, humanist subject.

In *Gattaca*'s genetic and, hence, demographic stakes, Vincent Freeman is not so fortunate, nor so free as his name suggests. His mother had decided, as she puts it, to 'put her faith in God's hands rather than the local geneticist' and, in a sequence of biographical scenes, she and Vincent's father are shown coupling in the way of romantic American Hollywood; in the back of a retro-futuristic Studebaker Avanti, parked by the sea, to the tempo of a resonantly symbolic, dangling crucifix. The technology of the big American car, the film suggests, in the glow of this nostalgic biographical sequence, is technology being used appropriately, humanly, in a time when things were still possible for the future. The film contrasts these dreamy nostalgic images to the oppressive future of *Gattaca* where Vincent is contemptuously labelled a 'Faith birth,' his genetic forecast bleakly warning of a potential early death, a likelihood of certain hereditary diseases, and ranking him an in-valid. Disregarding his potential genetic disadvantages, though, Vincent dreams of becoming a stellar navigator; a career that is entirely out of his grasp according to his genetic scorecard. His father, putting voice to the oppressive social structure, makes it painfully clear to him that the 'only way [Vincent] would ever get inside of a space station were if [he was] cleaning it'. Given the way the film has already at this point set up its generic, and, hence, narrative, allegiances, it is not surprising, then, that Vincent's genetic quotient is shown to be entirely misleading of his potential: after all, we are told, 'there is no gene for ambition,' nor for Fate. Played by the all-American hunk Ethan Hawke (whose athletic good looks certainly belie no obvious genetic disadvantage), Vincent nevertheless harbours his dream and eventually resorts to an elaborate deception of genetic identity. Enlisting the help of a ghoulish broker of identities,[68] Vincent Freeman is matched with Jerome Eugene Morrow whose DNA, in keeping with the imaginary possibilities of his name's reference to 'eugenics tomorrow,' represents the apotheosis of genetic perfection. Eugene (as he becomes known) is, in spite of this, highly self-destructive. A failed suicide attempt has left him crippled and wheelchair-bound, and places him as a symbol of the impossibility of reading identity straight from the genes and the huge expectations which are concomitant with even trying to do so. Just as the film's

perspective lovingly traces over the smooth clean lines of Frank Lloyd Wright's Marin County Center, and other sublime and massive architectural spectacles, these sights are also implicit, by way of contrast, in Eugene's crushed and broken body and the fascism of such a dream of hygienic perfection. Similarly, the homogeneity and obedience of the immaculate Armani-suited, bryl-creamed valids at the *Gattaca* Aerospace Corporation serve to emphasis that here 'Dirt has no place to hide'. [69] Nor do traces of genetic 'imperfection'. So in order to erase all traces of his 'in-valid' self in the 'valid' world, Vincent scrubs his body shiny clean every day to minimise the chance of stray skin cells compromising his identity as Jerome Morrow. To effect this daily deception, Vincent must strap on a bladder of Eugene's 'valid' urine and a fingertip prosthesis containing 'valid' blood for the daily substance tests while scattering Eugene's skin cells and stray hairs about his workstation. In this world, the eugenic man's genetically ordered substances are clean, while Vincent's are dirty. Abject body substances, it is emphasised, must be policed by Vincent to avoid the tyranny of genetic prejudice. The abject, as Julia Kristeva has described it, is what separates subject from object; hence, the feeling of horror implicit in contact with the abject is a result of its in-between ontological status.[70] Making the abject clean is, then, Vincent's work. In keeping with the ideological critique the film levels at this social ordering, Eugene is shown to be the one with the problem with bodily and social borders, with the abject, in other words. Lacking Vincent's ordered discipline, Eugene smokes, swears, drinks and then throws up. As someone for whom technologies are so intimate, he has a contaminated body: too perfectly hygienic and unnatural, too resonant of vampire-like fusions. He is also contemptuous of the social system in a way which Vincent is not, yet happily plays his strong genetic cards without qualms when it serves his needs. In this way, Eugene is both political and self-serving whereas Vincent is entirely self-serving and apolitical, if that is how we may interpret Vincent's single-minded individualist pursuit of escape into the stars.

With Vincent's rocket launch only a week away, a murder at the *Gattaca* space station tightens security which eventually forces Vincent into a showdown with his long-lost genetically superior brother Anton who is, appropriately, chief police investigator. The explicit point of the film is not hard to miss with its constant reiterations: while Eugene, the eugenic

man, and Anton, Vincent's superior brother, were born with every genetic advantage for success in this world, they are a failure of genetics to measure everything which makes up an individual's life.

In relation to the Human Genome Project, as my analysis in chapter one shows, the gene provides a map of competing political interests, not at all as a scientifically-neutral descriptor of human biological makeup. Drawing on Foucault's concept of biopower and the work of the feminist philosopher of science Sarah Franklin, Donna Haraway describes the tension between Nature and the gene: 'The instrumentalization of life proceeds by means of cultural practices—socio-political, epistemological and technical .... "Life," materialized as information and signified by the gene, displaces "Nature," preeminently embodied in and signified in old-fashioned organisms. From the point of view of the gene, a self-replicating autogenerator, "the whole is not the sum of its parts, [but] the parts summarize the whole"' [71]

Genes are small things we cannot see without the mediation of technologies. Seeing, then, has been displaced in this world from the privileged motif of the humanist subject by what the film suggests is a form of blindness. In *Gattaca* the motif of sight is extensively used as a means of expressing the ideological critique the film levels at blindness. For instance, myopia is one of the clearest indications that someone is a 'Faith birth' or a 'God child', as the naturally conceived are known. Vincent must wear coloured contact lenses to see at all and look like Jerome, and when he becomes a suspect in the murder enquiry, it is because one of his own eyelashes was found near the crime scene. Amazingly, even when photos of himself as a suspect are displayed everywhere, no one recognizes him as Vincent because genetic identity is the only thing they can 'see', and so all they can 'see' is Jerome, they are blind to his 'real' identity. Even as the film audience, we are not allowed to 'see' much outside the clean places where the privileged valids lead their lives. In only one brief scene are we allowed a glimpse of the average invalid's life, where they are being rounded up and checked for their genetic identity; with the spotlights, loudspeakers, and smart uniforms of the identity police contrasting so starkly to their shabby coats, their fearfulness and misery. This is the underclass who suffer more than Vincent and who he will leave behind after he has escaped to the stars.

Vincent's perspective clearly does not contain much of the abject underclass, and the film itself turns a blind eye toward this aspect of life, apart from in this aberrant scene. Instead, our gaze is directed, along with Vincent's, at the rockets which shoot off daily through the stratosphere to the stars. These scenes, with Vincent's hopeful face tracking the rockets' progress, invoke something of the upturned faces of the crowd, bathed in light, who gathered to watch launches like the Apollo XI mission. The sublime spectacle of rockets signifies exploration into the unknown, the valiant and rightful place of technology, going to new frontiers, for the exaltation and betterment of people. These are technologies which are outside the self and body. In contrast, technologies so close under the skin which cruelly measure and challenge identity are an undoing of 'God's handiwork,' as the film's epigraph suggests[72]. This is the crucial dichotomy between 'good' technologies and 'bad' technologies which, finally, *Gattaca* creates in order to resolve the sublime with a fearful erosion of the stable subject Man.

This move resolves the disjunction between contemporary anxiety stemming from fears of genetic determinism and nostalgia for a mythical time when the future was a sublimely bright place. This also opens up a space into which the sovereign humanist subject may be inserted. While *Gattaca* explicitly dramatises Vincent's movement towards freedom and escape, it achieves this by an ideological movement towards an individualistic, competitive, Darwinian hierarchical notion of 'natural' Man. Demonstrating this ideology, the two brothers swim out in the ocean, racing one another dangerously far from the shore and invoking a sense of primeval competition for natural selection which, as the film suggests, is the basis for our humanist individuality. Of course, Vincent wins this race. After all, he was conceived by the sea and has struggled all his life: all of the film's dominant motifs and generic allegiances set up the reinstatement of this narrative. Anton's complacent superiority epitomises, according to this logic, the arrogance of any other belief. Only individual achievement ensures success in the great race of life which this film represents.

Just as Haraway suggests that' "Life," materialized as information and signified by the gene, displaces "Nature," preeminently embodied in and signified by old-fashioned organisms' so *Gattaca* performs the opposite move of reinstating "Nature" and the natural

body as the correct metonym for social systems. Although beautifully crafted, visually stylish, and suspenseful, as a filmic text *Gattaca* does not really provide a thick or very provocative analysis of its issues but rather iterates and reiterates this conservative moral message in every scene. *Gattaca* negotiates the matrix of relations between ontology, technologically-mediated bioethics, and social organisation through the tension between technological utopian impulses and 1990's anxiety about genetics; what we have come to call in highly charged terms, social or genetic engineering. Early in the film we are told that this is a society where 'discrimination is down to a science'. What is at stake in this film is 'whose science?' and 'what science?' In the world of *Gattaca*, as elsewhere, the science that counts is that of those who have a stake in maintaining the genetically-defined hegemonic order. However, constantly in epistemic battle with this science is the recurrent motifs of natural selection, competition, and humanism: these, the film seems to suggest implicitly, are the 'right' sciences, or even, the right faith.

So just as 'Space travel challenges mankind not only technologically but also spiritually' *Gattaca*, illustrates what kinds of challenges are acceptable and the limits of their acceptability. Whereas space flight and other such technologies which extend man's power over the world are acceptable, technologies so close under the skin and too implicit in constructing Man, are clearly unacceptable. In the next chapter I will continue with the theme of the technological challenges posed to Man and show other ways in which this crisis is resolved

Chapter Four: Maria's Sisters: Figurations of Hi-Tech Women and Stabilising the Crisis of Man

Maria the robot from Fritz Lang's *Metropolis* (1926) offers a potent figure of fear of machines and fear of femininity. She is created out of perverse machine-love, masculine desire and is used for destruction. Her body is fleshy, erotic and satanic and yet covers a gleaming metal carapace revealed in her destruction on a bonfire. In contrast, the human Maria, in whose image the robot Maria is made, is like an agent of God; an angel whose purity, chastity and demureness are unquestionable. These two female figures are set within the imaginary dystopia of the cult film *Metropolis* famous for its critique of an imagined juggernaut of technological progress in the future. What is of particular interest here is that even though the film explicitly enacts a technological crisis posed to the figure of stable, unified, humanist Man, the representation and use of the two Marias is by far the strongest preoccupation of the representations and narrative structure of the film. I will discuss this seeming paradix in terms of Gayatri Spivak's contention that female representations are instruments of masculine self-assertion.[73]

Ridley Scott's *Blade Runner* (1984), tran sf orms these figures of Maria into Pris, Zhora and Rachael who are replicants, or biological copies, of human beings. While Pris and Zhora are highly sexualised, dangerous, with eyes lit by an inhuman light as are the robot Maria's, Rachael is contained and feminine, distant and aloof, and, above all, vulnerable. Maria's double identity in *Metropolis* encompasses cultural dualisms of real/fake, good/evil, virgin/whore, angel/devil, and so on, in *Blade Runner*, she splits into three female parts each of which can be seen as metonyms of Maria.

In this chapter I discuss the representation and structural function of these female figurations and argue that they are implicit in the conservative recuperation of the figure of Man. Far from learning 'from animals and machines how not to be Man, the embodiment of western logos,' as Haraway puts it, fusion with machines in *Metropolis* results in personal and social contaminations that need to be exorcised. This is the symbolism of Maria's punishment

when she is burnt down to her skeleton of inert metal and also the need for Christian narrative resolutions, as shall be discussed.

In her excellent *Technologies of the Gendered Body*, Anne Balsamo, maintains that Woman, and in particular, cyborg Woman, is a good site for examining social forces and figurations as the 'technological imagination has imbued cyborgs with ancient anxieties about human difference'. From this site, she continues, 'we can witness the struggle between systems of social order'[74]. Maria and her hi-tech sisters, then, are bodies in social struggle.

