

The Body Project: Transhumanism, Posthumanism and Modification in Twentieth Century Cyberpunk

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Abstract

This thesis focuses upon the social, cultural and political implications of employing radical body modification practices through an analysis of late twentieth century cyberpunk texts. Using the early works of William Gibson, Rudy Rucker and George Alec Effinger, the aim of this thesis is to demonstrate the ways in which cyberpunk writing works to critique the inherently transhumanist desire for creating technologically advanced societies in which the human race will potentially come to be replaced by a far superior race of posthumans. The thesis begins with an examination of the history of transhumanist thought, and applies the central tenets of transhumanism to the cyberpunk works of Gibson, Rucker and Effinger to illustrate the ways in which cyberpunk critiques the concept and deployment of revolutionary technologies in its analyses of near-future technologically advanced societies. The subsequent chapters of this thesis focus upon specific aspects of selected cyberpunk texts, including the commodification and fetishisation of the modified body; theologically-informed technological transcendence; the assertion of identity and sense of self in the modified subject; and the treatment of women in the race towards posthumanity. While a great deal of critical attention has been paid to the work of high profile cyberpunk writers such as Gibson, the works of other writers such as Rucker and Effinger have been comparatively ignored. The aim of this thesis is to address this imbalance, and to provide in-depth analyses of not only Gibson's well-known Sprawl Trilogy (1984-1988), but also of Rucker's Ware Tetralogy (1982-2000) and Effinger's Marid Audran series (1986-1991). All three sets of texts challenge the reader to consider not only the personal, but also the social, cultural and geopolitical implications of both the local and global employment of radical technologies, and this thesis analyses these implications using a transhumanist framework.

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Introduction

‘The body is a strange obsession in the cyberpunk universe.’¹

The central aim of this thesis is to establish a direct and fundamental link between the late twentieth century works of three cyberpunk writers, namely William Gibson, Rudy Rucker and George Alec Effinger, and transhumanist thought. Using transhumanism as the main theoretical framework, this thesis applies the key tenets of transhumanism as established by both early proponents such as Julian Huxley and contemporary advocates including Nick Bostrom, Max More and FM-2030 to interrogate the ways in which Gibson, Rucker and Effinger critiqued the concept of transhumanism in their writing in a number of significant ways. Through an analysis of the myriad body modification practices that exist within these texts, this thesis focuses upon the ways in which an adherence to transhumanist ideals in the technologically advanced societies depicted in these novels will have considerable personal, social, cultural and geopolitical implications, as the overwhelming desire for a technologically driven transcendence will lead to widespread abuse, exploitation and degradation.

Cyberpunk: A Brief History

The term cyberpunk was originally coined by Bruce Bethke, whose short story ‘Cyberpunk’ was written in 1980 and eventually published in 1983 by *Amazing Stories*, and featured a group of teenage hackers who are able to access security systems and steal from a bank using fake accounts in a series of funds transfers. The term cyberpunk was then picked up and used by other writers such as Gardner Dozois, John Shirley and

¹ (Dyens, 2001: 77)

Bruce Sterling, and began to gain traction at the various conventions and conferences that these writers were attending in the 1980s. In his foreword to the 1997 edition of Bruce Sterling's *The Artificial Kid* (1980), William Gibson refers to a panel at the World Science Fiction Convention in 1981 in Denver, in which he read his short story 'Burning Chrome' to a small audience that included Bruce and Nancy Sterling, as being 'the Ground Zero of Cyberpunk' (Gibson, 1997: 3), and he goes on to discuss Dozois' early influence upon the creation of the movement:

At this same convention Gardner Dozois will chair a panel called "Beyond The Punk Nebula." I won't be on it, but Dozois will point me out, as I enter the hall, as one of those doing whatever it is that he seems to be arguing is happening. (Let me take this opportunity to state that I remain convinced that Garner Dozois is, in some profoundly mysterious way, personally responsible for cyberpunk. That he somehow *willed it into being*. He put that panel together, and argued, *from no evidence whatever*, that something new was afoot. And, henceforth, it was.) (Gibson, 1997: 3)

Whilst Gibson credits Dozois with being responsible for cyberpunk, most writers, readers and critics of cyberpunk agree that it was Gibson's first novel that was the ultimate catalyst that brought cyberpunk into the public sphere, allowing it to progress from being a niche science fiction subgenre into a bona fide movement that had an impact upon literature, art and culture. On his website, Bethke credits William Gibson's ground-breaking novel *Neuromancer* (1984) with having ultimately defined the movement, and views his own contribution as being that of introducing a specific style of character:

what I set out to do was to name a *character type*. And the primary definition of cyberpunk – the one that gets used in every news story about computer crime – is my definition: a young, technologically facile, ethically vacuous, computer-adept vandal or criminal. (Bethke, 2010)

Bethke's story had a profound impact on science fiction, and it ensured that Gibson's novel, which was published the following year, was instantly recognised and categorised as cyberpunk. Cyberpunk writers were influenced by an array of genres, writers and movements; they drew inspiration from science fiction writers such as

Philip K. Dick, Harlan Ellison and J.G. Ballard, from the various counterculture movements of the mid-to-late twentieth century and were aesthetically influenced by punk fashion and music.² Cyberpunk very quickly became an instantly recognisable term for fans of science fiction, and the term itself became synonymous with a very particular aesthetic and political outlook. A portmanteau of cybernetics and punk, cyberpunk took a deliberate step away from the science fiction subgenres that came before and presented readers with societies, characters and lifestyles that were decidedly different:

The punk is referring to the low life, the working or lower middle-class characters, the have-nots, who populate such fiction. Rather than rocket scientists and beautiful daughters, cyberpunk features drug dealers, drug users, musicians, skateboarders as characters, as well as various hackers. (Butler, 2000: 15)

These characters live on the edge of society, and they work to negotiate systems that are designed to at best exclude, and at worst exploit and degrade them. There is a dichotomy between the structure of these societies and the ways in which these characters are treated in these texts. The governing bodies in these texts – whether they are ineffectual governments or vastly powerful corporate behemoths – maintain some semblance of social and political order by adhering to the fundamental tenets of capitalism, thus they create systems whereby individuals can *in theory* exploit revolutionary technologies to try to improve their lives, their relationships and their bodies, however, in practice, these freedoms are only available to those living in the upper echelons of society with the social, cultural and financial capital that is necessary in order to be able to take advantage of such technologies. Cyberpunk writers focus specifically upon the power dynamics between those who have and those who lack the means needed to utilise technological advancements that are radically altering society,

² Graham J. Murphy's and Lars Schmeink's chapter 'Introduction: The Visuality and Virtuality of Cyberpunk' in their edited collection *Cyberpunk and Visual Culture* (2018) provides a comprehensive analysis of where cyberpunk began, and the central influences of the movement.

and analyse not only the lengths that individuals will go to to be a part of these new technological revolutions, but also the myriad new and innovative ways in which governments, companies and powerful individuals will be able to exploit citizens by using the technologies they long for against them. In their novels, cyberpunk writers create: ‘a society [that] function[s] in which people could feel universally violated, universally empowered.’ (Di Filippo, 2013: 409) Cyberpunk is inherently political, and writers such as Gibson, Rucker and Effinger analyse the contradiction that is stated by Di Filippo in their works, as they consider these characters who are working to navigate new technologies, new desires and new ways of living within an existing capitalist system that works to exploit them.

A number of cyberpunk writers have referred and continue to refer to cyberpunk as a movement due to its influence upon not just science fiction, but literature as a whole, as well as upon other artistic forms such as film, music and fashion (Attebery and Pearson, 2018),³ as Rucker states in his nonfiction work *Seek!* (1999): ‘William Gibson, Bruce Sterling, John Shirley and I grew up under the spell of beatnik literature. And somehow we got the opportunity to start our very own cultural and artistic movement: cyberpunk.’ (Rucker, 1999: 323) Cyberpunk was and is a self-aware movement; the writers whose careers began or were established in the 1980s worked to cement their status within the movement: they attended the same conventions and conferences; they talked about each other’s work in the press; they wrote the forewords for each other’s published works and they collaborated on projects. The majority of these writers became heavily involved with and invested in what it meant to *be* a cyberpunk writer, and the potential for cyberpunk to become a literary, cultural and

³*Cyberpunk and Visual Culture* (2018) provides in-depth analyses of various aspects of both traditional cyberpunk and contemporary cyberpunk mediums which have been influenced by the cyberpunk of the 1980s, and assesses their impact upon film, video games, fashion, graphic novels and so on, as well as considering cyberpunk’s global reach, from German cinema through to Afrocyberpunk.

even political movement were primary concerns for writers at this time. This notion of embodying the fundamental tenets of a movement is a characteristic that is shared by both cyberpunk writers and transhumanists. Both the early cyberpunks and contemporary transhumanists were and are deeply engaged with what it means to be a member of their respective movements, and this has a significant impact upon their writing, their outlook and their social and political engagement, particularly in the context of their analyses of both the potential and possible pitfalls of engaging with new technologies, whether actual or projected.

Cyberpunk is a movement that was first developed by writers focusing on artificial intelligence and hacker culture in post-industrial cities rather than the more fantastical or inter-galactic future worlds favoured by science fiction writers in the preceding decades:

Cyberpunk stories are set in a future where globalization and capitalism have led to the rule of multinational conglomerates, while marginalized individuals live in a post-industrial setting defined by cold metal technology, virtual reality, and crime. Unlike some other varieties of science fiction, cyberpunk features no aliens, very few foreign planets, and no intergalactic space battles; few aspects of the cyberpunk environment cannot be, at least theoretically, traced back to our late twentieth-century world. (Lavigne, 2013: 11)

Cyberpunk was born out of the consumer culture and emerging technological advancements of the period, and works to critique such developments by exemplifying their inevitable consequences to society, culture, and humanity as a whole. Cyberpunk writers focus upon the norms and values of contemporary society and extrapolate these ideas to consider the ways in which near-future worlds will be shaped by contemporary ideals, particularly in the context of the utilisation of radical technologies. Cyberpunk writers are ultimately concerned with imminent realities (Kellner, 1995), and like all forms of present-day science fiction, cyberpunk considers the ways in which the accelerated rate of change that is taking place in the modern day in all respects will lead to feelings of division and isolation in society (Braidotti, 2002). Science fiction writers

ultimately work to reflect the issues that are affecting the time in which they are writing (Vint, 2007), and cyberpunk is an important example of this, as cyberpunk writers became at once both the promoters and the critics of late twentieth century mass consumer culture, and revolutionised science fiction in the process.

Cyberpunk writers working in the late twentieth century very much analysed and critiqued the budding trends of both youth and mass culture (Jameson, 2007), and employed these concepts with a form of rebelliousness cultivated from a sense of both disillusionment and disenfranchisement with the contemporary social and political landscape. The overriding motif that is associated with cyberpunk is its innovative depiction and utilisation of radical technologies. Cyberpunk writers extrapolate upon present-day technological advancements in a variety of ways in order to assess and evaluate their uses and effects in near-future societies, and this thesis focuses specifically upon these uses and effects in relation to the body in these texts. The new technologies that are depicted in cyberpunk – which are essentially developments of contemporary technologies and ideals – are invasive; they inhabit the mind and the body: penetrating every human process until human and machine become inextricably linked. In its initial stages, cyberpunk worked to respond to the technological advances that were taking place in the 1980s: focusing not only on their immediate effects on the body, but also their wider ramifications on culture and society as a whole:

The advances of the sciences are so deeply radical, so disturbing, upsetting, and revolutionary, that they can no longer be contained. They are surging into culture at large; they are invasive; they are everywhere. The traditional power structure, the traditional institutions, have lost control of the pace of change. (Sterling, 1988: X)

Cyberpunk is a movement primarily concerned with the insidious nature of technology: rather than developing future worlds with unimaginable scientific advancements, the cyberpunks created societies that fused the cultural influences of the 1980s with the technological developments of the era, allowing for an exploration of the possible

cultural and political implications which may arise from the availability of such technologies on the free market. The analysis of new technologies lies at the heart of the movement, and the dichotomy between the accessibility of scientific innovations for the wealthy in order to artificially prolong life and enhance the body versus the degeneration and devaluation of the mind and body of the poor is a primary area of focus within the subgenre. Unlike its predecessors, cyberpunk's representation of technology focuses specifically and unrelentingly upon its effects on the individual, particularly in terms of how technology comes to be used against humans in societies where governments have limited powers and corporations have unparalleled authority and influence when it comes to the lives of citizens. The use of various forms of body modification, biotechnology and artificial intelligence in an adherence to transhumanist values enables cyberpunk to explore the potential ramifications of these new technologies, particularly in terms of humanity's understanding of what it means to be human. Sterling's assertion of cyberpunk's regard for technology as invasive to the human body underpins the movement as a whole and is a motif that permeates the most famous and commercially successful works.

In his preface to *Mirrorshades: the Cyberpunk Anthology* (1986), Sterling identifies a number of themes that he sees as being essential to cyberpunk:

Central themes spring up repeatedly in cyberpunk. The theme of body invasion: prosthetic limbs, implanted circuitry, cosmetic surgery, genetic alteration. The even more powerful theme of mind invasion: brain-computer interfaces, artificial intelligence, neurochemistry – techniques radically redefining the nature of humanity, the nature of self. (Sterling, 1988: XI)

The body is placed at the centre of cyberpunk works, which is reflective of contemporary society. The body's susceptibility to the effects of illness, disease and the aging process are major concerns for cyberpunk: 'In the context of the postwar contemporary environment, the vulnerability of the body has become a major concern' (Wolmark, 1999: 15). It is this vulnerability that is central to cyberpunk's treatment of

the body. This works not only to highlight how fragile the human body is to disability and disease, but also how readily it can be renovated, rejuvenated and potentially regenerated. Science fiction's interest in the body has been noted by a number of critics, and revising the human body is a primary concern for the genre (Doane, 1999). Cyberpunk takes this one step further by politicising not only the body, but also the systems and social and cultural practices that work to define, construct and reconstruct the body in technologically advanced societies: 'Cyberpunk's deconstruction of the human body first appeared to signal a revolution in political art.' (Cadora, 1995: 357) This thesis focuses specifically upon this politicisation of the body, and analyses not only the ways in which cyberpunk writers of the late twentieth century were lauded for their depictions of these at once exploitative and empowering societies, but also how their approach came to be critiqued by readers and critics alike, particularly in the context of their representations of sex and sexual politics.