Metropolis is famous for its sublime city as technology. Lang creates a technological spectacle of city life where the city structure is offered as a metaphor for deep and unjust social stratification which is created and maintained through the medium of machines. The city is hence a technology of oppression. If the film represents the tyranny of the ruling classes over the workers, then, the worst part of this, the film seems to suggest, is the dehumanisation of the labour force through mechanisms of social oppression. 'Dehumanising', according to Lang's representation here is about treating humans as machines, of not making a *proper distinction* between humans and technologies.[75] Furthermore, the film's representation of all levels of the city contains a built in critique. I will return to this notion of the 'proper distinction' shortly.

The difference between a good and an evil woman is a central fascination in the film and is represented through the dichotomy between the real Maria and the false robotic Maria. In the spirit of both *Frankenstein* and *Pygmalion*, the false Maria is a creation of Rotgang, a 'mad wizard' who tries to create his lost love, Hel. There is a very clear visual differentiation between the real and the false Maria which is crucial to the maintenance of the proper distinction between machines and humans, subjects and objects, and its extant social order. In keeping with her Virgin Mary iconography, the real Maria is gentle, demure, and modest, her gestures and body movements are slow and contained and she is lit with an angelic white light. The false Maria, in stark contrast, is constantly frenetic and passionate, draws attention to her body, and to her gyrating hips, in particular, as an awareness of her own sexuality coded as evil. Her eyes are lit with an artificial light and she performs highly erotic, and yet, satanic dances which mesmerise and provoke the leisure classes of men to such a degree

that they fight one another in an effort to touch her. The film seems to suggest that feminine power is such that it can provoke violence in otherwise civilised men. Her power is also technological and so their desire for her is a perverse machine desire. Technologies are able to trick people into desiring bad things. When Maria the robot is finally destroyed, she writhes and laughs wildly in a satanic, orgasmic ecstasy before being burnt off to her skeleton of inert metal. After the purging and cleansing of fire and water, the master of the city, Joh Frederson, is awakened to the evil of his city. Maria encourages Frederson to link the 'hands' of the workers and the 'mind' of the Master with his 'heart', thus restoring order through this holy tripartite configuration and reinforcing the need for a proper distinction between humans and technology.

Through the false Maria, *Metropolis* shows that women's power is bodily, erotic, and evil and that it is also a power which much be contained and erased as much as possible. The power of the woman is not real power though; rather it is an ability to elicit sexual desire from men and manipulate this desire. Women who use their bodies in this way are 'temptresses' and need to be punished, the film suggests, as men cannot resist women's bodies. Rotgang, Maria's creator, states: 'I have lost control of the robot and the inevitable consequences frighten me.' The inevitable consequences are well known from Shelley's *Frankenstein* where machine-desire and female-desire are shown to be dangerous, even deadly. As Andreas Huyssen explains, the historical association of robots with woman can be explained in psychoanalytic terms as a fear of the feminine:

> Historically ... we can conclude that as soon as the machine came to be perceived as a demonic, inexplicable threat and as harbinger of chaos and destruction ... writers began to imagine the *Maschinenmensch* as woman. There are grounds to suspect that we are facing here a complex process of projection and displacement. The fears and perpetual anxieties emanating from ever more powerful machines are recast and reconstructed in terms of the male fear of female sexuality, reflecting in the Freudian account, the male's castration anxiety.[76]

In keeping with the anxieties of this Freudian account, the real Maria is made less real which decodes some of her feminine dangerousness. But, in some scenes, she is made so ethereal, so self-effacing that she seems not really to exist. She has an angelic lightness about her which is strengthened by the strong white light on her face and her slow wide-eyed movements. For instance, while delivering a sermon to the workers in the Underground

Cathedral, the real Maria fades out of view and her image is overlaid with a depiction of the story she is narrating. 'She becomes, in a manner of speaking, part of the scenery', Rebecca Sims comments[77]. While, technically, this is also a device for a silent film to tell her story, nevertheless it enacts a movement of self-erasure.

Blade Runner clearly borrows from this template for driving out frightening, sexual, Woman-machine hybrids. The film opens with the visual motif of a huge blue eye looking out over a panorama of Los Angeles in 2019 where, like *Metropolis,* the cityscape is dominated by a pyramid; in this case belonging to the powerful TYRELL corporation. As in *Metropolis,* there is a clear social stratification based on access to city levels, and, like the metaphor and the reality of the Tyrell pyramid; only a few get to the natural sunlight at the top or even to the upper levels.

Far below, Rick Deckard is completely at home in a street level bar, surrounded by the 'babble' of City-Speak. In the technologies of the city, he is completely at home. Here, the street offers a metaphor for human reality in *Blade Runner.* It is the place where bodies collide, real people talk, argue and exchange, and technologies are at home, greasy and used rather than rarefied and sublime. Deckard's job as a Blade Runner requires him to 'retire' replicants, or biologically manufactured humanoids, who are used as slaves in off-world colonies but who are illegal on Earth. Effectively, Deckard is a member of the identity police in much the same way as Anton in *Gattaca.* Whereas in *Blade Runner's* source novel, *Do Androids Dream of Electric Sheep?*[78] the androids are characterised as inhuman by their lack of affect, the TYRELL corporation in *Blade Runner,* not only manufactures replicants who are physically superior but has implanted artificial memories of childhood in them which has produced affect. So while the androids are characterised by their *lack*, the replicants are characterised by their *supplements.* Because of these supplemented memories, the replicants have developed emotions over time and a desire for freedom from their off-world slavery. As a policeman of identity, Deckard naturally provides a 'control' character in comparison to which the other replicants are contrasted. Deckard's own masculine coolness and lack of affect serves both as a constant contrast to the desperation of the replicants and as a moral reminder of the arbitrariness of the test he must administer to gauge humanity. [79]

The paradox at the heart of *Blade Runner,* is that while it explicitly asks the question 'what is a man?', it also implicitly demonstrates greater differences between man and woman than there are between humans and replicants. The question 'what is a man?', *Blade Runner* shows, can only be answered by also asking 'what is a woman?' Hence, the film's narrative resolution is achieved by reinforcing misogynistic stereotypes of femininity, sexuality and of Woman. Interestingly, there are no 'real' women in *Blade Runner*, all the female figures are replicants. By doing this, *Blade Runner* not only focuses the action on deciding what a 'real' man is but also this avoids the problematics of what a real woman might be. Femininity is something that is programmed into the hardware, whereas membership in the family of Man is much more spiritual and transcendent, as the replicant Roy Batty's and Deckard's final moments together in the film strongly suggest. In the film's quest to reach this point of knowledge, what constitutes a Man, what a woman is, and what she might become in the hi-tech environment must be strictly contained and policed. *Blade Runner* demonstrates the extreme violence involved in the containment and policing of female figures, and the punishment for female figures who step outside of this. This process begins high in the rarefied air of the TYRELL pyramid, where identity policeman Deckard tests Rachael for her humanity and decides:

> Deckard: She's a replicant, isn't she?
>
> Tyrell: I'm impressed. How many questions does it usually take to spot them?
>
> Deckard: I don't get it Tyrell.
>
> Tyrell: How many questions?
>
> Deckard: Twenty, thirty, cross-referenced.
>
> Tyrell: It took more than a hundred for Rachael, didn't it?
>
> Deckard: She doesn't know?!
>
> Tyrell: She's beginning to suspect, I think.
>
> Deckard: Suspect? How can it not know what it is?
>
> Tyrell: Commerce is our goal here at Tyrell. More human than human is our motto. Rachael is an experiment, nothing more. We began to recognize in them strange obsessions. After all they are emotionally inexperienced with only a few years in which to absorb the experiences which you and I take for granted. If we give them the past we

create a cushion or pillow for their emotions and consequently we can control them better.

The pleasures of commerce, science and their associated power and narratives of domination result in the world of *Blade Runner,* in Maria spawning three female replicants: Pris, Zhora and Rachael. Like the false Maria, all three are highly sexualised and operate within an economy of deep sexism and misogyny enforced by identity police like Deckard, manufacturers like Tyrell and their various technologies of codifying, of looking and of domination. Tyrell's brutal comment that 'Rachael is an experiment, nothing more', an experiment driven by the imperatives of the market, is nevertheless a logical historical extrapolation of the exchange value of women and their bodies in many social institutions, such as marriage and prostitution. However, spoken by one who is represented as an omniscient God-figure it is somewhat surprising that neither Tyrell nor the film, in any small way, ever acknowledges how much the gender and sexuality of the replicants is radically constructed and entirely beyond any stale theoretical arguments about nature versus nuture. Rachael, Pris and Zhora are embodied radical constructions of female figuration. As Simone de Beauvoir famously argued in *The Second Sex* 'woman is made, not born,'[80]

Contributing to Rachael's manufacture are the implant of prosthetic memories which act as technologies of control. These memories might be usefully compared to the functioning of cultural narratives in the sense that they create an illusion of truth for each individual which is implicit and collusive in lived experience. Pris, another of the female replicants, is described as a 'standard issue army pleasure model', equipped with appropriate prosthetic memories to enable her to function. This places her at the degrading level of an inflatable plastic sex doll and the indentured prostitute. Pris lives out these memories and her function through a mixture of childishness, innocence and canny manipulativeness which are symbolically representative of both the desire and fear of women in this film, and are clear derivatives from Maria. While Zhora, the third female replicant, is a killer designed for 'Political Homicide', on earth she works undercover in a seedy bar as a stripper and, with obvious biblical resonances, a snake charmer. What little we see of Zhora's life before her violent execution is shown to be a series of representations inside representations. While her pornographic stage

act urges the male audience to 'watch her take the pleasures of the snake', this is an undercover act for her role as political assassin, which is the only role given her in her manufacture, and which is the reason for her desire for freedom. She must perform all of these opposing roles within the boundaries and according to the prescriptions of femininity described and circumscribed by her prosthetic memories.

In keeping with the film's logic, as females to be both desired and punished, Zhora and Pris are executed violently in a way that is both highly sexualised and voyeuristic. Deckard visits Zhora in her dressing room pretending to be an 'artists' representative' investigating, with obvious irony, sexual harassment in her job. 'Little dirty holes' may be in your dressing room he tells her, to which she replies sardonically: 'are you for real?', bored, jaded and only slightly amused by the ridiculousness of Deckard's cover as she strips off her stage act outfit, readying herself for another role. By articulating this question, Zhora reverses the order of questioner/questionee: this is the question he would like to ask of her. Deckard is not very good at playing this game, however, and would rather get back to his authorised role as policeman. Lack of respect for Deckard's authority is dangerous for all the females in *Blade Runner*. Shortly after this scene, Zhora's gruesome death is captured by a slow camera speed, voyeuristically panning over her dash through plate glass shop windows, clad only in bra and pants under a transparent raincoat. She is cut up and shot by Deckard in the back, the sound of her violent death silenced, objectified and aestheticised under slow, sad music. As she falls to the ground, she is watched only by the unseeing eyes of naked plastic store mannequins, which, finally, reveals the true value of her life in the *Blade Runner* world. Coded as an object of perverse desire, Deckard masters and possesses her bodily and visually in the end.

Later in the film, Pris' death is also dramatised as a pseudo-sexual encounter with Deckard and filmed in such a way as to heighten voyeuristic pleasures. Pris and Deckard's encounter begins with Pris disguising herself as a life-size doll amongst other dolls as though to erase herself through camouflage. This throws up powerful visual resonances for her female replicant figuration, but also is reminiscent of the real Maria's erasure in *Metropolis*. However, Pris is a good Maria but she is very dangerous. When Pris fights Deckard she

attempts to strangle him in a hold between her thighs and succeeds momentarily in physically overwhelming him with her sexuality.

Andreas Huyssen points out that the fear of female sexuality, of castration or invagination but above all of emasculation, is clearly acted out here. Deckard could die between Pris' legs and so to pay her back he fucks her by blowing her away with his gun. Pris, as the standard army pleasure model, is thus killed in a manner resonant of violence and sex, and also, of violence to her body, the body she could not own herself, but could only be traded in her life as a sex slave. Her lover, Roy Batty, later tastes the blood from the gaping bloody hole in the centre of her chest. Enraged at Deckard's symbolic rape of Pris and her death, Roy Batty finally tortures Deckard; saying 'this is for Pris,' while he breaks one of Deckard's fingers. Pris' body had been used by another man, suggested in the metaphor of her gaping wound. Yet this metaphor of sharing will be what ultimately brings Batty and Deckard together in brotherly rivalry, enacting Mark Jenkins' of the fragmentation and then the recapture of stability.

The violence Rachael endures is more subtle. While Pris and Zhora are representative of *Metropolis'* false Maria and, like her death on the bonfire, they are accorded a violent death by Deckard, Rachael (as a kind of real Maria) is given a reprieve by Deckard once he is convinced that she is harmless, and when he falls in love with her and wants to possess her. In the economy of exchange that operates within *Blade Runner,* Deckard's desire to possess and keep Rachael means that she is given the right to an existence and a continued life. Nevertheless, Deckard's desire also manifests itself violently. Rachael and Deckard's first 'love' scene together begins with Deckard grabbing her forcefully and pushing her against a wall while she struggles to resist him. However, the deep misogyny of the film's figural economy is once again reinforced when Rachael, who until that point was cold, distant, and aloof toward Deckard, cannot help but respond to Deckard's 'passion'. As Stevi Jackson and Sue Scott explain: 'Within dominant cultural discourses, men are cast as the active initiators of sexual activity and women as passive recipients of male advances; men's desires are seen as uncontrollable urges which women are paradoxically expected to both sati sf y and restrain'.[81] Thus Deckard's initial sexual coercion and the underlying threat of serious

violence is justified, tran sf ormed and sanitised by the film as a natural part of his potent masculinity and desire, while Rachael's initial reticence is re-scripted as her own appropriate demureness. By acquiescing to Deckard's mastery, his status as a potent male is reinforced.

Reading this violence and commerce as deep sexism and misogyny tran sf erred over into the technocultural realm is one level of analysis, however, reading the narrative and structural *need* for these codings of perversity, violence, desire and misogyny is another level of analysis that is crucial to understanding how the film is able to answer the question it constantly and explicitly asks; that is, 'what is a man?' As noted earlier, Gayatri Spivak explains this structural phenomenon as masculinist discourse manufacturing woman as metaphor, their metaphor, and so woman becomes an *instrument of self-assertion* rather than a subject within herself. [82] This usage of female figuration is clearly in evidence in *Blade Runner* and *Metropolis*. The women here are *indeed* technological instruments and so, as Spivak's would argue, Maria, Pris, Zhora and Rachael are then merely prosthetic extensions of Frederson's, Tyrell's and Deckard's subjectivities. For this reason, Tyrell's prosthetic memories, which create a 'cushion' for the replicants' identities, can be seen as the discourses of Man used as instruments to assert his own identity as humanist man, still alive and well in the imaginary time of 2019. If female replicants can be seen as tropes of femininity materialised, underwriting and guaranteeing a masculinist economy of heterosexual gender, then these tropes are what secure the structure and ascendancy of the male discourse within the films. Man is the seer. What he sees is woman who is the Other to his self. The discourse of the white, masculine, heterosexual group requires the metaphors of the monster or the female as prostitute, snake charmer, stripper, to be feared and desired. In this way, the films represent a theory of femininity where the female can never inhabit her own terms: she can only ever be a replicant (robot) or positioned as a materialised trope of male discourse.

This is clearly shown as a gendered distinction and not a distinction between real and replicant robot by virtue of Roy Batty's *(Bladerunner)* tran sf ormation from replicant position as Other into a Man. His transition is dramatised at the end of the film in his heroic, hand-to-hand fight with Deckard. It is important that the violence that Deckard and Batty deal out to one another at the end is coded as an enacting of brotherly rivalry which ultimately confirms

the masculinity and status as subject of each. This is quite a different to the violence enacted against the females. As Teresa de Lauretis explains in relation to this kind of inherently masculine violence in film: 'The distinctive trait here is "reciprocity" and thus, by implication, the equality of the two terms of the violent exchange'. [83] It is interesting, then, that this exchange is not lacking in its homoerotic undertones. It is Batty, though, who chooses to strip to his underwear for this final scene, and, his body oiled, tanned and muscled, he performs various aesthetically filmed gymnastics, and when he hurts Deckard the film codes this as a kind of sado-masochism. Batty presents himself to be looked at but the resonances are different from those which code the female figures. Here, Batty is in control and he is stronger than Deckard whose exhausted body, as emblematic of the crisis to him and all he stands for, is always breaking down, being hurt. Quoting freely from poetry and making various classical references, Batty also presents his own body as like Christ's by driving nails through his hands and so presenting himself as a vessel of God rather than as a sublime machine or a mediocre human. Finally, Batty murmurs heroically: 'I've seen things you people wouldn't believe. Attack ships on fire off the Shoulder of Orion. I watched C-Beams glitter in the dark near Tannhauser Gate. All these moments will be lost in time, like tears in rain. Time to die.'

As noted earlier, humanist Man is not really a unitary figure, but rather a conglomeration of conjoined figures. It is interesting, then, that in addition to Deckard's ravaged body, a most spectacular representation of the weakening of humanist Man is that *Metropolis*, *BladeRunner*, and William Gibson's *Neuromancer* (which will be examined in the following chapter) contain an ageing patriarchial figure who is coded in a similar way. Given that all three texts deal with the erosion of power of the masculine humanist subject in the face of technological change, it is interesting that this ageing figure is the one *part* of this figure who either cannot cope with the new worlds the texts represent, or, alternatively, has become so tainted and perverse with his close association with technologies that he is unable to be reincorporated. Contamination from machines is a common technocultural anxiety. What is surprising, however, is the degree of convergence of the representations. The figures of Joh Frederson *(Metropolis)*, Tyrell *(Bladerunner)* and Tessier-Ashpool (*Neuromancer*) are all shown to be maniacal, deluded, perverse, grotesque, and full of a vampire-like machine

desire. Additionally, they all exist in lofty fortified environments, safe and far away from the busy exchange of life on the street or in the factory and incredibly out of touch with the experience of daily life, of the people over whom they have such enormous influence. Even though they all embrace technology (and their extravagant existences depend upon it) these figures are represented as conservative, aristocratic, eccentric and as collectors of memorabilia of the past. There is an overtone in all texts of a certain nineteenth-century colonial decadence, which is contrasted to the industrialised and postindustrial worlds in which they live. Gibson explains this distinction in the context of power where these patriarchal figures have become unable to properly adapt: 'He remembered the litter of the old man's chamber, the soiled humanity of it, the ragged spines of the old audio disks in their paper sleeves. One foot bare, the other in a velvet slipper.' When Molly Millions, the female cyborg figure in *Neuromancer*, manages to penetrate the security of Tessier-Ashpool's Villa Straylight, she finds him with his velvet slippers and a silk dressing gown in the middle of an elaborate suicide, complete with expensive bottles of brandy, sleeping pills, old-fashioned hypodermic needles, and a pistol: 'You are a very rude girl. Suicides here are conducted with a degree of decorum', Tessier-Ashpool informs her. In the corner of his bedroom lies one of his cloned daughters, raped and bloodily slaughtered by him: 'I'd order a Jane thawed, when I woke. Strange to lie every few decades with what legally amounts to one's own daughter'[84] the old man explains. This figure of 'soiled humanity,' adheres to old-fashioned decorum; outdated practices, and has tran sf ormed from a figure of huge power into a monster.

Similarly, perversity and vampire overtones are represented through Tyrell in *Blade Runner* . When Roy Batty and Pris manage to penetrate Tyrell's inner sanctum, his bedroom, they find an extravagant baroque haven where Tyrell engages in the gentlemanly pursuit of chess. Tyrell is also shown as shrunken and aged beside his creations, Roy and Pris, and with his massively oversized spectacles: 'All the better to look at you, dear', seems to come to mind without the question having ever been explicitly asked. And Tyrell, like the wolf who devours virgins who stray from the straight and narrow, is dangerous, although his power is weakening. Before crushing Tyrell's skull between his bare hands, Roy Batty gives his maker a long last kiss on the lips. The ambivalence towards Tyrell is thus reinforced: he is both to be

loved *and* despised. In contrast, *Metropolis*, being the oldest and most conservative of the texts depicts the aged patriarch as not irredeemably lost. While Joh Frederson is certainly represented as a decadent, megalomaniac patriarch, complete with velvet dinner jacket, classical tastes, and immense lofty office, he is able to be saved by his incorporation into Christian resolution narratives at the end of the film. His contamination from machines is not complete; he had made a proper distinction.

The latent anxiety over maintaining some integrity for these figures in decline is signalled by the sheer level of misogyny and the texts' unwillingness to deconstruct this misogyny at any point. Whereas female replicants/robot deaths are violent and turn male characters, and the audience into voyeurs, the death of the male replicant, Roy Batty, turns him into the seer whose view makes him a philosopher, hero, and ultimately affirms his place as humanist Man. This makes it not merely an interesting film that represents a misogynist, hi-tech future, but rather a filmic text which implicitly supports this representation. Judith Butler provides an interesting comment on this phenomenon in 'Imitation and Gender Insubordination'. Describing the relationship of various parody gender performances (such as the butch-femme, the transvestite in drag) to the sexist economy of gender and compulsory heterosexuality. She writes: 'The parodic or imitative effect of gay identities works neither to copy nor to emulate heterosexuality, but rather, *to expose heterosexuality as an incessant and panicked imitation of its own naturalized idealization.*'[85]

The description of heavily gendered heterosexist identity as a 'panicked imitation' of itself is useful. By way of contrast, the degree to which highly masculinist figures reassert gendered binaries, rather than exposing them, makes these texts inherently conservative for they do not attempt imagining any new potential figurations. In addition, seeing the figural performances as panicked relates equally well to the extreme hard-headed masculinity of Deckard to the extreme evilness associated with Zhora's sexuality. The panic is not limited to female figuration. If anything, within technoculture, when technologies, as artefacts which challenge historical understanding of identity, meet with the body, often the resulting cyborg figures can be characterised by this kind of 'incessant and *panicked* imitation of [their] own naturalized idealization'.

The realm of technoculture presents many examples. Lara Croft, who is the star of the highly succes sf ul PlayStation game *Toomraider,* is a souped-up cyberchick enacting a similar kind of panicked performance of gender identity which Butler describes in relation to the queering of heterosexual gender identity. Just as our historically-derived understanding of the natural body collapses, technocultural representations of the female cyborg body becomes more like 'panicked imitations' of their lost naturalized idealization. The first aspect of this anxious performance is the extreme femaleness of her representation: Lara's body is a hybrid of the postmodern armoured hardbody and the more traditional hour-glass figure with impossibly tiny waist, huge breasts and curved hips. Typically, Lara is clad in only a pair of brief shorts and a straining tank top. More significant than her clothes, however, is her weaponry: she is armed with large hi-tech state-of-the-art artillery. The more Lara is 'masculinised' through her weaponry and her muscled hardbody, the more her designers have compensated by giving her a stereotyped and exaggerated femaleness (soft voice, huge breasts and narrow waist). In addition, the perspectives the game offers of Lara always seems to be those which heighten most the vicarious and voyeuristic pleasures of her performances, whether she is made to swan-dive off cliffs, perform fantastic leaps and kicks or run while shooting from the hip. These kinds of technocultural texts contain no element of self-consciousness about their extant gender anxiety, or what the source of this anxiety might be, nor are they playful with this gender representation; rather it is taken very seriously. This is hard to do considering the kind of grotesque proportions the figures have.