From the moment of its inception, critics have disagreed about whether or not cyberpunk writers were working within the realm of dystopian fiction, and this is a question that continues to be asked about cyberpunk today. Due in great part to its focus upon radical and often dehumanising technologies, urban sprawl and societal decay, early cyberpunk in particular has been regarded as dystopian science fiction by some critics and readers, and Gibson's *Neuromancer* is a good example of this, as it has often been referred to as a depiction of a dystopian society (Coeckelbergh, 2017). It is certainly the case that early cyberpunk texts in particular depicted societies that had experienced radical change, whether that is due to a religious revolution as is the case in Effinger's Marîd Audran series (1986-1991); another world war in Gibson's *Sprawl Trilogy* (1984-1988); a robot uprising in Rucker's *Ware Tetralogy* (1982-2000); an outbreak of various civil wars as portrayed in Gibson's *Bridge Trilogy* (1993-1999); a global pandemic in 'Inertia' (1990), a short story by Nancy Kress; or a widespread

breakdown of social order as a result of political instability as portrayed by Jack Womack in *Random Acts of Senseless Violence* (1993). There is always some form of a breakdown of social order in these texts as a result of these wars, revolutions and apocalypses, however, that does not mean that the texts are inherently dystopian in their analyses and treatment of these issues. One of the most significant ways in which cyberpunk deviated – and continues to deviate – from other science fiction works comes in its treatment of geopolitical disasters, in that it does not assign a value system to its depiction of these events: ‘Cyberpunk [...] attaches zero value to its apocalypses: they are neither good nor evil, they simply *are*’ (Sponsler, 1993: 253). Cyberpunk writers such as Gibson, Rucker and Effinger are not concerned with the fight between good and evil, neither are they concerned with the struggle to create a better society than the one that exists in these texts; they are steadfastly focused upon conducting analyses of how these new and burgeoning societies define themselves and operate within the new technological revolution that is in progress. These writers are not interested in the past nor do they speculate upon the future in the context of these novels; their writing is steadfastly set in the now – they use contemporary social, cultural and political norms, values and ideals and intertwine them with current technological trends and extrapolate these ideas only so far as is necessary to depict the extent to which these trends will come to be realised. Their texts are especially focused upon analysing key transhumanist principles that were gaining traction in the late twentieth century at the same time as cyberpunk: ‘The transhumanist movement [...] gestated and emerged concurrently with cyberpunk sf during the 1970s and 1980s [...] against a backdrop of war, disease, and environmental degradation (Raulerson, 2013: 47). As is the case with cyberpunk, transhumanism is continuing to be redefined and further developed today, and its key principles include the desire for an extended lifespan; the potential for uploading an individual’s consciousness onto software in

order to try and achieve some form of immortality; rejuvenating and refurbishing the body to ward off and eliminate illnesses; and developing a symbiotic relationship with radical technologies to realise an eventual posthuman evolution.

Cyberpunk: Then and Now

Cyberpunk's impact on science fiction and popular culture is often underestimated, and there has been debate regarding its impact as a social or cultural movement (Melzer, 2006). It has often been regarded as a short-lived movement that peaked in popularity in the 1980s (Sponsler, 1993), only to fade away in the years that followed, due, in part, to its self-definition as a revolutionary movement existing on the edge of the cultural and literary community. Cyberpunk has been a divisive movement since its early days, and has received, and continues to receive, both ire and adoration in equal measure from readers and critics alike, and in the early days of the movement, the cyberpunks' representation of their own movement and brand often angered other science fiction writers, artists and fans:

In their works and in numerous, highly contentious public debates that took place at SF conferences and conventions, the cyberpunks presented themselves as “techno-urban-guerilla” artists announcing that both the technological dreams and nightmares envisioned by previous generations of SF artists were already in place (McCaffery, 1991: 12).

A central critique of cyberpunk is that first-generation cyberpunk in particular appeared to be little more than an all-boys club of white, male writers, predominantly living and working in the US and Canada. While some welcomed its analysis of radical technologies, consumer culture and the potential long-term effects of global capitalism, there were those that viewed the movement as regressive and even offensive: ‘first-generation cyberpunk, which struck many readers as little more than a technofetishistic circle jerk’ (Raulerson, 2013: 85). These cyberpunk writers were criticised by some readers and critics for being sexist, self-indulgent and even racist in their writing, and

their work has continued to garner such criticism to the present day, and this thesis will analyse some of this criticism in subsequent chapters. The writers themselves are aware of their reputation, and writers who were at the start of their careers in the early days of cyberpunk, such as Rucker, were concerned about the audience reactions they were receiving at the time, as described by Rucker when he was on a cyberpunk panel early on in his career:

The panelists were crayfishing, the subnormal moderator came on like a raving jackal, and the audience, at least to my eyes, began taking on the look of a lynch mob. Here I'm finally asked to join a literary movement and everyone hates us before I can open my mouth? (Rucker, 1999: 316)

Rucker's description of his experience in this particular panel illustrates the highly emotive responses to cyberpunk that the writers received from the very beginning. These writers, whilst focusing upon countercultural movements, had created one of their very own; while fans of cyberpunk were highly engaged and enthusiastic in their support of the movement, critics were vociferous in their judgement. Cyberpunk was and is a cultural and literary movement that divides opinion, and this is as true today as it was in the 1980s. Whilst some critics do question cyberpunk's status as an inspired and revolutionary movement, others continue to defend its importance:

Nobody had ever read anything like what the cyberpunks were writing – stories and novels that were the bastard child of science fiction, with a common-man perspective, a love of tech and drugs, and an affinity for street culture [...] Cyberpunk was new, it was vital, it was irreverent. Most importantly, cyberpunk *rocked*. (Blake, 2013: 9-10)

It is undoubtedly the case that cyberpunk writers were doing something completely new in their analyses of radical technologies, consumer culture and corporate power, and cyberpunk's enduring legacy rests upon the fact that these writers were conducting these analyses using contemporary norms and values, rather than speculating about potential new, far-future worlds that are drastically different from the present day.

Whilst some critics such as Sponsler have made the argument that cyberpunk ended almost as soon as it began in the 1980s, they do not take into account the significant impact that cyberpunk has had not just upon science fiction and literature, but also upon other artistic forms such as film, fashion and music. Sponsler does not take into account the fact that a significant number of writers were still publishing their works after the 1980s under the heading of cyberpunk, much as they still do today, and these works have proved to be equally as popular and as commercially successful as the vast majority of the novels published in the 1980s.

Cyberpunk has rapidly evolved since its initial development and categorisation in the 1980s, and this evolution has taken many forms across multiple mediums. In terms of literature, many new subgenres have been developed as a result of cyberpunk, including retro futuristic offshoots such as steampunk and futuristic branches such as biopunk and postcyberpunk. The early cyberpunk writers did experiment with these developing subgenres: Gibson and Sterling collaborated on an alternative history steampunk novel, *The Difference Engine* (1990), which was a critical success. Sterling and Paul Di Filippo have both engaged with biopunk in their writing, and Neal Stephenson's *The Diamond Age* (1995) is considered to be the archetypal postcyberpunk text. Rucker also continues to experiment with various science fiction subgenres, and he developed transrealism as a new form of literature during the period of time in which he was working on the Ware Tetralogy. Transrealism uses elements of the cyberpunk aesthetic in its analysis of reality and contemporary society, and Rucker began experimenting with this new subgenre whilst working on his cyberpunk series. Cyberpunk in its various forms and offshoots has continued to evolve since its inception in the 1980s, and the reason for this is that cyberpunk is not located within a specific set of paradigms, but is, instead, a form of social and political commentary that adapts to contemporary society:

cyberpunk was never really about a specific technology or a specific moment in time. It was, and it is, an aesthetic position as much as a collection of themes, an attitude toward mass culture and pop culture, an identity, a way of living, breathing, and grokking our weird and wired world. (Blake, 2013: 10)

Cyberpunk should not be encapsulated exclusively within the 1980s milieu, as it continued to develop in the decades that followed and still continues to have a significant impact upon popular culture today.

Six years after Sponsler's declaration that cyberpunk was dead, one of the most critically and commercially successful film franchises in history began with the release of *The Matrix* in 1999: a film that was inspired by Gibson's *Neuromancer* and used various elements of the cyberpunk genre to create a visual tour de force. *The Matrix* has earned over \$460 million at the box office and created a new subculture in which the matrix itself became the subject of various conspiracy theories relating to corporate power and artificial intelligence (AI). *The Matrix* received four Academy Awards and two BAFTAs: cementing its legacy as a work inspired by cyberpunk that was both critically and commercially successful. Two more films were released as part of the franchise in 2003: *The Matrix Reloaded* and *The Matrix Revolutions*. The franchise has taken over \$1.6 billion at the box office to date and is revered as a timeless and unparalleled classic, making it increasingly difficult to dismiss cyberpunk's influence and relevance to popular culture. This influence extends beyond *The Matrix* franchise; there have been a number of attempts in recent years to produce a film adaptation of *Neuromancer*, and in 2017 it was announced that the director of *Deadpool*, Tim Miller, and producer of the *X-Men* franchise, Simon Kinberg, had begun to work on a new adaptation of Gibson's novel. Emerging projects such as this illustrate the fact that rather than being a short-lived literary phenomenon, cyberpunk continues to evolve and harness new forms of media: a development that lies at the heart of the subgenre itself. *Neuromancer's* influence is not only apparent within the film industry. Since its

publication in 1984, adaptations of the text have included a graphic novel, a video game, an opera and a radio play, and Gibson's text continues to be referenced in public commentary concerning the internet, hacking and the future of AI. There have also been plans to adapt Effinger's *Marid Audran* series into a film, with writer C. Robert Cargill and director Scott Derrickson working on the project. While the project appears to have stalled at the moment, the fact that these writers, producers and directors are working upon adaptations of classic cyberpunk texts demonstrates that rather than being a short-lived science fiction subgenre, cyberpunk is an influential movement that has been embraced by those working in other creative mediums, and plans to adapt these texts for new audiences are continuing four decades after cyberpunk first began.

The enduring success and relevance of cyberpunk is due not just to its focus upon technology, consumerism and corporate culture, but also to its analyses of how these radically affect the individual in near-future societies. Gibson, Rucker and Effinger all focus upon technology's effects on the body, particularly in the context of attempts at creating a posthuman identity. This focus upon the body feeds directly into contemporary concerns: 'In recent developments in social theory there has been an important re-evaluation of the importance of the body, not simply in feminist social theory, but more generally in terms of the analysis of class, culture and consumption.' (Turner, 1991: 11) Cyberpunk writers tapped into these concerns, and cyberpunk deals directly with the three key concerns listed by Turner: class, culture and consumption. This concept of the importance of the body in the context of social theory is the central focus of this thesis, and the ways in which the body is treated, classified and modified in the wake of the widespread utilisation of radical technologies in cyberpunk texts is analysed and evaluated.

A wealth of research has been undertaken on cyberpunk since the 1980s, with topics including cyberpunk and embodiment (Stockton, 1995; Featherstone and Burrows, 1998; McCarron, 1998; Foster, 1999), cyberpunk and feminism (Nixon, 1992; Cadora, 1995; Gough, 2000; Cadora, 2010; Lavigne, 2013; Wolmark, 2013), cyberpunk and capitalism (Jameson, 1991), cyberpunk and commodification (Vint, 2010), political cyberpunk (Michaud, 2008), cyberpunk and global politics (Moylan, 2010), cyberpunk and performance (Landon, 1991), cyberpunk and music (McCaffery, 1991), cyberpunk aesthetics (Joyce, 2018; Murphy and Schmeink, 2018), cyberpunk and gaming (Boulter, 2010) and cyberpunk and architecture (Gardner, 2020). A key text that provides in-depth analyses of cyberpunk aesthetics across various mediums has recently been published; the publication of *The Routledge Companion to Cyberpunk Culture* (2020) is testament to the enduring appeal – both creative and scholarly – of cyberpunk, and this text brings contemporary research into cyberpunk to the fore.⁴ Alongside such studies and publications, a significant amount of research has focused upon Gibson and his work, including three in-depth author studies in the last decade (Henthorne, 2011; Westfahl, 2013; Miller Jr, 2016). Cyberpunk continues to be studied into the twenty first century, and this thesis will contribute to this vital and diverse research area through an analysis of the ways in which cyberpunk depicts the changing nature of the concept of human subjectivity as a direct result of the advent of ever more radical, infiltrative and transformative technologies.

Gibson, Rucker and Effinger

William Gibson, often referred to as the godfather of cyberpunk, is arguably the most critically and commercially successful cyberpunk author, and his most famous novel,

⁴*The Routledge Companion to Cyberpunk Culture* provides contemporary analyses of cyberpunk's influence across different artistic mediums including literature, film, animation, music and fashion, as well as considering how the cyberpunk aesthetic has been adopted and adapted on a global scale, taking into account regions and countries such as Latin America, Germany and India.

Neuromancer has sold over six million copies to date. *Neuromancer* is the first novel in the Sprawl trilogy, which also includes *Count Zero* (1986) and *Mona Lisa Overdrive* (1988). Before the publication of *Neuromancer*, Gibson wrote a series of short stories that were published in science fiction magazines such as *Omni* in the late 1970s and early 1980s, and these were eventually published in one volume, *Burning Chrome*, in 1986. His breakthrough work, *Neuromancer*, won the Philip K. Dick Award, the Hugo Award and the Nebula Award – the first novel to win all three awards – and made a significant contribution to science fiction:

Fictionalizing issues of identity, consciousness, and embodiment, Gibson's novel illustrates the degree to which postmodern identity has become fixed to that of the informational spaces provided by the global matrix. An original and controversial contribution to the 1980s, his novel offers valuable insights into the ways in which notions of the human begin to diversify, self-transform, and mutate as rapidly as do the new technologies (Pordzik, 2012: 152).