Louise Allen and Radhika Mohanram argue that Lara's figuration is not an empowering one for versions of active technocultural femininity. However, they put this down to her wearing femininity as 'an act of transvesticism' in the same way, they argue, that Ripley from the *Alien* trilogy does[86]. Important to their argument is that Lara's 'foundational identity' is implicitly masculine. If Lara wears femininity as an act of transvesticism, then her performance must be to expose this act *as* a performance, according to Butler's argument. To a degree, Lara's figural representation *does* undermine itself as a serious female representation by the almost parodaic extremeness of her female features. However, this is not the same as the *knowingness* of the performance of transvesticism. Further, in propounding for Lara a

'foundational identity,' Allen and Mohanram imply that there can be a foundational identity, and that that identity is Man or, as they put it, an Indiana Jones or other such similar heroic masculine adventure figure.

The difference between these texts and ones that do expose gender as a naturalised idealisation, to borrow from Butler's comment, draws attention to the manufacture of gender in hi-tech female figurations, that is they radically change the movement from one of naturalisation (albeit a panicked one) to implicit critique. The problem with the heavily gendered figures in both *Metropolis and Blade Runner* is that they naturalise and sustain their own gendered representations. At no point is the constructedness of their representations revealed, in the way the shiny metal carapace is revealed when Maria's flesh body is burned off. Too much of the stability of the valorised term, Man, depends upon this representation.

In contrast, 'Feminine Intuition' (1969), a short story by the prolific sf writer Isaac Asimov, the manufacturers of a potential 'girl robot' openly discuss manipulating the so-called 'self-evident givens' of gender and sex embodied in a robot. As they wish to create a robot with 'flawed logical paths in its positronic brain' in order to increase its powers of free association, they consider it useful to disguise this potentially frightening creature under a femininised shell: 'A girl robot?' A smile made its way about the conference table ... 'All right a girl robot. Our robots are sexless, of course, and so will this one be, but we always act as though they're male. We give then male pet names and call them he and him .... If we announce a female robot, it doesn't matter what she is. The public will automatically assume she is mentally backward. We just publicize the robot as Jane-1 and we don't have to say another word. We're safe.'[87]

Jane-1 is a feminised machine because her relation to meaning is problematic, she is expected to learn to interpret, empathise, understand through simulations of feelings and intuit: she represents, in this way, the feminine pathos rather than the masculine logos. The difference between Asimov's story and *Metropolis* and *Blade Runner,* is that the story at least makes explicit the choices that make up the constructedness of gender identity and its collusion in the creation of stable Man even if this constructedness is being both exploited and further naturalised by the characters in the story. By contrast, the two film texts perform the

opposite move in order to reinforce their stereotypes of femininity which are, as I have shown, crucial to the maintenance of the humanist masculine-coded figure. It is interesting, then, that the figure of Tyrell is replaced by a woman in Asimov's famous series of short stories; however, gone is Tyrell's high self-indulgence, the perversity, the omnipotence and the vampire resonances in keeping with *Blade Runner*'s implicit criticism of his unnatural, wrong desires to usurp God's right. Instead, Asimov's text has its own representational logic which offers up a sad realisation of the limitations of feminine empowerment. Dr. Susan Calvin is portrayed as an ascetic, frigid, cold, hard and, hence, highly rational woman. In order to be a brilliant robopsycologist she must give up anything resembling cultural perceptions of gendered femininity, almost as indulgences. Calvin hates men, it is implicitly suggested, and for this reason when the men at her company United States Robots do not understand how she can be sure about one of her conclusions, her response is: 'Carefully, she rose to her feet, and said sardonically, "how can I be sure? ... Call it feminine intuition.' In this way Calvin mocks their belief system that would make the robot feminine, and that would understand her reasoning in terms of intuition. She makes evident what is implicit but unspoken. In keeping with this logic, Calvin is stripped of her sexuality, she 'asks no favors and beats the men at their own game. To be sure, she remains unfulfilled—but you can't have everything.'[88] The high price for respect in the patriarchal realm of technoscience is playing the unfair patriarchal game at which Susan Calvin is at a disadvantage. Just as Lara is heavily feminised in order to balance her 'masculinisation' through heavy artillery and physical prowess, here Susan Calvin has her 'femininity' erased so that she may become like a man in a female body. The comment, 'you can't have everything' really should be prefaced with 'If you are a woman ... ' In this way, Butler's comment that heterosexuality is 'an incessant and panicked imitation of its own naturalized idealization' may be extended to gender representations of female figures.

Although Asimov's opus is hardly representative of a nascent feminism, at least, as this text demonstrates, there is an awareness of the constructedness of gender. This awareness is also the beginning of its deconstruction.

Common to all these texts is the way they explicitly illustrate the *lack* of real power for feminine representations within technoculture. In *Technologies of the Gendered Body*, Anne

Balsamo describes Foucault's concept of technology as 'the process of connection between discursive practices, institutional relations, and material effects that, working together, produce a meaning of a "truth effect" for the human body.[89]' Drawing on this Foucaultian framework, Balsamo elaborates that the process of producing these effects may be called articulation, which involves both '"expressing" that which is already given or operative and in the sense of conjoining or connecting'. However, with so many other theories convincingly elaborating the construction of desire and the desire to express oneself as an individual, the line between choice and freedom becomes very blurred and problematic. While general metatheories are useful and necessary for particular critical purposes, they also have their limits. This is why each case and representation must be examined for its variety of influences. So, if I will suggest one metatheory at this juncture, it is that the worlds of *Metropolis* and *BladeRunner* certainly create the figurations for hi-tech identity which are articulated through domination. In contrast, the two novels I examine next, *Neuromancer* and *Stars* problematise the possibilities of the technologies of the self and of articulation much more.

Chapter Five: Narrating Unoriginal Experience: Prostheses and Postmodern Bodies

'The pursuit of radical metaphor ... is a risky business'
—Samuel Delany, *Reading at Work*

'Man is an invention of recent date. And one perhaps nearing its end'
—Michel Foucault, *The Order of Things*

With its machine fusions, the cyborg offers a radical metaphor for the transgression of traditional boundaries and limits such as are inscribed in the concepts of the body, the human, and the notion of the humanist individual. As it is always engaged in this process of radically disrupting received notions of otherness, the cyborg is a boundary-crossing figure which challenges the stability of logocentric Man and his extant ideologies. But just as Man is not one figure, nor do cyborgs trangress boundaries in the same ways. Rather there are multiple forms of cyborged selves and bodies which offer up different figurations. While in the earlier chapters I have focused on the recuperation and reaffirmation of a logocentric figure of Man, this chapter will principally discuss William Gibson and Samuel Delany's representations of cyborg figures who are knowingly implicated in technological (re)construction whihch does not recuperate old orders. These new figural possibilities offer up a form of response to the logocentric urge to continually (re)create hierarchies and separations between self and Other. However, both *Neuromancer* and *Stars* problematise these new figures and explicitly demonstrate their limits and weaknesses. I will discuss these limitations and weaknesses primarily in terms of disruption and reconstruction of the notions of location, origin, narrative and knowledge.

If cyberpunk is, as Frederic Jameson contends, 'the supreme literary expression if not of postmodernism, then of late capitalism itself'[90] then William Gibson's classic *Neuromancer* (1984) must surely be the epitome of the postmodern just as it is considered to be the classic cyberpunk novel. Jameson is not alone in maintaining this reading of cyberpunk; other critics such as Peter Fitting and David Harvey also see cyberpunk identities as consummately representative of postmodern identities.[91] For the sake of this argument, postmodern identities may be characterised as ones which eschew transcendent metanarratives, hierarchised

orders, secure locations—including the location of the body—and have an unprecedented aversion to unmediated or authentic experience, which is also implicit in the loss of origins.

While *Neuromancer's* plot is quite pedestrian and adds nothing new to the generic expectations of generic thriller or detective fiction, what is interesting are the rich instances of human-machine fusion. These instances may be placed along a continuum, ranging from most real to most representational which also narrate varying possibilities of figurations which do not recuperate humanist man or his hybrid of parts. In this world, people's intimacy with technologies manifests itself mainly through technologies of the body and technologies of place; both of which are ultimately technologies of location each regulating the other. On the body, the ubiquity of implants, genetic alterations, cosmetic enhancements, and machine-mind interfaces abound. In stark contrast to *Gattaca,* cyberpunk texts welcome monsterish fusions, dirty, useful and intimate machines and celebrate the ability to tran sf orm the body and self. In this way, technologies here are not about the dramatic heroics of the sublime spectacle, as cyberpunk advocate and writer Bruce Stirling explains:

> For the cyberpunks ... technology is visceral. It is not the bottled genie of Big Science boffins; it is pervasive, utterly intimate. Not outside us, but next to us. Under the skin; often, inside our minds. Technology itself has changed. Not for us the giant steam snorting wonders of the past: the Hoover Dam, the Empire State building, the nuclear power plant. Eighties tech sticks to the skin, responds to the touch: the personal computer, the Sony walkman, the portable telephone, the soft contact lens[92]

The creation of *prosthetic* identity provides a cultural narrative which has replaced stories about Nature or Origins. Speaking at the New York Review of Science Fiction, Samuel Delany clarifies this point: 'The thrust of the cyberpunk speculation on the body's future has tended to move in clearly-defined prosthetic directions—along with prosthesis's subcategory: the cosmetic'.[93] Certainly, as Delany suggests there is a fascination with cosmetic alterations in *Neuromancer.* Additionally, these cosmetic alterations index the integral reworking of culture and society through the medium of technologies as it is manifested on the body as a malleable site of change. The ubiquity of these cosmetic alterations results in beauty becoming banality: many faces in *Neuromancer* are described as a 'forgettable blend' of the most famous and beautiful simstim stars. The fascination with the cosmetic means that faces and alterations are constantly narrated in the text: 'Case turned his head and looked up into

Wage's face. It was a tanned and forgettable mask. The eyes were vatgrown sea-green Nikon transplants. Wage wore a suit of gunmetal silk and a simple bracelet of platinum on either wrist. He was flanked by his joeboys, nearly identical young men, their arms and shoulders bulging with grafted muscle.'[94], These 'nearly identical' people lose their individual differences and instead becoming indistinguishable with 'forgettable masks'. This section of the populace use technology to shore up the anxieties of individual difference by recreating a Perfect Image of the Same, which is also a perfect image of banality.

The choice whether to have cosmetic surgery or not seems at least partly related to locations. In some parts of the city, for instance, ugliness is expected, albeit considered 'heraldic'[95] While a 'heraldic' individual may be a natural and, hence, legendary monster, some choose to *make* themselves into monsters which is not nearly so horrifying. The element of choice involved in the production of these aesthetics makes it mainstream. For this reason, people are less easily distinguished by their individual personalities than by their unique and peculiar variations, additions, mutations of their bodies. Recalling the fate of his friend McCoy Pauley, Case muses: 'his heart had done for him in the end. His surplus Russian heart, implanted in a POW camp during the war. He'd refused to replace the thing, saying he needed its particular beat to maintain his sense of timing'. In this way Pauley was a casualty from not fully embracing the cyborg body as work in process. Too much concern for origins or originals are shown to be disabling for individuals in the *Neuromancer* world.

In contrast to those for whom bodily alteration is important, the cyberpunk contempt for the flesh means that he does not enhance himself. Instead, presents himself as a postmodern antihero with all of the necessary accoutrements; nihilistic, survivalist, cynical of authority, addicted, improvising, machine literate. There is a deep glamour about these disaffected hacker cowboys with their mirrorshades and black leathers.[96] They symbolise ways in which the technologically literate, through brokering information and skill, can 'feed noise' back into the system. However, unlike the punk movement itself, cyberpunks are not so abrasive, aggressive or even so energetic. Feeding noise back into the system is not really an expression of rage and desire for real political change, but rather just an addiction to 'altered

states' provided by technologies and drugs and a way to summon up the capital for another day in life[97].