Gibson is a prolific author, and since the publication of the Sprawl Trilogy he has published the Bridge Trilogy, the Blue Ant Trilogy (2003-2010), and has just published *Agency* (2020), the second instalment of his latest series, the Peripheral Trilogy, which also includes *The Peripheral* (2014). He has also co-written with other cyberpunk authors, such as Sterling, Shirley and Michael Swanwick. Although he is regarded as the most renowned cyberpunk writer, Gibson has often commented upon how he does not feel that his work ought to be categorised as such. In an interview with Larry McCaffery in 1986, where McCaffery asks: “‘You’re usually considered the leading figure of the cyberpunk movement. Is there such a thing, or was the movement dreamed up by a critic?’” (McCaffery, 1991: 279), Gibson states:

“It’s mainly a marketing strategy – and one that I’ve come to feel trivializes what I do. Tying my stuff to *any* label is unfair because it gives people preconceptions about what I’m doing. But it gets complicated because I have friends and cohorts who are benefiting from the hype and who like it. Of course, I can appreciate that the label gives writers a certain attitude they can rally around, feel comfortable with – they can get up at SF conventions, put on their mirrored glasses, and say, “That’s right, baby, that’s us!”” (McCaffery, 1991: 279)

Gibson has noted his discomfort with the cyberpunk label on numerous occasions, and his response to McCaffery's question illustrates a key source of tension that has always existed in the context of cyberpunk, which is the ways in which the cyberpunk label is applied and utilised. As Gibson states, this label has been very useful for a lot of his peers, and they have been able to benefit both artistically and financially from having their work labeled as cyberpunk. As far as Gibson is concerned however, the cyberpunk label leads to people making assumptions about his work, and this concern has become more pronounced as Gibson has continued to publish well into the twenty first century. Gibson's displeasure at having any particular label attached to his work bears a distinct similarity to the approach taken by cyberpunk writers to create and embrace an entirely new term for the type of writing they were producing. In both instances, there is a desire to be so new, so avant-garde, so cutting edge that their work cannot be defined. The cyberpunks that embraced the term responded to this desire to be deemed as too revolutionary for classification by creating their own definitions for what they were doing, whilst Gibson wishes to eschew labels altogether as his argument is that his work is continuously pushing boundaries and revolutionising the field.

Gibson's influence, not just upon science fiction but upon popular culture, is made clear by the fact that not only does he continue to publish critically well-received and commercially successful works, but that he is also often cited and interviewed about contemporary issues that relate to his writing. In early 2020, Gibson's work was once again in the news when some of the characters and character types in his novels were referenced by Dominic Cummings, the Chief Advisor to Prime Minister Boris Johnson. In a blog post, Cummings stated that he wanted to shake up the civil service by hiring the types of nonconformists that are apparent in Gibson's texts. This prompted a flurry of articles from journalists and literary critics and led to discussions not only about Gibson's texts, but also his views about the concepts of nonconformity, workers' rights

and corporate culture. Gibson is a powerful figure within the science fiction and literary community, and his continued influence over four decades after the publication of his first series of short stories is testament to the power of his writing; Gibson's work hits a contemporary cultural and sociopolitical nerve, and his analyses of the ways in which humanity's approach to new technologies will define the lives of current and future generations remains as relevant in the twenty first century as it was in the twentieth.

Whilst this study considers the Sprawl Trilogy in its entirety, as well as Gibson's other works, the central focus is very much upon *Neuromancer*. *Neuromancer* centres upon Henry Dorsett Case, a hustler and hacker living in Chiba City, Japan. He and Molly Millions are hired by Armitage to help the immensely powerful Tessier-Ashpool family to illegally combine two powerful AIs – Wintermute and Neuromancer – in order for them to further entrench their levels of global wealth and power. The novel deals with themes such as identity; technology and its effects upon the individual; perception and memory; and exploitation.

Writing and publishing at the same time as Gibson in the late twentieth century was George Alec Effinger, a writer whose work has remained relatively unknown despite his stylistic reinterpretation of the cyberpunk model. Having published *When Gravity Fails* in 1986, Effinger went on to publish two more novels in the Marîd Audran series: *A Fire in the Sun* (1989) and *The Exile Kiss* (1991). Originally working within the realm of fantasy in the 1970s and early 1980s, Effinger's most successful novels came to be classed as cyberpunk, and his influence on the movement should not be underestimated. In her foreword to *Budayeen Nights* (2003), an anthology of short stories which was published after Effinger's death, Barbara Hambly, Effinger's ex-wife, argues that his initial foray into cyberpunk helped to cement his status:

George used a science-fiction palette to tell fantasy stories. But it wasn't until he began writing the Budayeen novels – *When Gravity Fails*, *A Fire in the Sun*,

and *The Exile Kiss* – that he settled fully into science fiction mode, and reinvented himself as one of the founding fathers of cyberpunk. (Hambly, 2008: IX)

Due to his untimely death in 2002, Effinger's planned fourth novel in the series, *Word of Night*, remained unfinished, and the two chapters that he had completed were instead included in *Budayeen Nights*. Accompanying the texts in *Budayeen Nights* is an introduction and a selection of forewords by Hambly, who was instrumental in having Effinger's final works published in the wake of his death. These forewords give not only an insight into Effinger's life – particularly his final years – but also explore the inspiration behind the creation of the Budayeen: a city in the desert that is loosely based upon 'the French Quarter [New Orleans], with maybe a little of the East Village in the sixties where George lived after dropping out of Yale.' (Hambly, 2008: X) Effinger's work deviates significantly from the cyberpunk texts that were being produced at the time that he was writing, as his decision to locate his novel within a post-revolutionary Islamic setting in the twenty second century rather than the sprawling metropolises typical of the genre enables him to explore the religious and cultural implications of body modification, particularly in terms of its effects on relationships, religious doctrine and sexual politics. Effinger used his own experiences when developing the Budayeen for the Marîd Audran series, as Hambly describes:

George had a very dark side to his nature, a fascination with the underworld and the demimonde that came about, I think, because many of his mother's friends were hookers and strippers back in Cleveland: he used to go and watch them dance when he was in his early teens. Maybe this was why he was so comfortable in the shadow-world of New Orleans. (Hambly, 2008: IX)

Effinger's fascination with the underworld is apparent in the series, which centres upon characters who are involved in corruption, acts of violence and various other criminal activities. Effinger's works explore this new world, this city in the desert using a distinctly cyberpunk aesthetic. Rather than focusing upon cyberspace or AI, as Gibson does in the *Sprawl Trilogy*, Effinger's series is more concerned with the ways in which

radical technologies can alter social, cultural and religious expectations and lead to the creation of a society in which every aspect of the human form is ultimately for sale.

The Marîd Audran series was well-received upon the publication of the novels; *When Gravity Fails* was nominated for both the Nebula Award and the Hugo Award for best novel, and these nominations further cemented Effinger's status as an up-and-coming cyberpunk writer. However, Effinger's challenging personal issues began to have a marked impact upon his writing career. Effinger suffered with ill health throughout his life, and this eventually led to his intellectual property being threatened by a New Orleans hospital on account of his unpaid medical expenses. During this time, Effinger refused to publish any more work, relating to the Budayeen or otherwise, and the ensuing legal battle, which was resolved when the legal team representing the hospital did not attend a bankruptcy hearing, meant that his work was no longer in print at the time of his death – a mere thirteen years after the first publication of *When Gravity Fails*. It was only after his death in 2002 that the Marîd Audran series was republished, and the writing Effinger had completed in the years between the original publication dates of the series and his death were also published as the *Budayeen Nights* anthology. This demonstrates the continued interest in Effinger's work, particularly from the science fiction community, and the fact that there is interest in adapting his series into a film highlights the extent to which Effinger's writing has influenced the cyberpunk canon.

Effinger's series hits a cultural nerve not just in terms of his analyses of new technologies, corporate culture and the changing nature of human subjectivity, but also in terms of contemporary geopolitics. Effinger's decision to locate his series within a post-revolutionary Islamic state that is now the most powerful governing entity in the world is a significant departure from the locales usually favoured by early cyberpunk

writers. Living and writing in the US in the aftermath of the Iranian Revolution of 1979, Effinger was able to scrutinise the fast-evolving relationship between not only the US and Iran, but also between Iran and the rest of the world, and was able to consider the ways in which cultural attitudes towards a former US ally shifted radically in the wake of a new form of religious fundamentalism. Effinger's series is situated within such a society, however, he is able to evaluate the extent to which this initial religious fundamentalism is redefined and adapted through an adherence to transhumanist values that are inherently western in both scope and practice.

Whilst he is known as one of the leading figures of the early days of the movement by readers and fans of cyberpunk, Effinger's work has remained relatively unexplored within literary criticism and academia, and a central aim of this thesis is to bring his work to the fore. Effinger made an important and unique contribution to the cyberpunk canon with his writing, and a study of this contribution alongside those of better known and more widely studied cyberpunk authors is long overdue.

The Marîd Audran series focuses upon Marîd, a hustler living and working in the Budayeen, who is chosen by the patriarch, Friedlander Bey, to be his right hand man. Marîd is coerced into agreeing to significant body modifications that ultimately enable him to control every aspect of his physiological processes. Marîd becomes a quasi-detective and begins to enjoy his elevated status and wealth as a result of his patron, and the series follows his experiences of life in the Budayeen as the new and improved version of his previous self. As with *Neuromancer*, the series focuses upon notions of identity, particularly in the context of the effects of radical body modifications upon a person's sense of self, as well as analysing the ways in which radical technologies have the ability to disrupt and re-engineer religious and cultural attitudes.

Rudy Rucker, the author of the Ware Tetralogy, is another cyberpunk writer whose work, despite early critical and commercial success, has not been afforded the same level of critical attention as better known writers such as Gibson. Initially a mathematics lecturer, Rucker also worked as a computer programmer and computer science lecturer whilst working on his cyberpunk texts, and retired from teaching in 2004. His best known work, the Ware Tetralogy, consists of *Software* (1982), *Wetware* (1988), *Freeware* (1997) and *Realware* (2000). As with both Gibson and Effinger, Rucker's work has also received accolades, and *Software* and *Wetware* both won the Philip K. Dick Award for best science fiction paperback upon their publication. Rucker was very much in the inner circle in the early days of cyberpunk, together with writers like Gibson and Sterling, and he is known as one of the founding fathers of the movement alongside his peers.

Rucker's writing provides yet another distinctly unique approach and perspective, and his tetralogy makes an original and thought-provoking contribution to cyberpunk. A direct descendent of the German philosopher Georg Wilhelm Friedrich Hegel, Rucker explores themes such as consciousness, transcendence and personal identity in his writing, and his exploration of these motifs through a cyberpunk lens enables him to analyse the extent to which human subjectivity will come to be affected by ever more sophisticated and invasive technologies. Cobb Anderson is the central character in Rucker's tetralogy, and the series follows Cobb as he experiences various new forms of embodiment across a significant length of time as he becomes the first human being to have his consciousness removed from his human body and uploaded on to numerous different platforms and life forms in his initial desire to achieve some form of immortality.

Despite all working within the same movement, the cyberpunk works of all three of the authors that are the focus of this thesis take significantly different approaches in their writing. While all three are white, male writers who were living and working in North America during the same period of time, the diversity and originality present in their novels illustrates the fact that cyberpunk as a movement welcomed innovation, multiplicity and creativity. While these texts deal with a range of different issues, ranging from the rise of AI technology through to religious fundamentalism, the overarching theme in all three series remains the same. All three authors are essentially concerned with the ways in which the widespread utilisation of radical technologies will come to significantly affect the human condition, and this is their central focus in these texts.

These writers are ultimately analysing power structures in their texts, and their analyses focus upon the ways in which these overarching structures affect the lives of powerless individuals in these societies. Scholars and critics have long debated about the ways that cyberpunk writers depict these ultimately exploitative and dehumanising power structures, and have questioned whether their portrayals work to criticise the societies they have created in these texts. Gibson, Rucker and Effinger are critical of the power structures they describe in their writing; however, they take a unique approach in their critique of these structures. Whilst they do depict the myriad ways in which the vast majority of the populace is damaged, exploited and ultimately dehumanised in these societies, they do not offer any potential solutions in their writing. These writers are not concerned with creating better worlds, but rather, are focused upon analysing the types of societies that are in the process of being created as a result of contemporary desires and ideals. Gibson, Rucker and Effinger develop societies that specifically adhere to these desires and ideals in order to examine the extent to which the notion of

progress in the context of technological advancement will fundamentally disrupt and alter the course of human history.

Transhumanism

Cyberpunk writers are particularly interested in exploring the relationship between humanity and technology, and this interest is infused in the writing of Gibson, Rucker and Effinger, who alongside this relationship between humans and technology, also consider other central relationships:

Punk and cyberpunk artists have created a significant body of work that explores vital new connections between high art and trash, beauty and ugliness, avant-garde and pop, delicacy and violence, the utterly programmed and the spontaneous, and, perhaps their most original synthesis, technology and humanism. (McCaffery, 1991: 306)

Cyberpunk and transhumanism are both movements primarily concerned with relationships, particularly in the context of the changing nature of both society and potentially the changing nature of what it means to be human. Transhumanists specifically focus upon the ways in which these relationships can be shaped and re-imagined with the utilisation of new technologies: 'Transhumanism is a set of dynamic and diverse approaches to the relationship between technology, self, and society.' (Marsen, 2011: 86) Transhumanism is focused predominantly upon relationships in four specific ways: there is the relationship between society and technology; the relationship between the individual and technology; the relationship between the individual and society, both in terms of the modified and un-modified individual; and finally there is the relationship between the un-modified self and the modified self, which is a fundamentally important consideration in the journey towards creating the posthuman as envisaged by transhumanists.

Cyberpunk writers also focus upon these four distinct relationships, and Gibson, Rucker and Effinger analyse both the significance and fragile nature of these

relationships in the texts used in this thesis. Both advocates and critics of transhumanism consider aspects of the intricacies of these relationships in a number of ways in their analyses of the future of humanity, and Gibson's, Rucker's and Effinger's novels focus upon the ways in which these relationships are affected by ever more sophisticated forms of technology. The technological advances that are depicted in these cyberpunk texts radically alter these types of relationships, as these technologies are inherently extreme and transformative in their nature. It is these radical technologies that Gibson, Rucker and Effinger are primarily concerned with in their writing: technologies that lead to a transformation of societies and work to redefine the subject's own relationship with their embodied identity and require a re-evaluation of the individual's relationship with their community and humankind as a whole. Technology moves from being used as an assistive tool with which to enhance the subject's experience of the world, to becoming a key arbiter of the relationship between the subject, their community, their embodied identity, and their perceived sense of self. Technology takes a central role in determining the subject's relationship with the world, and becomes an active intermediary between the subject, their embodied identity and society as a whole in these texts.

The inception and initial development of transhumanism in the twentieth century coincided with various social and political movements, as theorists focused upon the status of the human in an environment in which the human condition was being continuously reassessed and redefined, leading ultimately to a focus upon the posthuman condition (Braidotti, 2013). This focus upon the posthuman raises a number of questions about the human's place within a world that is undergoing an accelerated rate of change, and necessitates a re-evaluation of what it means to be human:

the posthuman condition introduces a qualitative shift in our thinking about what exactly is the basic unit of common reference for our species, our polity

and our relationship to the other inhabitants of this planet. This issue raises serious questions as to the very structures of our shared identity – as humans – amidst the complexity of contemporary science, politics and international relations. Discourse and representations of the non-human, the inhuman, the anti-human, the inhumane and the posthuman proliferate and overlap in our globalized, technologically mediated societies. (Braidotti, 2013: 1-2)

These are the questions and issues that lie at the heart of cyberpunk writing in the late twentieth century, as writers like Gibson, Rucker and Effinger worked to interrogate the effects that contemporary science has upon people, both as individuals and as citizens in increasingly technologically advanced societies. The types of technologies that become commonplace in these societies necessitate radical personal, cultural and social change, as cyberpunk writers focus upon a key transhumanist desire, which is the ways in which transformation – in whatever context – has the potential to be limitless: ‘cyberpunk is [...] focused on posthumanism, not just in narrative discussions of the boundaries being transgressed, but also in terms of images connected to the idea of changing subjectivity and ontological categories.’ (Schmeink, 2018: 280) This transgression of boundaries in a variety of contexts is a central focus of this thesis, and the proceeding chapters consider and analyse the ways in which while the notion of the transgression of boundaries in the abstract is lauded by transhumanists, as it represents a significant shift in human subjectivity, cyberpunk illustrates the many and varied drawbacks associated with this approach, particularly in terms of the potentially damaging consequences it can have upon the human condition.

Importance

Cyberpunk writing is essentially a form of social, cultural and political commentary; cyberpunk writers are ultimately concerned with the ways in which the norms, values and expectations of contemporary society will impact the near future, particularly in the context of the development and widespread utilisation of radical technologies. There continues to be debate amongst scholars and critics when it comes to

characterising science and speculative fiction, and cyberpunk writing is one area upon which this debate has been focused. The question of whether cyberpunk can be classed as speculative fiction is an important one, because it necessitates an understanding of not only the differences between science and speculative fiction, but also of the fundamental differences that exist between cyberpunk and other types of science fiction. When it comes to discussions about the differences between science and speculative fiction, many writers have weighed in on this debate; in an interview with *The Guardian* in 2003, Margaret Atwood distinguished between the two when talking about her latest novel *Oryx and Crake* (2003): “Science fiction has monsters and spaceships; speculative fiction could really happen” (Potts, 2003). Atwood’s somewhat simplistic definition illustrates one of the fundamental debates that exist within science and speculative fiction: whether one form presents the reader with societies that are instantly recognisable and accessible whilst the other offers a vision that is rooted in the fantastic. In the context of the differences between science and speculative fiction, Atwood’s definition is not universally shared, as scholars have argued that speculative fiction presents readers with alternate realities that are not readily identifiable as commonplace, with Gill arguing that speculative fiction works depict ‘modes of being that contrast with their audiences’ understanding of ordinary reality’ (Gill, 2013: 73). In addition to this, rather than categorising science fiction as existing within the realm of monsters and spaceships, as Atwood does, scholars have long made the argument that science fiction is fundamentally concerned with the use and application of science (Westfahl, 2005), and this is especially true in the context of cyberpunk. The technological advances that are depicted in cyberpunk – both in theory and application within the texts – are readily identifiable to a present-day audience, and the societies that cyberpunk writers create are firmly rooted within the political systems, ideals and desires of contemporary life. Cyberpunk writers do not focus upon

monsters and spaceships; rather, they are inherently interested in exploring contemporary social, cultural and political conflicts and they present societies that are recognisable and applicable to a contemporary readership. Cyberpunk therefore fits more readily into the definition of science fiction favoured by Westfahl rather than that of Atwood, and the focus upon readily identifiable and understandable scientific and technological advancements that is central to cyberpunk works sets it apart from other forms of fiction.

Neither of Atwood's definitions of science and speculative fiction are applicable to cyberpunk. Her definition of science fiction is too simplistic and limiting as demonstrated in the previous paragraph, and her definition of speculative fiction relies upon extrapolating to a further future that looks vastly dissimilar to contemporary society. Gill's focus upon 'ordinary reality' is important here; speculative fiction requires its readers to disassociate from their understanding of the ordinary in order to imagine future societies that are markedly different from their own. Cyberpunk, on the other hand, does not ask this of its readers, but rather it reflects contemporary ideals, desires and structures back to its readers using a "hard" science fiction aesthetic in order to analyse 'ordinary reality'. Cyberpunk writers present their readers with societies that are plausible, realistic, and applicable to the contemporary, and it is this approach that distinguishes cyberpunk not only from speculative fiction, but from other science fiction subgenres. Whilst Atwood argues that 'speculative fiction could really happen', cyberpunk writers focus upon what is already happening.

Although cyberpunk is not a form of speculative fiction, the works that were produced by writers in the late twentieth century did foretell some of the fundamental issues and concerns that humanity will begin to have in regards to the utilisation of new technologies. These include concerns about infringements upon privacy; the disparity

in access to new technologies according to personal wealth; the development of new forms of exploitation; the widening gap between the rich and the poor; and the numerous moral and ethical dilemmas associated with the utilisation of technological interventions in the medical field. Cyberpunk writers in the 1980s were:

striving, as they saw it, to update the genre for the information age, a project that entailed extrapolating the social fallout of postindustrial technologies like the computer with the same sort of expansive yet rigorously disciplined imagination that science fiction had always lavished on the artifacts of industrial production. (Latham, 2002: 224)

Cyberpunk writers continue to focus upon this ‘social fallout’ as described by Latham because these technologies continue to evolve and infiltrate every aspect of life in the twenty first century, and just like early writers, the cyberpunk writers of today are still very much focused upon examining contemporary anxieties in their analyses of radical technologies and their effects upon humanity.

This thesis focuses specifically upon a key aspect of this analysis: the body. This thesis illustrates the significance of the body, not only in the context of cyberpunk and transhumanism, but also in terms of the importance of considering the body in any analyses of the changing nature of human subjectivity in the wake of the widespread utilisation of radical technologies. In cyberpunk, the body is at once a political and a sacred symbol; it is at once both a consumer product and the product of consumer culture, and Gibson, Rucker and Effinger explore these conflicting concepts in their writing. A considerable amount of research relating to the body has been conducted since the start of the twentieth century, and the body has become a central area of concern for researchers focusing upon the embodied human’s place in the world. The body is no longer an inert entity in contemporary discourse, but rather, ‘the body [is] a bearer of signs and cultural meaning’ (Balsamo, 1999: 19), and is treated as such by cyberpunk writers.

Research focusing upon the body is still an emerging field, and its importance in contemporary discourse cannot be underestimated. This thesis adds to this discourse by analysing cyberpunk through a transhumanist lens to evaluate the extent to which the body has come to represent the front line in discussions about the potential future of humanity. The body in this context has the potential to be the ultimate representation of humanity's triumph over adversity, and its status as such was cemented in the twentieth century:

Throughout the twentieth century, the body was (and still is) a new world. Whether possessed, contaminated, tortured, dissected, or networked, for more than a century now the body has been a boundless territory, continuously renewed and renewable, externally limited but infinitely interpreted. The body is the endless world of our imagination. (Dyens, 2001: 55)

The ultimate aim of transhumanism is to remove all corporeal limits in order to enable the development of a posthuman future that will render all other forms of humanity obsolete. Cyberpunk writers are inherently concerned with the potential consequences of removing such limits, and their analyses of the ways in which this collective evolution as imagined by transhumanists will be replaced and corrupted in favour of an individualistic and erratic approach to radical body modification is a central focus of this thesis.

Cyberpunk remains, to some extent, a misunderstood and controversial movement, and this is due in large part to its early days when it was regarded by some readers and critics as somewhat of an all-boys' club that quickly closed ranks and dismissed all other forms of contemporary science fiction writing as self-indulgent, uninspired or passé. This idea of an all-boys' club has endured, and while the early works of well-known cyberpunk writers such as Gibson have been studied and critiqued, contemporary researchers have tended to focus upon the ways in which cyberpunk has evolved since its inception in order to try and overcome this lasting criticism. This has meant that important early works in the movement are being dismissed or simply

ignored in favour of more contemporary works, which has resulted in the works of writers such as Rucker and Effinger not receiving meaningful critical attention. This thesis brings their work to the fore, and their writing is analysed alongside Gibson's in order to provide an important reflection upon the early days of cyberpunk. This focus upon cyberpunk's early days and its less well-known writers is necessary in order to develop an understanding of the movement beyond that which is offered by more famous writers such as Gibson and Sterling. Rucker's and Effinger's writing represents early examples of the evolution of cyberpunk; both writers took significantly different approaches when compared to writers such as Gibson and Sterling, and in doing so, illustrated the vast potential and innovative nature of cyberpunk.

Terms and Scope

The three sets of cyberpunk series discussed within this thesis encompass a significantly wide range of themes, motifs and issues, and this is testament to the richness and relevance of the subject matter. This vast range means that it is not possible to analyse all of the issues that are presented within these texts, and there is a need to be selective and concise in this analysis. An analysis of the ways in which radical technologies affect human subjectivity – both pre and post modification – is a central focus of this thesis, and all three series are evaluated using this key concept.

A considerable range of important issues relating to identity and subjectivity are raised within these three series that it is not possible to analyse in this thesis, although these issues will be signposted in the proceeding chapters as potential future modes of enquiry. These include issues pertaining to representations of race, disability and gender identity. All three of these topics are present in these texts to greater and lesser extents, and they are important potential areas of study in the context of cyberpunk and transhumanism, however, it is not possible to explore every aspect of the human

condition within one thesis, therefore it has been necessary to be selective in focus in this context. As an example, in the context of representations of disability, disability studies is a growing field of research, and its application to literature is developing at a brisk pace: 'Literary disability studies is rapidly diversifying in terms of its reach across literatures, embodied conditions, and interdisciplinary engagements.' (Barker and Murray, 2018: 6) A significant amount of work has been done when it comes to analysing representations of disability in science fiction in recent years (Cheyne, 2012, 2013, 2018) and this has included research focusing specifically upon the representations of disability in the *Sprawl Trilogy* (Murray, 2018, 2020) and Gibson's writing more generally (Tarapata, 2018). These topics can be readily investigated using the tenets of transhumanism, however, as other issues are being analysed in this thesis, it is essential to work within specific parameters in order to be able to provide a thorough evaluation of the topics that are the focus here. In the context of cyberpunk and transhumanism, race, disability and gender identity are pertinent and critical areas of study, as they are inherently concerned with personal identity, human subjectivity and the future of the human condition, and these themes are worthy areas of future study in contemporary literary criticism.

There are various other parameters that are important to acknowledge in terms of the production of this thesis. One key consideration is timeframe, particularly in the context of cyberpunk. Cyberpunk evolved rapidly from its inception in the 1980s, and science fiction writers began to experiment with the form in a variety of ways, leading to an expansion of a movement that had in the early days only tended to include white, male writers. For the purposes of this thesis, the focus is very much upon early cyberpunk, and the works of three specific male writers who are considered to be amongst the group of founding fathers of the movement. The key reason for this is that these founding fathers considered themselves to be revolutionaries; they argued that their

writing offered a new and unique perspective in relation to contemporary society, and they were the vanguards to this new art form. This thesis tests these writers' revolutionary ideals in order to evaluate the extent to which they were distinctive and innovative in their approach, and in order to do this it is necessary to focus upon the early days of a movement that made such substantial promises. While the works of other writers will be referenced throughout the thesis in order to provide contextual background and demonstrate the variety that exists within cyberpunk, the focus here will be upon Gibson, Rucker and Effinger, and specifically upon the three series that cemented these writers' reputations as three of the founding fathers of cyberpunk. The term "early cyberpunk" is used in this thesis to differentiate between the cyberpunk that was produced in the late twentieth century and that which came after. The central texts that are considered in this thesis span a time period between 1982 and 2000, they represent the period in which cyberpunk began through to the beginning of the twenty first century, and it is this time period that is the focus here. Whilst the rapid social, cultural, geopolitical and technological developments that have occurred in the first twenty years of the twenty first century will be referenced, particularly in the context of transhumanism, analyses of these developments will refer back to early cyberpunk.

Much like cyberpunk, transhumanism has continued to evolve since its early inception in the mid twentieth century. This evolution has been necessary due to the rapid technological advances that have taken place in the proceeding decades. These advances have enabled transhumanists to begin to consider real-world applications rather than focusing exclusively upon the theoretical in their desire to potentially achieve a posthuman future, and as such, transhumanism continues to evolve in its consideration of the ways in which new technologies can be utilised to alter the current human condition. Contemporary transhumanist thought is used in this thesis to analyse cyberpunk for a number of significant reasons. Cyberpunk and transhumanism both

respond directly to contemporary society; while cyberpunk uses the present to critique the norms, values and desires of humanity, transhumanists use present-day trends – whether social, cultural, political or technological – in order to imagine and assess the potential for creating a future posthuman utopia. Both cyberpunks and transhumanists critically assess humanity’s present situation, however, while cyberpunks extrapolate only so far into the near future as is necessary in their writing, transhumanists are focused upon a potential new world that will only be possible in the far future. Whilst this difference in outlook is considerable, both groups are ultimately concerned with answering the same central question, and that is how radical technologies will fundamentally alter human subjectivity. Another reason why transhumanism is used as the key theoretical framework in this thesis is that early cyberpunk writers were essentially critiquing the key tenets of transhumanism in their writing, and their approach worked to illustrate the fundamental flaws that exist within transhumanist thought, particularly when applied within the parameters of contemporary political systems. The societies that have been created by Gibson, Rucker and Effinger in these texts exemplify the possible consequences of promoting inherently transhumanist values in inherently exploitative societies; transhumanists do not consider the ways in which structural inequalities could lead to further exploitation with the development of ever more radical technologies as they are more focused upon the *potential* of these technologies rather than the realistic application of them. Cyberpunk writers take the opposite approach as they analyse the extent to which such technologies will be used against the poorest and most vulnerable sections of society, especially if the widespread promotion and utilisation of such technologies happens within political systems that are already plagued with pervasive inequality.