The notion of addiction to technologies or compulsion to augmentation plays itself out through various cyborged representations. For instance, in this world, billions of 'users' spend much of their lives jacked up to stimulated reality shows, called simstim, which are described as 'consensual hallucinations'[98]. Jacked in users of simstim live out recorded and edited 'texts' of lived simstim stars' experiences and, hence, are shown to be utterly tuned in and dropped out of their own. The conflation of drug taking with simstim is clear and Gibson emphasises their mutual addictiveness. However, while drug taking is an habitual part of the cyberpunk's life, the mediated experience of simstim is looked upon with the contempt by the cyberpunk as technologies which the multiplication of flesh 'input'.

Eliminating flesh input is the cyberspace realm. This is the privileged 'location' of cyberpunks, a realm of pure data and information representation, which occludes the need for enhanced bodily experience. While the desire to shift the mind into the experience of an idealised simstim bodily experience is considered contemptible by the cyberpunks, leaving the body behind in cyberspace is considered an understated heroics. Case defines himself through this mode of expression; as living 'for the bodiless exhaltation of cyberspace'[99]. Conversely, falling out of cyberspace is also falling into 'the prison of his own flesh'. Because of his hatred of embodied experience, Case consistently describes his body as 'the meat,' mocking any residual sanctity with which the body might have once been imbued. Cyberspace is thus a place beyond bodily limits where his body becomes a vessel for potential multiple technologised escapes. Since Gibson first used the word 'cyberspace,' the concept it embodies has been extensively theorised by numerous critics as providing an irresistible link to various brands of postmodern theory. Robert Markley suggests in *Virtual Realities*[100] that it is as if all of our tales about the traditional subject have been translated into the new medium of cyberspace with the profound division between mind and matter wholly retained by the cyberspace paradigm. (I will discuss the implications of the loss of the body further on.)

In contrast Molly treats her body as an intricate tool, functional and athletic, with nerves spliced-up to superhuman speed and muscles technologically strengthened, implanted

fingertip blades and eyes protected and hidden behind a pair of skin-sealed mirror shades. Disconcertingly, these twin mirrors reveal nothing of her gaze but only reflect back the look of the observer. Molly does not like self-disclosure, and her mirrors, symbolise this. With her enhancements, Molly is lethal and enjoys her power: 'She held out her hands, palms up, the white fingers slightly spread, and with a barely audible click, ten double-edged, four-centimeter scalpel blades slid from their housings beneath the burgundy nails. She smiled. The blades slowly withdrew.' [101] Molly revels in her state of enhancement. But if she is shown to be self-assured and completely lacking in any of the traditional trappings of femininity, then this is juxtaposed to her recent past as a 'meat puppet', or prostitute. Meat puppets rent their bodies out for hire while a 'neural cutout' blocks their conscious minds from the experience and replaces it instead with the customer's choice of programme. Molly says that it was a 'Joke, to start with, 'cause once they plant the cutout chip, it seems like free money. Wake up sore, sometimes, but that's it. Renting the goods, is all. You aren't in, when it's all happening.' The concept that Molly was able to vacate herself from 'the goods' exemplifies, once again, a transference of the Cartesian split between mind and body over into a realm where the mind has become a cyberspace and the body has become a commodified resource. Trading on this assumption, for Molly it seems a fair equation that in order to empower herself with an enhanced body, she had to pay for it by first renting out this resource. While Molly clearly views the notion of origin as passivity, vulnerability, helplessness, she also articulates her understanding of bodily trade which allows her to escape the confines of an originary past in the first place. Far from being innocent and essential the body is a tool for transformation, a means to an end, a case that can, and must be, constantly enhanced in order to survive in the various technological environments.

In both, sketching a sense of the technologised location is important. Technologised locations in these texts are both bodies and places so, in addition, to bodily enhancing technologies in Gibson, for instance, cities are also technologies of the self. However, knowledge, too, needs a location and, so, the subject's articulation into these technologies and technologised locations is crucial to epistemology. Hence, location is another important technology of these radically cyborged figures. The city becomes a technology to which the self becomes

prosthetically attached. These places offer up a continuum from the most real and authentic to the most representational, just as identities do in the novel. Peter Fitting explains, 'people depend on technology to mediate and re-present their experiences and perceptions for them' resulting in an 'aversion to any original or unmediated experience'.[102] From Freeside, an orbital paradise, with its wealthy, cosmetically-obsessed people, recorded sky and other theme park special effects, to Earth cities covered by domes to seal out the polluted weather, to the corporate-owned self-sufficient arcologies where most of the middle class live, work, and relax, never venturing outside. Zion is an orbital spindle where spiritual low-tech Rastafarians live in low-gravity which contrasts to cyberspace which is described as: 'lines of light ranged in the nonspace of the mind, clusters and constellations of data' where things appear as you *imagine* their representation. And finally, the Zone which is a thoroughly postmodern space where heterogeneous bodies collide and the endless 'biz' is conducted. Through these representations, the novel clearly shows place to be a technology of the self which influences the articulation of identity. People's intimacy with technologies manifests itself mainly through technologies of the body and technologies of place; both of which are ultimately technologies of location. I would like to add to this matrix that these relationships regulate each other to a degree. Living in a certain technological location requires certain enhancements; while, conversely, certain enhancements require a specific realm to gain their meaning.

Loss of authenticity in the novel also involves the loss of trust and origins. The logical extension of this is that there are almost no references to families as organising units nor are there real friendships. Signifying an expression of static unchosen origins, old-fashioned social and cultural logics, families are a liability. Similarly, friendships signify trust and lack of autonomy. The only relations between people are business relations, relationships based on mutual need, or brief and untrusting associations for sex; all three of which may ultimately fall under the sign of commerce or commodity. Commerce has displaced friendship as the code of survival and the portal to power, and superficial pleasures through drugs, technologies or enhancements replace other intimacies. Nevertheless, there is an overwhelming sense of isolation within the novel. Even between Case and Molly, who become lovers, there is little

intimacy or closeness. The Tessier-Ashpool family represents the only family unit in the text and it is characterised by severe dy sf unction, perversity, and inbreeding. In this world of shifting alligiances and wheeling and dealing, intimacy is equated with vulnerability. While fusions with machines proliferate and technologies are intimate with humans on a cellular level, the possibility of intimacy with another person has atrophied.

The notion of renting out the body and its sensations is revisited later on in the novel in another form. Molly's body becomes a mobile broadcast unit while she is carrying out the physical work of their missions. Rigged with simstim, Case is able to flick in and out of Molly's sensorium experiencing her heightened sensations, movements and pain but without control of them. The effect of these quick physical transitions in the text, flicking in and out of Molly's perspective, cyberspace and his bodily 'reality,' reads like channel zapping. Televison—as an old-fashioned paradigm for content transmission—now becomes the new paradigm for these technologies. As with television, the spectator remains a spectator insofar as Case has no control over Molly's actions. However, Case's perspective is the novel's perspective, even when he is inside Molly's body which becomes a 'case' for his perspective. Nevertheless, Case find this technology irritating rather than fascinating, rejecting it as a 'meat toy' with its 'gratuitous multiplication of flesh input'.[103] The experience is *too* authentic for him, he prefers the abstracted purity of the realm of data in cyberspace where bodies, even high performance ones, are left at home on the sofa.

As the story progresses, however, Case increasingly experiences feelings which pierce through his habitual numbness. He is surprised by this, the only 'flesh inputs,' or feelings, he was used to were the extreme and altered rushes provided by his drug habit. So when Case becomes enraged, which he describes as a raw animal thing signifying its essentiality and authenticity, he both embraces and shuns it: '*Meat*, some part of him said. *It's the meat talking, ignore it*'.[104] Fear and desire are strange feelings for him as most of his experiences take place inside the web where there is no 'animal', or bodily input in experience. It seems that his state of perpetual numbness is a result of his cyberspace personality taking over his Zone personality. Bodily need of any kind is a lamentable fact, and

Case disassociates it from himself as much as possible, thinking 'all the meat ... and all it wants'[105].

Science fiction writer and post-structuralist theorist Samuel Delany explores many of these ideas in his work. His novel *Stars in My Pocket Like Grains of Sand* can be read as an exploration of the radically constructed cyborg and how this figure can be disruptive to the practice of locating knowledges. As a disruptive potential, Delany emphases the opposite to Haraway's utopian cyborg figure. For his own critical and writerly practice, however, location and perspective are crucial. In his 1998 *Longer Views: Extended Essays* Delany stresses the importance of his position as narrator: 'When I try to articulate the positions from which I write, as a male, as a black male, as a gay black male whose work is the writing of paraliterary fictions, of which this, as you read it may be one—it seems only reasonable someone else may protest: "who *else* would cite, would mark, would take on and torture so this particular text?" By articulating a continuum of gender, racial, sexual and writerly positionings of differing privilege, Samuel Delany makes clear his belief in locating knowledges. This interest in subject positioning and its relation to epistemology manifests itself in *Stars* through a definite struggle between, on the one hand, what I will characterise as a radically relativist (and disruptive) epistemology which is *unsituated* and, on the other, a socially constructed epistemology which is deeply *situated.*

Stars can be read as a struggle between these two forces—for order and for disruption— which begins with certainty and order and ends with loss, destruction and uncertainty. Part of the pleasures in reading Delany is that he is such an adept theorist himself. However, rather than making his texts easier to theorise, precisely the opposite is true: Delany's texts yield easily and self-consciously to many differing interpretations but also, by the same token, they undermine them. In this way his texts contain an urge to master meanings, precisely as it deconstructs this kind of possibility. This makes Delany's work as rich as it is problematic, as challenging as it is frustrating, as hugely imaginative of disjunctivity irrealities as it is intense about containing an almost modernist urge to instate critical meaning. I will return to this idea shortly.

In keeping with this love of complexities, the title of this dense and lavishly poetic novel *Stars in My Pocket Like Grains of Sand* telescopes the tiny and near to the huge and far away, collapsing their disjunctivity. The trope 'stars ... like sand' is cognitively unsettling, offering at the very beginning an irresolvable aporia. This is appropriate, though, given that any unity of place here encompasses a universe of over 6200 worlds, richly peopled with human and alien cultures, which the text foregrounds abundantly in a 'laden collage surface'. [106] Critic and sf writer Damien Broderick offers the somewhat glib narrative précis that *Stars* is about 'boy loses world, boy meets boy, boy loses boy, boy saves world'. [107] While not wishing to take Broderick's flippant gloss too seriously, I think it is important to note that it is deceptive in its implication of self-evidence and narrative closure, whereas as a writer and theorist Delany overtly proselytizes a post-structuralist ethic which is crucial to understanding this novel.

In keeping with the gradual deconstruction of narrative, the novel is divided into a tripartite structure that present the reader with a distinct narrative evolution. While the 'Prologue' is written in an unquestioningly confident third person mimic of the Classic Realist text, the 'Monologues' are narrated by the self-reflexive main character Marq Dyeth who is a highly literate interstellar industrial diplomat or, in shorthand, an ID. An ID, Marq repeatedly explains, is trained to be a cultural mediator and interpreter between very different worlds, yet as the name of his profession suggests, interpretation is never neutral as it is always a filtering through the cultural 'i.d.' or even the 'id' of the translator. The id offers, then, a point of fixity and location. Marq is firmly committed to situating his knowledges and discusses at length themes of identity construction, the arbitrariness of knowledge and belief systems, of social orders, taboos and desire yet advocating all the while the tolerant ideologies of his home world which, interestingly, is called 'Dyethshome'. Later in the novel when the solidity of Dyethshome is revealed as 'illusion and spectacle' sustained by technologies of sensory deception, Marq's ability to narrate also dissolves. The death of home (Dysthshome) as symbolic of the ability to ground knowledge is lost and all that is left is a disaffected, uncertain identity with no ability to feel or communicate.