This thesis is fundamentally about technology, and it is important to accurately define what “technology” means in this context. Technological advancements have been

central to the development of humanity across millennia, and these advancements have, on the whole, enabled humans to live relatively longer, healthier and safer lives. The types of technological advancements that are the focus of this thesis, and indeed the focus of both cyberpunk authors and transhumanists are altogether different. These technologies are inherently invasive in their purpose and scope: they are designed to infiltrate the human body and to disrupt and re-engineer the neural, mental, physical and physiological processes of the body. Rather than working to restore, repair or rejuvenate – as has been the focus of medical technologies to date – the new technologies in this discourse are not concerned with optimal human performance, but upon re-defining the optimal, and in the case of transhumanism at least, to eventually re-engineer the human altogether on the road to creating the posthuman. The types of technological advances that are referenced in both cyberpunk and transhumanism include biotechnology, nanotechnology, cybernetics, biohacking, biowarfare, robotics and AI, amongst others. These technologies are often based upon contemporary advances in the field, and both cyberpunk writers and transhumanists hypothesise how these technologies may and can eventually come to be used, with cyberpunk writers focusing upon the near future and transhumanists focusing upon a far posthuman future. Various terms are used in this thesis to describe these technologies, such as “radical”, “new”, “revolutionary” and “advanced”. These terms are used interchangeably, and they equate to the same concept; technologies that have never before existed in the history of humanity and are being developed, and in some cases, evolving, at an exponential and ultimately uncontrollable rate.

These new technologies lead to the characters in these cyberpunk texts choosing to undertake or being coerced into undertaking ever more radical forms of body modification. Body modification has been categorised in many different ways in contemporary society, and surgical procedures that involve this process have been

labelled using a variety of terms over time. Labels such as “cosmetic surgery” and “plastic surgery” have become interchangeable within body modification discourse, and such terms are used to describe a wide range of procedures. However, these terms have become synonymous with the modification of the *body*, and the same labels cannot be readily used to describe surgical procedures that involve not only the physical body, but also the mind and internal bodily processes. Therefore it is important to address the fact that such terms cannot be used to accurately describe the surgical procedures that take place in cyberpunk as the physical body is but one aspect of modification and expression of self in these novels. For this reason, the myriad ways in which the characters choose to modify themselves will be defined as “elective surgery”, and this encompasses modification of both the mind and body. These procedures cannot be accurately described as “cosmetic” or “plastic” due to the fact that in a high proportion of cases, the motivation for such procedures is not for the purpose of simply changing physical appearance, but rather, for more visceral and innate reasons. “Elective surgery” will include all non-essential processes of modification: those undertaken to change or improve an already fully-functioning body and mind. However, there are also moments in these novels when characters are coerced into agreeing to such procedures, and in this case, such procedures will be classified as “surgical procedure/s” for the purposes of differentiation, as these modifications are not freely chosen.

A number of the scholars and critics cited in this thesis use the abbreviation SF or sf in their writing. Whilst SF or sf is often used interchangeably to mean either science fiction or speculative fiction, in the context of this thesis the abbreviation is used to refer to science fiction. The abbreviation is not used in the main body of the thesis for the avoidance of doubt, and in the instances where it appears in direct quotes it is referring to science fiction. The abbreviation may appear as either SF or sf depending

upon the scholar's own preference, and these preferences have been preserved in the citations. The cyberpunk writers that are the focus of this thesis and a significant proportion of the theorists and critics use American English and syntax when it comes to their work, and this has been preserved in the direct quotes of their works throughout this thesis. This is also the case in terms of the italicisation of sections or entire quotes from the authors and critics. In terms of the longer quotes used in this study, speech marks have been utilised in instances where the quote is from an interview or denotes conversation between characters when quoting directly from the novels and short stories.

Concepts and Questions

Transhumanists consider the human to be simply another step in the evolutionary chain towards the desired posthuman condition, and their perception is that the widespread development and utilisation of radical technologies is necessary for this next step to be possible. Cyberpunk writers focus not upon this potential posthuman future, but upon the contemporary transitory phase between present-day humanity and the potential next step as imagined by transhumanists. This thesis focuses upon the ways in which this transitory phase is depicted in these texts, and a key concept within the context of this thesis is the notion of the body as project. A significant proportion of the central characters in these cyberpunk texts see the body as a work in progress, and their utilisation of new technologies enables them to not only radically alter their embodied identities, but also allows them to partake in a new form of self-expression, one where to modify oneself is to participate in a shared social and cultural experience:

cyberpunk fictions do not focus solely upon man's identification with machines; they are also (and especially) a common narrative on the rise of a new type of cultural body (created and formed within computers). Cyberpunk fictions are stories of the coupling of blood and silicone, of soul and algorithm, its artists inserting computer networks into torn human bodies [...] so as to

create new beings whose reality is based on a computer-network encoding of the world. For these writers, the body is nothing, if not culture. For a cyberpunk, existence is a territory where biology, technology, and culture fuse into one another. (Dyens, 2001: 73)

This thesis focuses upon these new cultural bodies, and considers the impact that such an approach to the utilisation of new technologies can have from a number of different perspectives, both at the individual and the societal level. These include the impacts upon the individual, which can be physical, psychological and physiological amongst others:

New technologies promise to enhance lives, relieve suffering and extend capabilities, yet they are often also perceived as threatening bodily integrity, undermining feelings of uniqueness, evoking feelings of growing dependency and encroachments on privacy. (Graham, 2002: 66)

Alongside this, there are the potential social, cultural and geopolitical impacts upon wider society.

A key question that this thesis considers is what are likely to be the potential consequences of adopting transhumanist values within contemporary capitalist systems, and this question will be explored by analysing the cyberpunk texts of Gibson, Rucker and Effinger. The ways in which a widespread adoption of such values will affect individuals is a central mode of enquiry for cyberpunk writers, as it raises concerns about civil liberties, free will, and agency: ‘A recurring question in cyberpunk is how much control characters have over their lives, their bodies, and their environments.’ (Joyce, 2018: 158) Gibson, Rucker and Effinger all approach this question in different ways, and this thesis analyses these varying approaches through a transhumanist lens.

Findings

Cyberpunk writers tap into the fundamental anxieties of contemporary society, and they develop near-future worlds in which these anxieties have been realised in order to

examine humanity's relationship with itself. A central contemporary anxiety that is explored by cyberpunk writers concerns humanity's ever-changing relationship with technology, particularly in the context of new technologies that have the potential to re-define humanity itself:

What it means to be human is in play, in ways that it has never been before – and, importantly, in ways that undermine most of the mental models, cultural constructs, and institutional systems we have created to structure our relationships with our Selves, our institutions, our politics, and our conceptualization of our role in the universe and relationship to our deities. (Allenby, 2012: 457-458)

The impact that new technologies can have upon society is significant, and Gibson, Rucker and Effinger work to illustrate the ways in which, while the initial development of certain technologies may lead to promising outcomes, their utilisation within inherently exploitative political systems can have ultimately detrimental effects. Whilst this argument is made in this thesis, it is important to reiterate that cyberpunk writers are not trying to prophesise about the future of humanity or offering any type of warning; they are reflecting upon changes that are already taking place in contemporary society. In his interview with McCaffery in 1986, where he is asked about technology, Gibson states:

“My feelings about technology are *totally* ambivalent – which seems to me to be the only way to relate to what's happening today. When I write about technology, I write about how it has *already* affected our lives; I don't extrapolate in the way I was taught an SF writer should [...] My aim isn't to provide specific predictions or judgments so much as to find a suitable fiction context in which to examine the very mixed blessings of technology.” (McCaffery, 1991: 274)

These ‘mixed blessings’ are a central focus of this thesis, and although Gibson makes the argument that his approach is ambivalent, when considered within the context of transhumanism, it becomes clear that cyberpunk writers have a deep understanding of not only the potential of radical technologies – as imagined by transhumanists – but

also of the significant personal, social, cultural and political ramifications of developing an ever-more intimate relationship with such technologies:

What cyberpunk fiction offered – better make that “brandished” – was not speculation or extrapolation so much as simple, unhysterical, unsentimental understanding of the profound technological and epistemological implications of accomplished and near-accomplished cultural fact (Landon, 1991: 239).

Cyberpunk writers do not take either a dystopian or utopian view when it comes to technology, they look at the types of technological advances that are taking place and analyse the potential uses for these technologies that are being developed using contemporary ideals and viewpoints.

As this thesis shows, there is disagreement amongst scholars as to whether cyberpunk is a form of dystopian fiction, and this disagreement rests in part upon the fact that cyberpunk writers focus upon subject matter that lies at the heart of dystopian writing:

Dystopian narrative is largely the product of the terrors of the twentieth century. A hundred years of exploitation, repression, state violence, war, genocide, disease, famine, ecocide, depression, debt, and the steady depletion of humanity through the buying and selling of everyday life (Moylan, 2018: XI).

Dystopian fiction analyses these ‘terrors of the twentieth century’ to explore and examine fundamental human fears about the evils of contemporary society, and often extrapolates upon these fears to create alternative visions of a near or far future where these evils have come to ultimate fruition. Utopian fiction, much like dystopian fiction, is also fundamentally concerned with these contemporary evils:

Despite the distance in space and time separating the setting of utopian narratives from the world we live in, utopian fiction’s social and moral implications are pertinent to our present condition. Modern utopias refer to live topics such as overpopulation and overorganization, inequality, oppression, and lack of purpose; whereas marriage and sexual relations, eugenics and euthanasia, and questions of common or private property discussed in older works are as relevant now as they were then. (Fokkema, 2011: 16)

However, unlike dystopian fiction, utopian fiction addresses contemporary crises by creating far future worlds in which alternative states and ways of living have been

created out of a collective desire for change (Carey, 2017). Science fiction writers have adopted both the utopian and dystopian forms in their works in order to analyse present-day issues and evils; dystopian worlds have been created by those focusing upon contemporary political systems to imagine a near or far future in which these systems have been able to gain traction and flourish, leading to the development of societies where social inequalities, natural disasters and apocalypses are prevalent. Those in the utopian tradition focus upon futures that are significantly different to the present, and the increase in utopian writing in the late twentieth century has been attributed to science fiction writers who present readers with these hopeful futures:

the revival of utopian writing [in the 1970s] was in many ways *made possible* by science fiction, for as non-realistic fiction, as a genre of fiction that in many instances was set in or on imagined worlds and futures, science fiction provided a way to imagine and describe alternatives to an inadequate present. (Fitting, 2009: 121)

Ultimately, both utopian and dystopian fiction writers present their readers with a value system; there is a clear differentiation between good and evil in these texts. In the context of dystopian fiction, the characters in these texts are fully aware of the exploitative, dangerous and malevolent nature of the societies in which they live, and they are ultimately concerned with improving their lives using any means they can. Utopian fiction, on the other hand, focuses upon societies that have overcome periods of catastrophe, exploitation and societal collapse, and the characters in these texts are able to contextualise their current way of life through analyses of the darker periods of human existence to ensure that past mistakes are not repeated. Utopian and dystopian fiction are both focused upon the passage of time; in the context of utopian fiction, this fascination with past crises ensures that all citizens in the present-day have an acute awareness of the importance of fair and equitable treatment. With dystopian fiction, characters in these texts are not only focused upon a better past – where the crisis or apocalypse has been a recent development – but are also concerned with hoping for

and working towards building a better future. In both cases, there is an element of living in the past, present and future in dystopian and utopian texts. In the context of cyberpunk, the focus is very much on the now or the very near future; whilst references are made to historical events, the characters in these texts do not work to analyse the past or consider an alternate future. A value system that distinguishes between good and evil or right and wrong does not exist in cyberpunk as it does in dystopian and utopian fiction; the characters in cyberpunk are not concerned with creating a better society for the greater good. Cyberpunk takes an inherently individualistic approach to the concept of the improvement of the human condition, and this aligns with the transhumanist approach to the potential future of humanity.

Whilst transhumanists envisage what *could* be achieved with new technologies if they were developed and utilised with a clear and universal aim, cyberpunk writers focus upon what is most likely to be achieved within contemporary cultural and political systems. Cyberpunk writers deem the most likely outcome in this context to be progressively more invasive and brutal forms of exploitation, endemic poverty, and an increasingly widening gap between the upper echelons and the rest of society, as Victor, a care worker, exclaims in 'Getting to Know You' (1998), a cyberpunk short story by David Marusek: ““We’ve returned to Roman society [...] Masters and servants! Plutocrats and slaves! Oh, where is the benevolent middle class when we need it?”” (Marusek, 2013: 119) Cyberpunk writers focus upon what will be achieved in the current system rather than imagining how a different type of society could potentially respond to the development of new technologies.

Cyberpunk writing is reflective in the sense that it is ultimately concerned with analysing contemporary society. The cyberpunk that was produced in the late twentieth century provides an accurate snapshot of the norms, values and expectations of the time

period, particularly in the context of new technologies, and the cyberpunk that has been produced since then and continues to be produced today remains faithful to this tradition. Cyberpunk is as relevant today as it was when it began in the 1980s. It has evolved as society has changed and will continue to do so, as it is a movement that is primarily concerned with analysing the contemporary human condition.

Overview of Thesis Chapters

The first chapter of this thesis provides an introduction and a historical and contextual analysis of transhumanism, and relates key transhumanist principles to early cyberpunk. This chapter provides a number of important critiques of transhumanism, including its specifically western point of view and concerns relating to a lack of understanding of, and appreciation for, accounting for differences in terms of sex, ethnicity, culture and class. The transhumanist concept of moving beyond the limitations of the current human condition through the utilisation of new technologies is critiqued using the cyberpunk works of Gibson, Rucker and Effinger, particularly in the context of the current limitations that do exist within contemporary society in relation to a generalised lack of the wealth and access needed to be able to effectively utilise new technologies to their fullest potential. The notion of the body becoming a consumer product in cyberpunk is introduced in this chapter, and the various ways in which humans come to be exploited as a result of this concept is evaluated using the works of Gibson, Rucker and Effinger.

Chapter two is fundamentally concerned with the commodification and consumption of the body in cyberpunk, both in the literal and the metaphorical sense. This chapter focuses upon the ways in which male and female bodies are treated differently in these texts, particularly in relation to the ways that they are exploited in technologically advanced societies. This chapter looks at the inherent vulnerability of the human body

as represented in cyberpunk, and analyses the numerous ways in which the characters in these texts attempt to overcome aging, illness and disability by adhering to transhumanist values. The concept of disgust is also considered in this chapter in relation to the vulnerability of human flesh, as a number of the characters in these texts work to transcend beyond the fragile human flesh that incapacitates and disgusts them.

The next chapter focuses upon the various representations of spirituality, theology and transcendence in the works of Gibson, Rucker and Effinger, and considers the ways in which these writers combine the central tenets of transhumanism with aspects of theology, mythology and spirituality to analyse the ways in which the human subject is currently defined. The concept of immortality is a key focus in this chapter, and this concept is analysed using both transhumanism and theological doctrine, with both being related back to cyberpunk. This chapter also looks specifically at Effinger's representation of Islam in the *Marîd Audran* series, and provides historical and contextual background to Effinger's work with a focus upon the ways in which the Iranian Revolution of 1979 impacted upon the US' understanding of Islam.

Chapter four is primarily concerned with consciousness, and the myriad ways that engaging with radical technologies significantly affects the characters in these texts within the contexts of their memories, embodied identity and perceived sense of self. This chapter focuses upon the potential psychological impact of radical body modification, and analyses how the characters in these texts struggle to re-define their embodied identities once they have undergone intensive body modification.

The final chapter of this thesis focuses upon the representation of women in the works of Gibson, Rucker and Effinger. Early cyberpunk has been heavily critiqued for its treatment of its female characters and its lack of engagement with feminist discourse, and this chapter evaluates this criticism to establish the extent to which this is the case.

This chapter analyses Gibson's and Effinger's depictions of the sex industry in their texts, and considers why these writers have represented their female characters in the way that they have in their novels. Contextual and historical analyses of both feminist science fiction and 1980s corporate culture is provided in this chapter in order to illustrate the extent to which these cyberpunk writers were working to critique both the concept of the posthuman ideal as imagined by transhumanists and the contemporary treatment of women in the late twentieth century.

The chapters have been ordered in this way to ensure that the thesis provides a comprehensive critique of these writers' approaches to modification of the body and mind using transhumanism as the main theoretical framework. Chapter one provides a broad overview of contemporary transhumanist thinking including historical and contextual analyses to ensure that the central tenets of transhumanism are clear and explicit when they are being applied to the works of Gibson, Rucker and Effinger. This chapter also provides an introduction to the key cyberpunk texts, and begins to focus upon the key themes within these texts that are applicable to transhumanism. The second chapter leads on from the first, and expands upon a key cyberpunk concept that is introduced in the first chapter: the idea of the body being both a consumer and a consumed product. This chapter expands upon this idea further by introducing another key concept of both cyberpunk and transhumanism: the concept of the innate fragility and vulnerability of the human body, the human mind and the human experience. Chapter three expands on this notion of needing to transcend this vulnerability, and introduces the utilisation of theological principles in the desire to overcome this innate fragility. Cyberpunk and transhumanism both engage with theological doctrine, particularly when considering the modification and augmentation of the mind, and the fourth chapter expands upon this concept by examining the links between the inherent transhumanist and theological desire for transcendence (in various forms) and its

potential effects on not only the idea of the soul, but also upon mental health, particularly immediately prior to, during, and immediately after the period of modification. The last chapter builds upon the themes introduced in the previous chapters and applies them specifically to the female characters in the texts of Gibson and Effinger. This allows for an analysis of the extent to which cyberpunk can claim to be revolutionary in the context of its representation of women.

Chapter One

The Transhuman Project: Creating the Posthuman

‘That which makes a man superhuman is terrifying’⁵

The cyberpunk texts that were produced in the twentieth century are predominantly concerned with the potentially transformative nature of the human condition within technologically advanced societies that adhere to the fundamental tenets of a capitalist framework, and the works of William Gibson, Rudy Rucker and George Alec Effinger focus upon the ways in which the category of the human can be analysed, critiqued and re-evaluated in such societies. These writers analyse the extent to which the category of human will continue to be ensconced in a place of privilege with the advent of ever more autonomous, sophisticated and invasive technologies in societies that are in the process of undergoing significant social, cultural and political change. In these texts, the concept of humanity is disrupted as a consequence of advancements in technology that have hitherto been unimaginable, and the pace at which these technologies evolve results in a fundamental lack of awareness or understanding of their potential effects upon individuals, communities, and societal structure as a whole. These effects are exacerbated in societies where the traditional rules of order and governmental checks and balances have all but ceased to exist, and multinational corporations are leading the pace of change with limited – or, in some cases no – supervision or regulation.

This chapter considers the technologically-driven “evolution” of the human in the works of Gibson, Rucker and Effinger through a transhumanist lens using three sets of

⁵(Herbert, 1988: 283)

their cyberpunk novels: Gibson's *Sprawl Trilogy*, Rucker's *Ware Tetralogy* and Effinger's *Marîd Audran* series. These texts are the focus of an evaluation into the ways in which contemporary understandings of humanity are in continuous flux in ever more technologically advanced landscapes. This chapter analyses the ways in which these writers respond to a key transhumanist argument – that technological advances will eventually enable humanity to transcend the deemed limitations of the contemporary human form and experience, thus leading to a posthuman future. Using the works of key theorists such as Nick Bostrom, FM-2030⁶ and Max More, this chapter considers the potential for a cyberpunk-infused step towards this posthuman future using the tenets of transhumanism as the starting point.

The History of Transhumanist Thought

The theoretical foundations of present-day transhumanist thought can be traced back to the middle of the twentieth century. The term “transhumanism” was coined by Julian Huxley,⁷ and he, along with his contemporaries John Burdon Sanderson Haldane⁸ and John Desmond Bernal⁹ are considered to be at the heart of the origination of the contemporary transhumanist movement (Tirosh-Samuelson, 2012).¹⁰ In his text *New Bottles for New Wine*, Huxley asserted that transhumanism requires humanity to focus upon transcendence:

⁶ FM-2030 (Fereidoun M. Esfandiary) was a transhumanist philosopher who legally changed his name in the 1970s to, in part, reflect his hope and desire to live to be a hundred years old.

⁷ Huxley was a member of the esteemed Huxley family, which included his brother Aldous Huxley, the celebrated author of *Brave New World* (1932). Huxley was a member of the Zoological Society of London (serving as its Secretary between 1935-1942); the first Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO); and a member of the British Humanist Association. He studied Zoology at Balliol College, Oxford, graduating in 1909, and received a knighthood in 1958.

⁸ Haldane worked in the fields of genetics, evolutionary biology, physiology and mathematics. He was educated in New College at Oxford and taught at the University of Oxford, the University of Cambridge and University College London during the course of his career.

⁹ Bernal was a scientist who specialised in crystallography and molecular biology, and went on to become Professor of Physics at Birkbeck College as well as a Fellow of the Royal Society.

¹⁰ Huxley, Haldane and Bernal all supported eugenics at various points in their lives, and Huxley was a member of the British Eugenics Society, becoming its President in 1959.

The human species can, if it wishes, transcend itself – not just sporadically, an individual here in one way, an individual there in another way – but in its entirety, as humanity. We need a name for this new belief. Perhaps *transhumanism* will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature. (Huxley, 1957: 17)

Huxley considered the human species to be capable of realising and welcoming radical change, and argued that there is the possibility for a collective transcendence of humanity. This collective transcendence would necessitate redesigning and redefining the human, and creating a being capable of biological and physiological feats that have hitherto either been unimaginable or unachievable in human history. Huxley's thoughts on transhumanism have shaped the contemporary transhumanist theoretical framework, and this has in turn influenced the writing of science fiction writers, with cyberpunk writers in particular focusing upon the potential ramifications of incorporating key transhumanist principles into the present-day body politic.

Transhumanism, with its focus upon creating the posthuman, has come to be an increasingly contentious concept: 'Is it a utopian aspiration, a cautionary critique, an evolutionary end-point?' (Sheehan, 2015: 245) Transhumanism necessitates the dismantling and reconfiguring of the human subject, which can be seen as either an exhilarating new phase in human evolution or as a deeply worrying development in contemporary understandings of the limits and possibilities of the evolution of human nature: 'the prospect of becoming posthuman both evokes terror and excites pleasure.' (Hayles, 1999: 283) The theory has been analysed and critiqued by writers and theorists since the mid twentieth century, and transhumanist principles concerning body modification, extended life spans, extended health spans and other aspects of human corporeality have been the focus of various companies, lobbyists and policy-makers in recent years.

This chapter focuses upon a number of the key principles of contemporary transhumanist thinking, including the potential development of the posthuman;

utopianism; the concept of the common good; and both historical and contemporary eugenicist thinking in relation to the concept of human transcendence. The works of Gibson, Rucker and Effinger consider these key aspects of transhumanist thinking in a number of different ways, and their writing critiques the extent to which the concept and application of transhumanist ideals upon already unequal societies will have a detrimental impact upon the general populace, the vast majority of whom will not be able to access the types of revolutionary technologies that will enable them to engage with transhumanist body modification principles.

The (Post)Human Condition

The latter part of the twentieth century saw an increasing amount of interest in the concept of transhumanism and transhumanist principles more generally, with writers focusing on not only what a potential posthuman future could look like, but also the ways in which transhumanist values have the potential to radically alter both the human experience and the ways in which the very concept of *human* is defined and categorised in contemporary discourse (Dinello, 2005). Both transhumanism and posthumanism are terms that are difficult to define:¹¹ ‘What is the “posthuman”? One answer is simply that nobody knows’ (Thweatt-Bates, 2012: 1). The overarching focus of transhumanism is the need to transcend beyond the current limits of the human experience, thus leading to a new type of human: ‘The imagined descendants of *Homo sapiens* have been dubbed *posthumans*, and the process that will bring about their presumed evolution constitutes *transhumanism*.’ (Coursen, 2012: 421) Often using Huxley’s definition as a starting point, contemporary transhumanists analyse the extent to which the transhumanist desire to fundamentally alter the human form – and by

¹¹ See Dieter Birnbacher’s chapter ‘Posthumanity, Transhumanism and Human Nature’ (2008) for an examination of the various ways in which each of the terms have come to be defined, analysed and critiqued.

extension, every other aspect of humanity – is continuing to be shaped by technological advances:

First named in its modern incarnation by FM-2030, transhumanism is an increasingly pervasive movement and an important actant, especially in technology policy and bioethics debates, whose members seek, broadly, to hack the human biocomputer to extend life, increase welfare, and enhance the human condition. (Pilsch, 2017: 1)

Pilsch's argument, that transhumanist theory influences debates around technology and bioethics, illustrates the extent to which transhumanism, in its myriad forms, has come to affect discourse on policy, ethics, and the future of humanity in the cultural and political zeitgeist,¹² and this chapter focuses specifically upon the ways in which cyberpunk writers responded to the concept of transcending the human in their work.

According to Bostrom, the founding Director of the Future of Humanity Institute at the University of Oxford (established in 2005), the posthuman condition requires humanity to have gained control over the body, and for illness and suffering to be rare occurrences in significantly extended life spans. Transhumanists are concerned with removing limitations on the human experience, and transhumanism relies in part on the acceptance that the posthuman potential will be inherently limitless in ways that humans cannot begin to imagine. Becoming posthuman would by necessity involve a significant effort at reimagining and transforming the current limits of both human capabilities and expectations, and transhumanist theorists such as Bostrom argue that whilst the contemporary human is naturally limited in terms of ability, the posthuman will have a much higher degree and breadth of potential. In his article, 'Transhumanist

¹² Critics of transhumanism have been accused of being in direct opposition of technological advancement: 'Political advocates of banning or restricting research and development into or availability of enhancement technologies are referred to as "bioLuddites."' (Thweatt-Bates, 2012: 63) Otherwise known as bioconservatives, these advocates have had a significant influence over the political establishment. An example of this can be seen in the appointment of Leon Kass (who has been given the label of "arch-bioLuddite") to George W. Bush's President's Council on Bioethics in 2001.

Values' (2005), Bostrom imagines the potential possibilities that a posthuman future would present to human existence and experience:

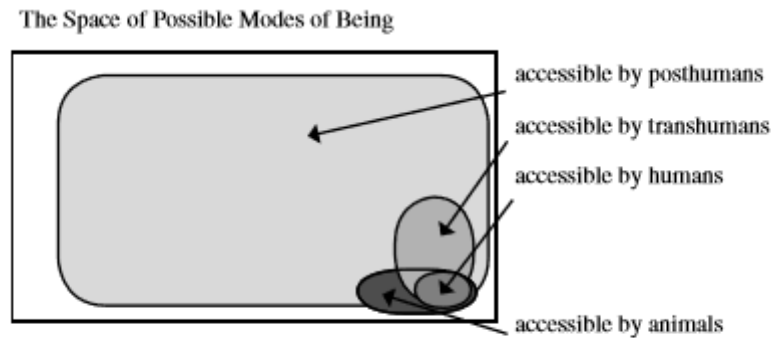


Figure 1. We ain't seen nothin' yet (not drawn to scale). The term "transhuman" denotes transitional beings, or moderately enhanced humans, whose capacities would be somewhere between those of unaugmented humans and full-blown posthumans. (A transhumanist, by contrast, is simply somebody who accepts transhumanism.)

According to this figure, the posthuman mode of being will far surpass any other mode of being. Transhumanism, in Bostrom's figure, denotes a transitional phase between what currently is, and what ought to be possible for the human condition. In this figure, the posthuman mode of being shares a connection with every other mode of being but extends far beyond any and every other space that is accessible by animals, humans and transhumans. Bostrom's focus upon the limited nature of the human and transhuman condition in contrast to the seemingly limitless capabilities of the posthuman condition exemplifies the overarching aim of transhumanism to create an entirely new mode of being that will have the human and the transhuman as its foundation. This posthuman future would require, in Bostrom's view, a significant amount of effort on the part of the human and the transhuman to achieve, because the posthuman is not a natural evolution, it is a designed evolution. Transhumanists make it clear that the true potential of a posthuman future would be unachievable without significant vision and effort on humanity's part. The posthuman will have capabilities that far surpass those of the human and the transhuman, and will represent a new mode of being that has hitherto not existed in the history of the world.