As Rat's various cyborg tran sf ormations are so different, I will now trace this evolution which references radically variable notions of the constructed cyborg body.

Rat's radical reconstruction begins on a planet where oppressive technologies subjugate and enslave much of the populace to serve as labour in an economy of exchange. Masked authorities coerce the monstrous figure of Rat with a permanent and life-changing proposition: "Of course,' they tell him in all honesty, 'you will be a slave". 'But', they insist, tantalizingly, 'you will be happy' (3). Radical Anxiety Termination, Rat's treatment, is a drastic and irreversible operation which removes all capacity to create links between ideas, which, effectively, is the removal of the ability to think at all. Weary of his life on the margins, Rat strongly desires to be re-made like the masked people, and pathetically mistakes the operation for a normalising rehabilitation. Protesting angrily, he exclaims: 'I could learn if you taught me!' (5) to which they reply, pronouncing their exegesis of fixed (and oppressively logocentric) identity: 'we're not out to change the fact of who you are. We only want to change that small bit of you grossly unhappy *with* that fact' (5-6). Tricked into saying 'yes', the new Rat Korga is tran sf ormed into a subjugated cyborg. Accordingly, a decade of hard labour, beatings, near death experiences, and sexual abuse passes until a desperate and miserable woman illegally purchases Rat as a sex slave, a fantasy lover, and as a person to read poetry to her. She explains to Rat how he has lost the ability to process information, how he needs a 'supplement', to allow him to think again, and to fulfill his role for her. So she gives Rat a glove which, neurally connected, feeds him information and encourages the construction of 'associations between external and internal perceptions', or 'knowledge, insight, belief, understanding, belligerence, pig-headedness, stupidity'. 'Only social use', elaborates the glove in Rat's mind, clearly espousing a politics of radical relativism, 'determines which associations are knowledge and which are not' (32-33). While Rat and the woman drive across thousands of kilometres of glittering desert under a scorching orange sky, Rat consumes at the rate of half a second each huge tomes of alien literatures which are lovingly, expansively and intricately described in the text. Their effect is tran sf ormative once again; Rat's view of the world resonates with new connections. Unfortunately though, the outlaw couple are soon captured by the police and Rat returns to his life in a labour camp ending this first part of the

novel which is ironically entitled 'A World Apart', Rat's status is suddenly changed once again: in a bizarre and mysterious firestorm, the surface of the planet is destroyed leaving Rat as the sole survivor.

Soon after, Rat is discovered by rescuers who are keen to remap and replace his missing parts In a scene strongly reminiscent of Mary Shelley's *Frankenstein*, the monster Rat Korga awakens in his tub of life-support fluid. The scene is heightened by the resonant use of birthing imagery. A solution is found to compensate for the jamming effects of Rat's brain mutilation which further complicates his radically cyborged identity. The text introduces Vondramach Okk, a 'hopelessly privileged' psychopathic ruler who had a penchant for self-mutilation and subsequent limb replacement; we are told that at any one time she would normally have a wardrobe of prostheses made up for her and, for good reason; as a result of this pastime 'she'd had to replace most of her vascular, muscular, and skeletal systems, as well as a good deal of neural matter, several times over' (167). For Vondramach Okk, the synaptic jamming was simply an extension from the physical to the mental of her 'radically violent art-form'(163) of self creation. However, soon bored with the brain mutilation she had made hundreds of rings which would act as counterfeit neurological compensators.

Finally Rat is reawakened complete with all prostheses. Steadily he rises from the vats: a 'tall naked male save a handful of rings' in sharp contrast to the experts 'cluttered with [their] accoutrements: silver suits, bright insignia, recorders, calculators, reading machines' etc (173). Clearly here, the text self-consciously invokes images of colonisation, of birthing and of creation; the alien and the spaceman, the monster and Frankenstein, God and Adam; in short, of the Subject who creates the Other, through their more powerful technologies. For this reason, Rat seems both pre-lapsarian and frighteningly alien: he is still a kind of monster but a cyborg monster. The final technology of self-making which Rat undergoes is to be linked to Marq as each other's perfect erotic object

This concept of 'the perfect erotic object' sits very strangely within the novel. In spite of all this perfection, when they do meet, Marq's descriptions are very fragmented; Rat becomes an assemblage of attractive body parts which cannot be re-membered into a whole. This dynamic quality is an intrinsic part of desire. As Marq explains, 'the perfect erotic object

remains only in recognition memory; and his absolute absence from reconstruction memory becomes the yearning that is, finally, desire' (198). For once, Rat cannot be reconstructed into a whole in Marq's mind. So desire is disruptive rather than consolidating. It involves an active and constant creation of the other which also entails an endless deferral of resolution. Desire never achieves stasis. Just as Rat is a figure in process, Marq's desire for Rat is always in process.

While the perfect erotic object is about endless creation, chasing the dissemination of *différance*, Marq believes in the stability of home. Symbolically, however, the destruction of this stability is most strongly represented by a friend visiting Marq's large and lavish apartment, complete with baroque furniture and massive views. To demonstrate that artifice guarantees the putative stability of this location, his friend George switches off the technology which generates Marq's room and, in surrealist coup de théâtre:

> Stars and clouds went out.
> The hills, with Morgre between, vanished. George laughed. Fire cactus faded. Some where the stream ceased to plash. Bed and desk and rail and carpet disappeared. Three metres by three metres, my living room's wall plates had once been sprayed ... with a translucent green gum that had now worn off the centre of the floor showing tarnished blotches. Where the metal bolt-heads were deeply inset, some of the coating had pulled loose, though still after a century it still accomplished its major job: to keep any random chemical reactions in the walls' surface from adding any upsetting order to the image the plates could be excited to project.
> George, no longer bronze and not quite so tall, stood by the control post that slanted up, off center, in the pentagonal floor. "Same technology. Same everything ... Not a bit different from mine.
> (139-140)

George disrupts not only the illusion of solidity of Marq's location and representations, revealing a framework of technologies underneath which have prevented 'any upsetting order' disturbing the projected images. George's aim is to narrow the differences separating Marq from himself. His comments about everything *being the same beneath the surface* provoke Marq to rethink what home is: 'I know how much of my world—its streets, its hills, its runs, its rains, the halls, the heat, the sky, the stars, the stream itself—is and is not an illusion. But for a moment, as I sat at my desk, still lost in the disruption from George's invasion, I felt as foreign a creature from one of those primitive geosectors on some world where all productive media are safely contained in clearly visible frames, who for the first time, confronts a modern society where all is what we once called ... spectacle. (342) All of a sudden Marq feels as

though there is no stability nor certainty. While George only disrupts the surface of representation, this is revealing of their lack of authenticity. Home becomes just another illusion; a spectacle.

The effect of reimaging the world as illusion and spectacle, of losing Rat and the stability of home, is narrated by Marq as if he too had undergone synapse-jamming. His technologies of self, are either illusory, unstable or arbitrary. In the third part of the novel, he is no longer a confident cultural translator. Old certainties have dissolved and in their place is a profound sense of loss. Marq marvels at his ability to be able to converse with anyone at all. Of an alien woman he muses 'that they both could find something in common to talk about ... was ... where all wonder lay' (check p360). The concept of a woman, of space travel, of dawn: none of these concepts is simple, their cultural conceptual referants are easily dislodged and made utterly alien. And taking away Rat, says Marq, has 'practically destroyed my home'(371). Yet it seems that Marq is mistaken here: *being* with Rat practically destroyed his home for it entailed, as he says, 'seeing identity at its most intense' and *'to see that identity shatter, fragment, and to realise that its solidity was always an illusion*, and that infinite spaces between those referential shards are more opaque to direct human apprehension than all of the star-studded vacuum' (364 my italics). And in a marvelous diatribe of loss Marq describes the 'edgeless dislocation that marked the nothingness between ... half sleep and a loggy waking'.

Hence, Rat is a destabilising force. He knows no home nor stability, no perspective even a partial one. In the course of his many radical reinventions, he constantly unsettles all social and cultural structures which come into contact with him. Disruption is the only constant in his identity. Finally, Rat seems to precipitate a phenomenon which the text refers to as 'Cultural Fugue'. This Fugue is represented in the dreamy and chaotic epilogue. Marq is aboard a huge interstellar colony ship strung up on a hammock beside thousands of other sleeping bodies: an image of cultural diaspora from the 'marking' of the 'death' of the coherent, self-aware subject within a knowable, translatable universe. The potent trope of sleeping bodies dangling in hammocks, is symbolic of the diaspora of the self and the loss of location. I will return to this point shortly.

As this précis shows, Rat's tran sf ormations are variously described as mutilations, mutations, rebirths, regenerations, remappings, as a radically violent art form, and as deformations. These changes signify quite different perceptions of the body. For instance, augmentation implies the body is a potential, rebirth imbues the body with Edenic narratives of origin and purity, remapping implies reading the body as text, mutilation invokes the body as a site of battlegrounds, whereas as an artform in progress, the body is a playground. As Marq's Perfect Erotic Object, Rat becomes 'an assemblage of parts that cannot be reordered,' and as a perfect mirror image of Marq's desire. All of these ideas narrate differing possibilities and ideologies relating to bodily technological change.

Whereas in *Neuromancer* the emphasis was strongly on individual enhancement, *Stars* contains bodily change without consent. In *Neuromancer*, bodily change is consensual but as it enacts a code of survival, most people need to be enhanced to survive. Enhancement, for both cosmetic and functional reasons, is common, and this reflects different social spaces. While Gibson sets this clearly within a continuum of most real and original (Rastafarians, ethnic youth) to most representational and perverse (the vampire cloned Tessier-Ashpool, the trapped identity of Dixie Flatline), Delany constructs no such comparisons. He is too interested in multiple, polymorphous forms of figuration to foreclose on any. Also the notion of a continuum symbolically reenacts the deadly logocentric assumption that difference can only be construed in hierarchical terms. However, the problems with lack of any foreclosure, Delany makes quite evident in the poststructuralist narrative disintegration.

Espen Aarseth approaches the issue of cyborg figuration from a slightly different angle: 'Any cyborg field, as any communication field, is dominated by the issue of domination or control. The key question in cyborg aesthetics is therefore, Who or what controls the text? Ideologically, there are three positions of struggle: author control, text control, and reader control'[108] In Delany's novel, the control of the narrative is initially Marq's responsibility. As his control becomes increasingly impossible through Rat's multiple disruptive reconstructions, the control becomes textual in Aaseth's terms. As Aarseth comments on textual control: 'the text is an impurity, a site of struggle between medium, sign and operator'[109] This sense of struggle to master the narrative is incorporated in Marq's desire to 'reconstruct' Rat in his mind, which,

finally, he finds impossible. His failure to do this is not without effort. Marq's language testifies to the attempt to overdetermine the narrative—in precisely the way of Barthes' readerly (*lisible)* text. However, by this very overdetermination, the reality effect is put in jeopardy; 'awash in a flood of information about how meaning is constructed'[110], as Mark Jenkins describes the novel's language.