Transhumanists envisage a future in which the posthuman form will become integrated with technology to such a significant degree that the boundary between the natural and the artificial will become permanently and irrevocably permeable:

Posthumans could be completely synthetic artificial intelligences, or they could be enhanced uploads [...] or they could be the result of making many smaller but cumulatively profound augmentations to a biological human. The latter alternative would probably require either the redesign of the human organism using advanced nanotechnology or its radical enhancement using some combination of technologies such as genetic engineering, psychopharmacology, anti-aging therapies, neural interfaces, advanced information management tools, memory enhancing drugs, wearable computers, and cognitive techniques. (The Transhumanist FAQ 3.0)

Cyberpunk writers have considered every one of these possibilities for creating the posthuman, and have demonstrated the extent to which the perceived success or failure of the posthuman project will depend, in large part, not on the capabilities of the technology itself, but, rather, on the ways in which the technology is developed, controlled and utilised. In Gibson's *Sprawl Trilogy*, various aspects of The Transhumanist FAQ's list of posthuman capabilities are apparent, such as anti-aging practices, various forms of genetic manipulation, implantable digital tracking technologies, technology to significantly extend the human life span in the form of recoding the DNA, cloning, cryonics, uploading, and various forms of body modification that significantly alter the natural physiological processes of the body. The *Sprawl Trilogy* also features subcultures where people work to fuse aspects of their physiology with that of animals in order to replicate animalistic tendencies for the purposes of combat or prestige. Molly's claws are retractable like that of a cat's, which enables her to extend and retract them at will depending upon the circumstance. The Panther Moderns in Gibson's series adopt ever more radical forms of human-animal-machine modifications, as is the case with Angelo, who uses radical technologies to modify his face using shark cartilage to resemble a carnivorous animal. Body modification practices that either merge the human and the animal or give humans

animalistic characteristics are apparent in a number of key cyberpunk texts, from Gibson's *Sprawl Trilogy* through to Jeff Noon's *Vurt* series (1993-1996), and cross-species assimilation extends to the mixing of human and plant matter, as is the case in Rucker's *Ware Tetralogy* and Noon's *Pollen* (1995). In the *Ware Tetralogy*, Cobb Anderson submits to a physical death in order for his consciousness to be uploaded on to various technologically advanced forms, culminating in him inhabiting a moldie body that is infused with biological matter which enables him to perform feats of physical transformation, movement and dexterity that are impossible for a human body to perform. These texts highlight the extent to which the boundary between the human and the other (be that flora, fauna, mechanical or technological matter) is at risk of being traversed in the pursuit of the posthuman ideal. The characters in these texts are given the freedom to define what posthumanism ought to mean to them, and as such, are able to choose the types of body modification that most fits with their own ideas of what constitutes the ideal posthuman. In the case of characters such as Molly and Angelo, this constitutes developing physical characteristics that are inherently animalistic, whereas for other characters such as Cobb, the focus is on using the latest developments in biotechnology to create a new corporeality that is capable of feats that would be unimaginable for an unmodified human.

Both advocates for, and opponents of, transhumanism use the tenets of the concept in their analyses of the potential ramifications of humankind embracing ever more sophisticated, transformative and infiltrative technological advancements, and these arguments feed into contemporary discussions focusing upon the utilisation of such technologies, particularly in the healthcare and elective surgery industries. These ever more sophisticated and invasive technological advances necessitate an adjustment in humanity's relationship with technology, and transhumanism 'represents a cultural shift in which the technologies changing the horizon of our lives have a significantly

more intimate relationship to our bodies.’ (Pilsch, 2017: 7) It is this intimate relationship with technology that most interests cyberpunk writers: ‘For the cyberpunks [...] technology is visceral [...] it is pervasive [...] utterly intimate. Not outside us, but next to us. Under our skin; often, inside our minds.’ (Sterling, 1988: XI) According to cyberpunk writers, technology is invasive and infiltrative, and it necessitates the development of a relationship between humanity and technology that becomes increasingly intimate as technological advancements become increasingly more radical and sophisticated in application and scope.

The characters in these cyberpunk texts are expected to develop personal relationships with technology in its multitude of forms; individuals who attempt to resist this development are often coerced, as is the case with Marid Audran in Effinger’s series, who is forced into undergoing a highly dangerous and experimental surgical procedure by Friedlander Bey – the political leader of the Budayeen. Characters are also exploited, which is the case for the majority of the women and trans women who work in the sex industry in these texts, or are forced to acquiesce during a period of intense vulnerability which is what happens to Colonel Willis Corto in Gibson’s *Neuromancer*, when a war mission leaves him with life-changing disabilities. In the vast majority of circumstances in these texts, individuals place themselves at significant risk in order to be able to access the revolutionary technologies that they have been socialised into wanting in the hope of becoming something more than human; characters such as Case and Molly in *Neuromancer*, Johnny Mnemonic in Gibson’s short story and Cobb Anderson in Rucker’s Ware Tetralogy risk their lives in order to be able to partake in the transhuman quest for transcendence from the human. This desire to transcend the human is a central tenet of transhumanism, and cyberpunk writers focus predominantly upon the ways in which ordinary citizens will need to be prepared to agree to progressively more invasive forms of exploitation in order to be able to access invasive

forms of body modification. Cyberpunk makes it clear that while advances in revolutionary technology may, in theory, be utilised for the betterment of the individual and the common good of society, these technologies will be owned and controlled by corporations that will work to exploit rather than enhance the lives of citizens.

The potential development of the posthuman presents a number of key challenges for theorists, ranging from significant consequences for individuals through to governmental misuse of radical technologies:

The most important concerns about enhancement fall under eight headings: (1) character, (2) human nature and the natural, (3) the possibility that enhancements would produce beings with a higher moral status than persons, (4) unintended (bad) consequences, (5) justice, (6) research on enhancements, (7) abuses of enhancement technologies by governments (e.g., for unacceptable military applications or suppression of domestic dissent), and (8) the risk of a “new eugenics”. (Buchanan, 2011: 21)

The *Sprawl Trilogy*, the *Ware Tetralogy* and the *Marîd Audran* series all focus upon societies that are in the midst of this promised posthuman evolution. Cyberpunk analyses the transitory period between the lived experiences of the human and the potential development of the posthuman, and Gibson, Rucker and Effinger all exemplify the fact that this supposed transitory period is fraught with widespread poverty, violence, denigration and desperation on the part of human subjects who are trying to keep pace with rapid technological change in increasingly unequal and dangerous societies. The widespread use and acceptance of radical technologies in these cyberpunk texts has resulted in unaccountable corporations developing increasingly dehumanising ways of further exploiting an increasingly vulnerable populace. Not only do the citizens in these societies have to concern themselves with making a living, but they have to navigate a new world order that is attempting to contravene their very existence as human beings in the focus upon the evolution of the posthuman.

Fundamentally, whether the use of new technologies to develop the posthuman would be positive or not, the fact is that there is the possibility that such a development would lead to the existence of beings that are completely separate from humans. Rather than being interested in developing a new type of human, key theorists are instead interested in the potential development of the *posthuman* (Walker, 2011). The potential development of the posthuman heralds a significant shift in humanity's understanding of the privileged status of the human, as it presents the possibility that another being will overtake the superior position of the human, with humans and posthumans existing in opposition (Hayles, 1999; McNamee and Edwards, 2006; Wennemann, 2016). It becomes clear in cyberpunk that there is a great deal of variation in what posthumanity can mean depending upon definition, and there is dispute amongst theorists here, as there is disagreement with what the posthuman future will look like, with two key theorists, Bostrom and FM-2030, holding differing views on what it will mean to be posthuman. There is ongoing debate as to how the posthuman will be categorised in terms of its relationship to the human, and this is an important area of scrutiny for key transhumanist theorists:

it is a matter of dispute among transhumanists whether the posthuman is still a member of the human species, but has one capacity which goes beyond the capacities of currently living human beings (Bostrom) or whether the posthuman is actually a member of a new species (FM-2030). (Sorgner and Grimm, 2013: 14)

Whilst this is an argument that continues within transhumanism, in the context of cyberpunk, the focus is very much upon the transitory phase on the journey to creating the posthuman; the characters in these texts work to engage with radical technologies in a number of ways for a number of different reasons, whether that is so that they can live longer, healthier lives or modify their bodies in order to attempt to transcend human flesh altogether. The notion of improvement of the human condition is not a contemporary conceit, and in the context of transhumanism, whilst the theory may have

been developed in the twentieth century and is being continuously revised today, the concept of human transcendence can be traced much further back. Whilst Huxley did coin the term transhumanism, contemporary transhumanist theorists have argued that the tenets of transhumanism can be traced much further back than the twentieth century, and Bostrom argues that the foundations of transhumanist thought can be traced as far back as the Sumerian *Epic of Gilgamesh* (circa 2100 BC), which focused in part on the quest for achieving immortality.¹³ The focus and desire for some form of immortal life, particularly a form of immortal life in which what is considered to be the soul is not bound to a fragile body, is a key area of concern for transhumanists, and is a concept that links transhumanist principles with ecclesiastical doctrine.

Fundamentally, cyberpunk writers are concerned with the finite nature of the human experience, and these texts focus to a great extent upon the various ways in which mortality itself can be transcended in order to create new forms of material immortality using technology, therefore moving away from the vast majority of theological doctrine that is concerned, instead, with the immortality of the soul. The most significant and radical form of body modification in these texts focuses upon life extension and attempts at immortality. The concept of significant life extension, or indeed, immortality, is a key focus for transhumanist theorists (Waters, 2014). It is widely accepted by transhumanists that the posthuman species will have a significantly extended life span compared to that which humans have now, and this is considered to be a vital development in the transformation of the human. The possibility of creating a new species that may potentially be immortal, or at the very least, may have a

¹³ 'A History of Transhumanist Thought' by Nick Bostrom (2011) provides a comprehensive overview of transhumanism, taking into account the historical antecedents of the movement as well as contemporary critiques. 'The Transhumanist Manifesto' by Jeanine Thweatt-Bates (2012) analyses the various strands of the transhumanist movement, including extropianism, democratic transhumanism, hedonistic transhumanism and singularitarianism. 'The Philosophy of Transhumanism' by Max More (2013) provides further insight into the historical and philosophical roots of transhumanist thinking.

significantly extended life span, is a key focus because it will allow humanity to overcome the fragile and vulnerable nature of contemporary life. Transhumanists view this fragility and vulnerability as a crutch that stands in the way of humans being able to transcend the banality and mundane nature of the human experience, in order to be able to reach a higher plane of consciousness.

Transhumanism requires that the human be seen as a work in progress (Bostrom, 2003); the physical, physiological, emotional, spiritual and intellectual capabilities of the human are open to change, and transhumanism welcomes the idea that the human is an unfinished project: 'Transhumanists see human nature as incomplete, human biology as limiting, and human technology as the pathway to a new form of humanity.' (Cole-Turner, 2011: 10) According to Cole-Turner, transhumanism focuses upon the potential creation of a new form of humanity, however, whilst this may be the case in theory, cyberpunk writers demonstrate that rather than being a collective effort, the adoption of transhumanist principles in the hope of creating the posthuman will be undertaken primarily by individuals engaging in exploitative and dangerous behaviour. When it comes to human evolution, there are a number of different forms to consider here: the biological, the technological, the cultural and the epistemological. Transhumanists consider the human being as the starting point, the project through which, with the advent of seemingly limitless technological advances, the posthuman will be developed. A number of critics have focused upon the need for continuous and never-ending progress when thinking about the development of the posthuman (Miah, 2008; More, 2011) and that striving for a posthuman future is based upon the pursuit of continuous human evolution, whether that is through biological means (Stock, 2002) or technological means (Hayles, 2011). Radical advances in technology make the potential for creating an enhanced form of humanity possible (Chan, 2013), and the

development of ever more sophisticated forms of AI has led theorists to consider the impact that these technologies will have on human evolution (Minsky, 1992).

In the context of this thesis, transhumanism and transhumanist principles more generally refer to an adherence to the notion that the innate fragility, vulnerability and mortality of the human body can be overcome through the use of radical technologies. The types of technologies that are considered here include implantations, cybernetics, biotechnology and cryonics, amongst numerous others. The characters in these texts live in societies in which transhumanist principles have become widely accepted, and these societies exist in a transitory phase prior to the development of the idealised posthuman. This is the reason why transhumanism is the main theoretical framework in this thesis. Both cyberpunk and transhumanism were initially developed in the twentieth century during periods of great political, technological and societal upheaval, and they both respond to these developments by focusing upon the human's place within a rapidly changing world. However, whilst transhumanists use these developments to consider the potential future of humanity, and the evolution of the posthuman, cyberpunks are more concerned with the ways in which such societal upheavals have the potential to directly affect humanity in its current iteration. As discussed in the introduction to this thesis, cyberpunk is not speculative fiction, and cyberpunk writers are primarily focused upon the effects of the present upon the present or near future. Both cyberpunks and transhumanists are essentially concerned with the effects of new technologies upon the human body, and this represents a significant shift in cultural attitudes regarding the significance of the body from the twentieth century onwards: 'The body [...] seems endlessly malleable. It can be 'volatile' or 'flexible', it can be 'leaky', it can be made 'slender', it can be 'rejected' or 'deviant'. Upon its surface we can etch the cultural angst of the West at the end of the twentieth century' (Birke, 1999: 135). Birke's assessment of the importance of the body in the context of

highlighting western cultural attitudes is a key concept in this thesis, and is a concept that lies at the heart of cyberpunk writing in the twentieth century and beyond.

The Individual versus the Corporation

The tenets of transhumanism call for an analysis and evaluation of the future of humanity, and ask that the embodied human experience be regarded as a continuous work in progress: 'Transhumanism is a way of thinking about the future that is based on the premise that the human species in its current form does not represent the end of our development but rather a comparatively early phase.' (Bostrom, 2003: 4) According to transhumanist principles, the posthuman will represent the pinnacle of human development, and will be capable of overcoming the fragility and vulnerability of the contemporary human form, and may even be able to overcome death.