If Rat can be read, then, as symbolic of a deeply post-structuralist identity, this figuration, and the aesthetic it embodies in its multiple changes, is ultimately depressing in the loss of all stability and location. While Rat dispels metanarratives, defies hierarchies and recreates his stories of origins, he is also denied the possibility of any points of certainty, belief or sustained commitment. By virtue of being remapped so easily, he has no stubbornly residual personality, or maps, of his own. The disillusionment of this cyborg figure is in stark relief to Haraway's utopian vision of the cyborg in the 'Manifesto'. This is in spite of her cyborg being described as 'a kind of disassembled, reassembled, post-modern collective and personal self'[111]

Also published in the same year as these texts, Donna Haraway's 'A Manifesto for Cyborgs' contains a very different kind of cyborg metaphor. Haraway emphasises the embodiment of the cyborg to stress a sense of stability located in the bodily which is responsible in its recursive technological constructions. This cyborg does not easily fly away along the nodes of the network, or into the exhaltation of cyberspace. The visceral and symbolic body prevent it from doing so. The cyborg's partial perspective and objective vision Haraway celebrates is, hence, a practice of recognising boundaries, transgressing them, and tran sf orming notions of otherness. This is from an embodied position and with a recognition of a finite and polluted point of view.[112] The cyborged body is, in this way, both the real place of utterance and perspective *and* an emblematic, tropic place. The body works well tropically because, just as it cannot be erased; it can hurt, it is finite.

In terms of this politics of embodiment, this is what makes Haraway's cyborg a creature which stands for radical contingency, rather than the radically relativism of a cyborg like Rat. Contingency means that, things hinge on other things which are historical, important

and able to be gauged rather than things hinge on other things which are historical important but unable to be gauged.

In his reading of Haraway's manifesto, Delany explicitly narrates his struggle against the violence inherent in the creation of a master discourse within a text, or a reading of a text, and the urge toward open-endedness. These struggles are also the struggles of a cyborgian consciousness, of politics, and of literary criticism. His reading of Haraway could also be seen as a more self-reflexive theoretical version of *Stars.* He sees what he calls 'the gap' in Haraway's work between dualistic notions of construction. Delany compares: 'Liberation rests on the construction of the consciousness, the imaginative apprehension, of oppression, and so of possibility,' from the Manifesto, with '[this is] an argument for *pleasure* in the confusion of boundaries and for *responsibility* in their construction.' Construction, according to Delany means both: 'to build or to create from former materials' and also 'to construe, to understand, to analyze, to tear down into its constituent parts'[113] Construction, of metaphors through prostheses, of arguments through various writing technologies, of cyborgs, must negotiate the urges between destruction and construction, to paraphrase Delany. He clarifies: 'For my argument ... to be useful ..... It must be analyzed, fragmented, sliced open, cut up, cut off, fragments of it recombined ... till all unity is struck from it (the very concept of unity returns only to trouble, to critique, to annoy), resembling rather some junk-lot of deformed monsters, part human part machine, and then—perhaps—some part of it cut off or up or out for new use, while the rest is simply left missing.'[114] Amongst all of this linguistic violence, the figure of Rat becomes clearer, and with him also a very Foucaultian sense of the violation power and mastery have over the human 'docile' body, and which discourse enacts. Fusions are not with utopian possibilities, in the way of Haraway's attempted feminist myth-making, as they must necessarily involve tearing other things apart.

If then, *Stars* can be read as Delany's allegory of knowledge making, then Marq *is* the mark, of power of civilisation, of power, he is the power to tell the stories, to construct wholes, albeit situated ones. Marq's narrative evolution is clear: in stark contrast to the novel's final and depressingly dislocated narratives, Marq's original narratives are brim-full of authenticity-generating devices; geographical, temporal, cultural and semantic technologies which help

create the sense of verisimilitude within the disjunctive reality of the science fiction world. However, as a counterweight to this attempt to (over)determine the meaningfulness of the narrative is the text's implicit deconstruction of such coherent frameworks and by the disruption of identity effected by Rat. Rat, in this schema, is the body always in a dynamic of construction and destruction, fought over, unshared, and violated of its integrity. Rat is in a dynamic of various technologies of power, which, as Foucault, elaborated 'determine the conduct of individuals and submit them to certain ends of domination, and objectif[y] the subject'.[115] The novel, then, in its movement, of order to disorder, enacts the atrophying of the ability to order and to narrate within the nexus of dominating power relations. Order to disorder also reverses the usual move of the previous sf texts.

The notion of self-making is also inextricably tied to knowledge-making in *Neuromancer's* beleagured post-apocalptic world. However, Gibson does make way for some more essential, undisrupted figures and their 'truths'. While Mark Jenkins maintains that 'Gibson pursues mutating relations of subjects and objects across a terrain characterized by frequent disruption of narratives and of hierarchy, resisting the modernist legacy of purity and identity',[116] the notion of a continuum itself reinstates a definite hierarchy, even if it is more complex and useful than oppositional categories.

Finally, if these novels present in their differing ways a response to the urge to recapture the fragmented, stressed, technologically-implicated figure of Man, then their responses are also fraught with dangers. What is interesting, though, is their problematisation of the figure of the cyborg. The cyborg cannot be a unitary figure, espousing a unitary politics. The feminist film critic Teresa de Lauretis has pointed out that bodies are made by ideologies which 'will never exhaust or fully coincide with [these ideologies]'. [117] If we replace 'ideologies' with 'technologies' then we have an interesting paradigm for cyborgs insofar as the technology of the cyborg will never exhaust or fully coincide with the natural body either. This makes it a multiple figure; articulated into the technologies of the city as much as it articulates its own bodily enhancements. The desire to leave this body as a symbolic site of location in favour of radical reconstruction is not held as promising, according to Delany. It enacts, rather, a state of perpetual denial of limits and location. Or, additionally, according to Gibson, the desire to

leave the material body is a desire for self-annihilation, as Gibson shows in the aesthetic of simstim and cyberspace.

Some Conclusions

The critical practice I have adopted here—of reading narratives, tropes and ironies which are a contested part of the fraught technocultural map—is, above all, a practice which aims to denaturalise sedimented ideologies. The ideologies which resist this denaturalistion and concomitant politicisation are, paradoxially, often the ones which disguise the most their implicit dominations. Hence, they are often the ones that seem the most natural. The historically-derived narratives of progress, of the techolgoical sublime, and of a colonial relationship between man and nature, for instance, are implicit in upholding the ascendency of science as a truth discourse which is outside of the cultural practices which gives rise to it in the first place. Hence, science relies on this philophical tautology to uphold its Truth telling. Additonally, this truth telling is based in an epistemological belief in the symbolic *transparency* of representation to reality. By proposing a narrative reading of science, technology and techocultural figures, the nuanced and mediated relation of practice to truth is emphasised. Just as the US Department of Energy aims to provide an 'account' of their work in 'To Know Ourselves', after the feminist practice of situating knowledges, these accounts should also be accountable to their placement in relations of politics and power.

Contesting the economy of technocultural narratives is also about creating new tropes and figurations for life. Sf texts are full of such rich tropes. By their conjoining of fiction with science, sf texts are located across the boundaries of these anxieties and the historical framework which distill out the political from the technical. Hence, sf can offer a rich resource for gauging social and cultural crisis points. Even when these texts are implicitly conservative in their recuperation of logocentric ideologies, such as those which guarantee the dominant place of Man, this process is made more readily evident.

An important focus of many of these texts is the future of the body. While Donna Haraway has suggested the political and utopian figure of the cyborg as a trope for life 'in the integrated circuit", sf representations of human-machine fusions are far from utopian. Through the technolgies of the city, or of other spaces such as cyberspace, prosthetic enhancements or genetic alterations, technologies often challenge both the coherency of the visceral and symbolic body in a way which ultimately reinforces existing social oppressions.

In addition, the possibilities for radically different kinds of cyborgs also narrrate very different relationships, such as are inscribed in the concepts of the body, the human, and the notion of the humanist individual. As the cyborg is always engaged in this process of radically disrupting received notions of otherness, it is a boundary-crossing figure which challenges the

stability of logocentric Man and his extant ideologies. But just as Man is not just one figure, nor do cyborgs trangress boundaries in the same ways. The relationship of narrative to the body is illustrated in Samuel Delany's *Stars in my Pocket Like Grains of Sand* where the radically reinvented cyborg figure is shown to provide such a strongly disruptive potential to notions such as location. This disruptive potential may be composed to a radical relativism whereas a politics of locating knowledge requires embodiment, albeit a knowingly constructed one. Finally, this account suggests that origins and truth-telling are necessary components of the possibility of any narrative, and of any politics.

Notes

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[1] Donna Haraway, *Modest_Witness@Second_Millenium.FemaleMan©_Meets_Oncomouse™* (London: Routledge, 1997) 268.
[2] Teresa De Lauretis, 'Signs of Wo/ander', *The Technological Imagination: Theories and Fictions*, ed. Teresa De Lauretis et al. (Madison: Coda, 1980) 159.
[3] Istvan Csicsery-Ronay, Jr., 'The SF of Theory: Baudrillard and Haraway', *Science Fiction Studies*, Volume 18 (1991) 387.
[4] Mark Jenkins, *Visible & Invisible Persons Distributed in Space* (Diss. San Diego: University of California, 1997) 110.
[5] Joanna Russ, *The FemaleMan* (London: The Women's Press, 1985) 157.
[6] Francis Bacon, *Essays and New Atlantis* (London: D. Van Nostrand Company, Inc., 1942) 288.
[7] Here when I use the term Man, I am referring to the historically-constructed figure of western identity whose privilege is guaranteed by the process and taxonomy of logocentrism. I am not referring to man as an old fashioned generic term for human.
[8] Ibid 299.
[9] Quoted in: Teresa de Lauretis, *Technologies of Gender: Essays on Theory, Film, and Fiction* (Bloomington: Indiana University Press, 1987) 42.
[10] Evelyn Fox Keller and Helen E. Longino, *Feminism and Science* (Oxford: Oxford University Press, 1996) 36.
[11] One way in which a narrative of progress is embodied in scientific development is through the trope of the frontier. This is even evident in the sociologist Stephan Cole's popular terms to make a distinction between accepted scientific knowledge and new knowledge which he calls 'core' and 'frontier' knowledge. These terms are widely used in the sociology of science. For cultural critics the term 'frontier' in relation to technologies evokes the kind of large, mythic and romanticised technologies which were implicit in the American colonisation of the west and the way in which the resulting cultural productions often incorporated the notion of the frontier as a literary trope with all of its various resonances to colonialism, the relationship of Man to Nature, and so on.
[12] Rey Chow, 'Postmodern Automatons', *Feminist Theorize the Political*, ed. Judith Butler and Joan W. Scott (New York and London: Routledge, 1992) 101.
[13] For an interesting analysis of the ways in which representations of race and of women in *National Geographic* magazine are similarly naturalised, see Catherine A. Lutz and Jane L. Collins 'The Color of Sex', *The Gender/Sexuality Reader*, ed. Roger Lancaster and Micaela di Leonardo (London: Routledge, 1997). Lutz and Collins argue, amongst other things, that there is an inherent contradiction between the classic humanist elision of difference between peoples and the Western hierarchisation of races.
[14] Robert Taylor, 'Evolution is Dead: The Germline Gene Therapy Debate' *New Scientist.* 3 October 1998, 25-29.
[15] Ibid. 25.
[16] TIME Magazine from January 11, 1999.
[17] Ray Chow, 'Postmodern Automatons' *Feminists Theorize the Political*, ed. Judith Butler and Joan W. Scott (New York and London: Routledge, 1992) 101-117.
[18] *To Know Ourselves*, Human Genome Program, US Department of Energy, 1996, http://www.ornl.gov/TechResources/Human_Genome/tko/.
[19] *Modest_Witness*, 255.
[20] This is Donna Haraway's term for the new humanist man who is 'enterprised up' for the age of technoscience.
[21] Donna Haraway, 'A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s', *Socialist Review* 80 (1985) 79.
[22] Mark Dery, *Escape Velocity: Cyberculture at the End of the Century* (New York: Grove Press, 1996) 27.
[23] 'Walt the Impaler'. 28-08-1998. The Well (http://www.well.com) is a popular San Francisco based news group where many writers on technology and culture chat on on-line conferences. Regular contributors include; Bruce Sterling, William Gibson, Mark Dery etc.

[24] The Critical Art Ensemble (CAE) describe themselves as: 'a collective of six artists of different specializations committed to the production of a new genre art that explores the intersections among critical theory, art, and technology'. (*CTHEORY*, 'The Technology of Uselessness') Using what they CAE refer to as 'the principles of the anti-economy-perversity', the ultimate icon within this paradoxical system is the stockpiling of nuclear warheads:

> The location of the most complex pure technology is of no mystery. Deep in the core of the war machine is the missile system. Ultimately, all research is centered around this invisible monument to uselessness. The bigger and more powerful it becomes, the greater its value. But should it ever be touched by utility - that is, should it ever be used - its value becomes naught. To be of value, it must be maintained, upgraded, and expanded, but it must never actually do anything. This idol of destruction is forever hungry, and is willing to eat all resources.

[25] Olu Oguibe 'Forsaken Geographies', http://satie.arts.u sf .edu/~ooguibe/journals.htm.
[26] Keith White, 'The Killer App: Wired Magazine, Voice of the Corporate Revolution', *Commodify Your Dissent: Salvos from the Baffler*, ed. Thomas Frank and Matt Weiland (New York: W.W. Norton & Company. 1997) 46.
[27] The Critical Art Ensemble.
[28] *Collins Dictionary* (HarperCollins*Publishers*, 1995).
[29] Elizabeth Grosz, *Sexual Subversions: Three French Feminists* (NSW: Allen & Unwin, 1989) 19.
[30] *Collins Dictionary* (HarperCollins*Publishers*, 1995).
[31] See, for instance, Elizabeth Grosz's excellent explanations of these points in *Sexual Subversions.*
[32] Donna Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature.* (New York: Routledge, 1991) 177.
[33] *Wired* Magazine from October 1998, 38.
[34] See, for instance, Haraway's excellent analyses in *Modest_Witness* of PreMed's advertisement for the 'Unholy Alliance' (where a gorilla/vampire stands as substitute for a black woman who is marrying a terrified white doctor) and *Time* Magazine's 'The New Face of America', a morphed image of the perfect woman of the future (257-265). In terms of cultural narratives, the ultimately miscegeny identity is Mary Shelley's Frankenstein. Frankenstein mixes life with death, science with 'god's work', violence with desire.
[35] In passports you are asked to list any distinguishing characteristics: but what is there to list? Certainly not that one is white or middleclass or a businessman with 2.5 children. Mainly the distinguishing charateristics are scars and tatoos.
[36] *Modest_Witness,* 24-25.
[37] Ibid.
[38] Haraway's term for the discursive realm of technoscience.
[39] Paul de Man, 'The Rhetoric of Temporality', *Blindness and Insight: Essays in the Rhetoric of Contemporary Criticism* (2nd ed. London: Methuen, 1983) 226.
[40] Roland Barthes, *Mythologies* (London: Vintage, 1993) 141.
[41] Brian Opie. 'Android Textuality or, Finding a Toad in the Desert of America', *Remembering Representation,* ed. Howard McNaughton, 76.

[43] Andrew Ross, *Strange Weather: Culture, Science and Technology in the Age of Limits* (London: Verso, 1991) 26.
[44] Paul Gross and Norma Levitt, *Higher Superstition: The Academic Left and its Quarrels with Science* (Baltimore: John Hopkins University Press, 1994).
[45] See also Allan Sokal's recent co-editted collection: *Intellectual Impostures: Popular Philosopher's Abuse of Science* which, as the title suggests, inveighs against readings of this sort of science.
[46] Susan Bordo, 'Material Girl', *The Gender/Sexuality Reader: Culture, History, Political Economy*, ed. Roger N. Lancaster and Michaela de Leonardo, 346.

[47] Luther H. Martin et al., eds., *Technologies of the Self* (Amherst: University of Massachusetts Press, 1988) 17-18.
[48] Mark Jenkins, *Visible and Invisible*, 45-46.
[49] *Modest_Witness*, 11.
[50] Michel Foucault, *The History of Sexuality. Volume 1: An Introduction*, trans. Robert Hurley (New York: Vintage Books, 1990).
[51] *Modest_Witness.*
[52] Donna Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (London: Routledge, 1991), 154.
[53] Donna Haraway, 'A Manifesto for Cyborgs: Science, Technology, and Socialost Feminism in the 1980s', *Socialist Review* 80, 1985, 65-108.
[54] *Modest_Witness.*
[55] See note 34.
[56] Manfred Clynes and Nathan Kline, 'Cyborgs and Space', *The Cyborg Handbook*, 29.
[57] This organism was a mouse permanently connected to an osmotic pump which would permit the continuous injection of chemicals to the mouse when it was necessary to regulate its bodily function in some way.
[58] The term 'technological sublime' was first coined by Perry Millar who traces to evolution of this cultural narrative in America in *The Life of the Mind in America from the Revolution to the Civil War.* Harcourt, Brace and World, 1965.
[59] David E. Nye. *American Technological Sublime* London: The MIT Press. (1994) See also Norman Mailer's *Of a Fire on the Moon.* Boston: Little, Brown. (1970)
[60] Nye, David. *The American Technoloigcal Sublime*
[61] Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America.* (Oxford University Press, 1964) 155. See also Rob Wilson 'Techno-euphoria and the American Sublime', *National Identities and Post-Americanist Narratives*, ed. Donald E. Pease. (Durham and London: Duke University Press, 1994).
[62] Bordo, Jonathan, 'Ecological Peril, Modern Technology and the Postmodern Sublime' in *Postmodernism and Religion*, 1992, 175.
[63] Burke, Edmond. *Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful* (1757)
[64] This bleeding of the tropes of science fiction over into defence policy is not so far-fetched. In an similar vein, feminist Constance Penley documents the way in which NASA has explicitly borrowed from *Star Trek* to reinforce its public standing in *NASA/TREK: Popular Science and Sex in America.* London: Verso. 1997. This Manoeuvre, according to Penley, is past of the American tradition of utopian experiments using technology to reinvent the possibilities of the social.
[65] Vincent Mosco, *Cyborg Worlds.*
[66] David E. Nye, *American Technological Sublime.*
[67] Ross, Andrew *Strange Weather: Culture, Science and Technology in the Age of Limits,* 135.
[68] Unsurprisingly for a culture wrapped up in the sovereign humanist subject, brokers of identity always looks like vampires. For instance, Rotgang in *Metropolis,* Tyrell in *Blade Runner*, and Julius Deane in *Neuromancer* who contrasts his vampirish identity with handmade suits and the camouflaging smells of preserved ginger.
[69] Andrew Niccol quoted in *Gattaca.*
[70] Julia Kristeva, *The Powers of Horror: An Essay on abjection*, trans. Leon S. Roudiez (New York: Columbia University Press, 1982).
[71] *Modest_Witness*, 134.
[72] In the opening sequences to the film a caption reads 'Who can undo what God has made?'
[73] 'Sexual Skirmishes and Feminist Factions' in *Feminism and Sexuality: A Reader,* (New York: Colombia University Press. 1996) 17.
[74] 'Reading Cyborgs, Writing Feminism', 39.
[75] The word 'robot' derives from Karel Capek's play *R.U.R. Rossum's Universal Robots* which describes manufactured creatures as indentured labour, which is what robot means in Czech.
[76]Quoted in above, 130.
[77] 'In Gender and Utopia: The Roles of the Dual Woman in *Metropolis'* at http://piglet.cc.utexas.edu/blackangel/writing/rolesdual.html.

[78] Phillip K. Dick. *Do Androids Dream of Electric Sheep?* (London: Voyager, 1997).
[79] Although in the director's cut Deckard's lack of affect is given a much higher significance: it is suggested that he may be a replicant himself.
[80] Simone de Beauvoir, *The Second Sex*, trans. H. M. Parshley (New York: Knopf, 1953).
[81] 'Sexual Skirmishes and Feminist Factions' in *Feminism and Sexuality: A Reader* (New York: Colombia University Press. 1996) 17.
[82] Quoted in Teresa de Lauretis' The Violence of Rhetoric' in *Technologies of Gender*, 47.
[83] Ibid, 43 (My italics).
[84] Ibid, 221.
[85] Judith Butler, 'Imitation and Gender Insubordination,' I*nside/Out: Lesbian Theories, Gay Theories*, ed Diana Fuss (New York: Routledge, 1991) 22-3 (My italics).
[86] From the paper 'Colonial Fantasies: Virtual Spaces and Digital Feminities' presented at the conference, 'Culture Shocks', in Wellington, August 1998.
[87] 'Feminine Intuition', *The Complete Robot*, London: Panther Books, 1984, 581.
[88] Ibid, 327.
[89] 'Reading Cyborgs, Writing Feminism', 21.
[90] Frederic Jameson, *Postmodernism, or the Cultural Logic of Late-Capitalism* (London: Verso, 1991) 419n.
[91] See, for instance, David Harvey's *The Condition of Postmodernity* (Cambridge: Blackwell. 1989) or Peter Fitting who calls this kind of text, the 'apotheosis of the Postmodern' 'The Lessons of Cyberpunk' *Technoculture*, 295-315.
[92] Bruce Sterling, *Mirrorshades* (London: HarperCollins, 1994) 11.
[93] Samuel R Delany,'The Future of the Body: Science Fiction and Technology' *The New York Review of Science Fiction.* Number 51, November 1992, 2.
[94] *Neuromancer*, 21.
[95] Ibid, 4.
[96] This iconography is borrowed for the *Terminator* movies where the mirror shades and black leathers signify potent masculinity and technopower, whether worn by the villain (*Terminator*) or the hero (*Terminator 2*). For more on the iconography within the Terminator movies, see Jonathan Goldberg's 'Recalling Totalities: The Mirrored Stages of Arnold Schwarzenegger' *The Cyborg Handbook.*
[97] Fiction into reality is no surprise within the technocultural realm. In this way, the 'cyherpunks' are a loose group of software engineers and technicians who are concerned about the increasing loss of privacy in a world of electronic traces, information databases and data swopping and selling. Through crytopography, and specifcally with the usage of a public and a private key after the work of Whitfield Diffie, the cypherpunks want to create a world of crypto anonymity within the digital realm. More or less adhering to the goals of the cyberpunks they see themselves as modern day heros: 'cryptography is too important to leave to governments or even well-meaning companies. To ensure that the tools of privacy are available to all, individual acts of heroism are required.' (Steven Levy, *Wired*, May/June 1993).
[98] *Neuromancer* 34.
[99] Ibid, 45,
[100] Robert Markley, *Virtual Realities and Their Cdiscontents* (Baltimore: The Ohns Hopkins University Press, 1996).
[101] Ibid, 25.
[102] 'The Lessons of Cyberpunk' in *Technoculture*, 305.
[103] Ibid, 71.
[104] Ibid, 72.
[105] Ibid, 17.
[106] *Reading By Starlight*, 113.
[107] Ibid, 142.
[108] Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature* (Baltimore, The Johns Hopkins University Press, 1997) 55.
[109] Ibid, 57.
[110] Jenkins, Mark. *'Visible and Invisible'*, 139.
[111] Donna Haraway, 'A Manifesto of Cyborgs' 93.

[112] For the sake of length I will not go into this interesting and important critical practice, which is also called standpoint epistemology. See, for instance, Sandra Harding's cogent article 'Rethinking Standpoint Epistemology: What is Strong Objectivity?' and also Donna Haraway's 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective' both in *Feminism and Science*,ed. Evelyn Fox Keller and Helen E. Longino. (Oxford: Oxford University Press, 1996).
[113] *Longer Views*, 98.
[114] Samuel R. Delany. *Reading at Work*.
[115] Michel Foucault, 'Technologies of the Self', 38.
[116] Mark Jenkins, *Invisible and Visible*, 3.
[117] *The Cyborg Handbook*, 240.