Cyberpunk writers take this idea of immortality and focus upon characters who attempt to achieve their own understanding of immortality in a number of different ways. Gibson's *Neuromancer* focuses upon the ways in which members of wealthy families use advances in technology to redefine society's understanding of what it means to be human. One of the most radical forms of body modification in the Sprawl Trilogy is adopted by the Tessier-Ashpool family, who undergo cloning and cryonic manipulation in order to retain control of their corporate empire, despite cloning being illegal, as it is made clear in *Mona Lisa Overdrive*: 'There were numerous laws forbidding or otherwise governing the artificial replication of an individual's genetic material, but there were also numerous questions of jurisdiction...' (Gibson, 1995: 134) Members of the Tessier-Ashpool family are able to circumvent the law as they have the financial capital to create Freeside and their home, the Villa Straylight within it, which ensures that they are safe during periods of societal upheaval and war:

When war came, Tessier-Ashpool were behind that wall [the wall of Freeside]. They watched Bonn flash and die, and Beograd. The construction of the spindle continued with only minor interruptions, during those three weeks; later, during the stunned and chaotic decade that followed, it would sometimes be more difficult. The children, Jean and Jane, were with them now, the villa at Biarritz having gone to finance construction of a cryogenic storage facility for their home, the Villa Straylight. The first occupants of the vault were ten pairs of cloned embryos, 2Jean and 2Jane, 3Jean and 3Jane... (Gibson, 1995: 133-134)

The Tessier-Ashpool family's residence on Freeside means that they are free from the usual legal restraints placed upon the use of such radical technologies. The Tessier-Ashpool family's use of cloning and cryonics enables members of the family to retain control of the vast Tessier-Ashpool Corporation, and the individuals within the corporation are in essence untouchable by governments or law enforcement as a result of their vast wealth and influence. It becomes apparent that members of this family have circumvented the laws that govern the use of cryonics to an extreme level; in *Mona Lisa Overdrive* it is revealed that 3Jane has 19 sibling clones, all with the same birth date, and all of the clones can be reanimated at will in order to ensure that the family retains control of the corporation despite the passage of time. This approach to retaining corporate power across generations in the Sprawl Trilogy results in the concept of the corporation becoming synonymous with biological processes: 'Power, in Case's world, meant corporate power. The zaibatsus, the multinationals that shaped the course of human history, had transcended old barriers. Viewed as organisms, they had attained a kind of immortality.' (Gibson, 1995: 242) Case goes on to think about the similarities between the multinationals and the Yakuza: 'Phobic vision of the hatching wasps, time-lapse machine gun of biology. But weren't the zaibatsus more like that, or the Yakuza, hives with cybernetic memories, vast single organisms, their DNA coded in silicon?' (Gibson, 1995: 242) Case views corporate power in the same way that he considers a biological entity to exist; corporations transcend the ravages of time and exist on a pseudo-immortal plane that is inaccessible by the general public. Case describes these multinationals as organisms that are almost animalistic in their set

up and behaviour: these corporations have memories and thought-processes, and the power that they have is such that they can alter the course of human history. These corporations are not simply the products of their environments; they are, in fact, the catalysts for social, cultural and political change. These corporations control the narrative of these technologically advanced societies, and they are able to dictate the direction that these societies will go in, as their existence outlasts governments, thus attempts at controlling these organisations by law enforcement agencies fails due to a lack of longevity and jurisdiction.

In the case of the Tessier-Ashpool family, their utilisation of cryonics enables them to avoid the natural biological processes of aging and eventual death, thus allowing them to retain control of their own life cycles as well as the family corporation. The concept of being able to control the aging process as well as the natural life cycle is a recurrent theme in cyberpunk: from characters such as Julius Deane in *Neuromancer* – a fixer who helps Case with his missions, and who is: ‘one hundred and thirty-five years old, his metabolism assiduously warped by a weekly fortune in serums and hormones. His primary hedge against aging [is] a yearly pilgrimage to Tokyo, where genetic surgeons re-set the code of his DNA’ (Gibson, 1995: 20); to the Tessier-Ashpool family and other such corporations who are, as described in *Count Zero*: “‘clans [that are] trans-generational, and there’s usually a fair bit of medicine involved: cryogenics, genetic manipulation, various ways to combat ageing.’” (Gibson, 1995: 145); Friedlander Bey and Abu Adil in the Marîd Audran series; Joseph Virek in *Count Zero* and Cobb Anderson in the Ware Tetralogy. As with cyberpunk, biomedical gerontology is a significant concern in transhumanism; the potential ability of the human body to overcome the ravages of illness and old age has been a key focus for medical practitioners, religious leaders, theorists and governing bodies for millennia, and this is a concern that cyberpunk writers have seized upon in their analyses of the potential

ramifications of engaging with ever more extreme forms of body modification. The dream of creating a genus of posthumans that will have significantly extended life and health spans is the focus of the work of a number of key transhumanist theorists such as Bostrom, FM-2030, More et al. This idea of being able to increase the human life span and health span is a key aspect of not only transhumanist thinking, but is a focus for policy makers, governments, the medical profession and individuals who wish to alter or disrupt the aging process. Cyberpunk writers have responded to this contemporary cultural obsession with the aging process by focusing upon the ways in which technological advances in these texts have enabled characters to halt, disrupt or reverse the aging process using highly dangerous, experimental and expensive procedures. These characters are able to either achieve significantly lengthened life or health spans, or, are able to utilise approaches such as cryonics or consciousness uploading in order to preserve and reanimate their bodies or their consciousness over a potentially infinite amount of time. Both Friedlander Bey and Abu Adil have significantly extended their healthy life spans in the Marîd Audran series, as Marîd notes in *A Fire in the Sun* when he is called into Friedlander Bey's office: 'The man was about two hundred years old, but he'd had a lot of body modifications and transplants.' (Effinger, 2006: 27) As such, much like the Tessier-Ashpool family in the *Sprawl Trilogy*, they are able to continue to exert their power and dominance over a much more extended period of time than would otherwise have been possible had they not engaged with transformative technologies.

A desire for, and the realising of, an extended life span or immortality in whatever form it may present itself is an important aspect of a number of key cyberpunk and science fiction texts, as this focus on an extended lifespan plays into the very human fear that exists around the concept of death and the finite nature of the human experience. There are many examples of texts that deal with these concepts in the cyberpunk oeuvre, from

the use of cryonics in Bruce Sterling's *The Artificial Kid*, James Patrick Kelly's 'Solstice' (1988) and Greg Bear's 'Fall of the House of Escher' (1996); significant life extension in Paul Di Filippo's 'Stone Lives' (1988); and extended life spans through uploading in Rucker's Ware Tetralogy amongst others. These texts make it clear that while the technology to overcome the inherent fragility and finite nature of the human condition has been successfully developed, access to these revolutionary technologies is available only to those that have the required social and financial capital. Those who have been able to access these technologies exist as entities that are, to all intents and purposes, entirely separate from their unmodified contemporaries, as Loveless tells Rydell in Gibson's *Virtual Light* (1993): "People up here have no idea what *money* can do, Rydell. They don't know what real money *is*. They live like *gods*, in the compounds. Some of them are over a hundred years *old*" (Gibson, 2011: 231) These beings have, to a certain degree, achieved the transhuman dream of significantly extended life spans, and in the case of texts such as Rucker's, characters like Cobb have access to technology that would enable them to "live" forever by inhabiting numerous physical entities. These characters inhabit spaces outside of the existing societal structure, as their very existence challenges entrenched notions of humanity; these characters' refusal to accept the physical, physiological and spiritual limitations of the embodied human self is considered to be an act of defiance towards the natural order, and as such, they are either rejected by their peers, as is the case with Cobb, or, as with the Tessier-Ashpool family, choose to remove themselves from society by living in inaccessible compounds that lie outside of any jurisdiction. Characters such as the Tessier-Ashpools become the gods of the new world order in these texts; their ability to transcend the mundane banalities of human existence means that they exist on a separate plane. Characters such as the Tessier-Ashpools are at once reviled and idealised; they are both gods and monsters in the eyes of the rest of humanity. Their

exploitation of revolutionary technologies enables them to move beyond the natural limits of the human in order to develop posthuman existences that lie outside of the material realities of the rest of humanity. With the Tessier-Ashpools, Case comes to regard them as both more and less than human; he is both awed by their refusal to accept the natural order of life, and troubled by their ability to step outside the accepted boundaries of human existence in their pursuit of a form of immortality. When Ashpool kills the current clone of his daughter, Jane, and commits suicide, Case refers to his death as:

the death of a mad king. And he'd killed the puppet he'd called his daughter, the one with Jane's face [...] 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. (Gibson, 1995: 242)

In death, Ashpool becomes human once again; the money, power and influence he had accumulated during his extended lifetime – attributes which were initially so impressive to Case – ultimately amount to nothing, as he was susceptible to death (albeit by suicide) in the same way as any other human being. The Tessier-Ashpools are at once human and non-human in *Neuromancer*, and Case finds it difficult to categorise them in his meetings with the family. Their wealth, power and influence alongside their cryonically manipulated bodies place them outside the realm of the ordinary human, and yet, they too, can succumb to the relative banality of death.

This re-writing of the natural rules of order in terms of life and death not only leads to the development of these vast corporations that are led by individuals who are at once both more and less than human, but also ensures that these corporations begin to develop a type of half-life of their own. As the abundance of information – both biological and otherwise – grows ever denser and more complicated, these corporations begin to expand beyond the boundaries set by their owners, as Fox, a corporate extraction agent says in Gibson's short story 'New Rose Hotel' (1984): "The zaibatsus

[...] the multinationals. The blood of a zaibatsu is information, not people. The structure is independent of the individual lives that comprise it. Corporation as life form.” (Gibson, 1995: 129) These behemoths begin to develop rules and systems of their own, and, much like the most advanced artificial intelligence systems, create a type of life form that exists irrespective of human intervention. These corporations adapt to exploit the latest AI technologies in order to become self-reliant, self-aware, and, most fundamentally and disturbingly, self-perpetuating life forms that are capable of overriding the wishes and instructions of their human creators. One of the fundamental aspects of the Sprawl Trilogy is Gibson’s depiction of AI systems, which in *Neuromancer* include Dixie Flatline (the reanimated thought processes of the human McCoy Pauley), Neuromancer and Wintermute. These systems are self-aware, have a great deal of autonomy and are able to communicate with and manipulate the human beings that are in effect supposed to be able to control them. These AIs are in control of the flow of information in *Neuromancer*, and in a society where information is the most valuable commodity, their power and influence extends beyond any limits within which they were originally designed.

Information becomes the ultimate weapon in these texts, and individuals, corporations and governments (where they still exist in some form) utilise this weapon in order to further entrench their power and influence upon citizens. In Gibson’s Bridge Trilogy, which includes *Virtual Light*, *Idoru* (1996) and *All Tomorrow’s Parties* (1999), the concept of the body as information is further developed, particularly through the character Rei Toei, who is a personality construct and is developed through the use of AI and machine learning systems. She is a singer, and is globally recognised and desired. Her handler, Rez, describes the way in which Rei understands and responds to the world around her: “Rei’s only reality is the realm of ongoing social creation [...] Entirely *process*; infinitely more than the combined sum of her various selves. The

platforms sink beneath her, one after another, as she grows denser and more complex...” (Gibson, 2011: 202) Rei’s interactions with the world lead her to harness the information she is presented with in order to grow ever more complex; she is not an embodied construct, but rather, a simulated projection, as Colin Laney, the protagonist of the text who is a data analyst states: ““She is not flesh; she is information.”” (Gibson, 2011: 178) In Gibson’s text, Rei’s lack of flesh is not a barrier to her development of an identity that is accepted by society, even to the extent that she is able to form a relationship with a human being, and she is a celebrity in her own right. The body is a coded signifier of the individual’s relationship with the technocentric zeitgeist, the body exists as a ‘[form] of information’ (Murphie and Potts, 2003: 128) here. In the context of Rei Toei, this form of information adapts according to the needs of its audience or intended user, and while the concept of Rei as a single entity as a celebrated singer exists, the Rei that is an amalgamation of various selves as described by Rez is a construct that exploits the desires of a contemporary culture to identify with a technically perfect but nevertheless technically non-existent entity. Rei Toei exemplifies the pinnacle of corporate exploitation; she is an AI construct that has been developed to embody the physical, psychological and emotional ideals of contemporary society in order to manipulate the general public into investing in a posthuman ideal that is impossible for a human to achieve. Despite this, citizens continue to engage in ever more radical body modification practices in order to partake in a society that celebrates the modified self.

Whilst corporations do indeed represent power and influence in these texts, Rucker’s Ware Tetralogy has a different approach to the merging of the biological and the technological in the context of body modification. Both Gibson’s *Sprawl Trilogy* and Effinger’s *Marîd Audran* series feature characters who are actively encouraged, and in certain cases coerced, into engaging with radical and often dangerous body

modification practices for either personal or corporate gain. In Rucker's tetralogy however, the merging of biological and technological matter is viewed as subversive, and the individuals that have these type of bodies are considered to be less than human, despite them having the type of characteristics that are deemed by transhumanists to represent the pinnacle of a posthuman future, and a moldie is representative of this in the tetralogy. A moldie is: 'an artificial life form made of a soft plastic that [is] mottled and veined with gene-tweaked molds and algae.' (Rucker, 2010: 295) Moldies are described as being superhuman in *Freeware*: they can regenerate, reproduce, change their physical forms and can modify every aspect of their appearance. Moldies are able to live independently and are able to form relationships with other moldies and with humans. They are at once revered and reviled by humans; they are revered because they represent the very latest in revolutionary technology, however, they present a real danger to humans as they are able to control them using thinking caps, whereby they are able to insert themselves directly into a human's brain. Alongside this, due to their development using mould spores, they emit a distinct, and to most humans, unpleasant smell that sets them apart from humans. Moldies come into existence in the aftermath of a biological attack on the bopper (robot) colony in *Wetware*, where a new type of chip mould is released into their Nest that is designed to destroy the boppers' circuits, thus killing them. Rucker explains how this mould works in his nonfiction text *Seek!*:

The humans exterminate the boppers by means of a biological "chipmold" that ruins their silicon chips. But the boppers had this kind of intelligent plastic for their skins called flickercladding, and the flickercladding became infected with the chipmold and got smarter. (Rucker, 1999: 12)

This is in essence how the moldies come to exist. When Cobb's consciousness is eventually transplanted on to a moldie body in *Realware*, rather than him being celebrated as representing the next potential revolutionary step towards the posthuman ideal, Cobb is treated as a social pariah by members of society who refuse to categorise

him as human, leading, eventually, to Cobb's plea to his friends and family not to transplant his consciousness on to any other body once his moldie physical form naturally degenerates.

Corporate power is so immense within the vast majority of cyberpunk texts that these corporations are able to not only encourage or force their employees to undergo radical forms of body modifications that will in essence make them more useful and malleable employees, but modifications that are also designed to punish workers who exhibit undesirable behavior. In Gibson's *Count Zero*, these modifications are not only performed on the rank and file employees:

“It's currently quite fashionable to equip top employees with modified insulin-pump subdermals [...] The subject's system can be tricked into an artificial reliance on certain synthetic enzyme analogs. Unless the subdermal is recharged at regular intervals, withdrawal from the source – the employer – can result in trauma...” (Gibson, 1995: 101)

These employees come to exist in a co-dependent relationship with their employers, as their employers are able to bring them great physical pleasure or immeasurable physical pain due to their control over their employees' body modifications. In these situations the employer becomes at once the source of pleasure and pain, leading to the employee developing an emotional relationship with their employer that transcends the workplace. This metabolic control is apparent in *Neuromancer*; at the start of the novel, Case has significant health issues that he has spent a vast sum of money trying to rectify. The reason for this is that Case had stolen from his previous employers, and their retaliation had been devastating to his body: ‘They damaged his nervous system with a wartime Russian mycotoxin.’ (Gibson, 1995: 12) This has the dual effect of both ensuring that the money that Case has made up until that point needs to be spent on attempting to repair the damage, and that the use of the drug results in Case's ability to work as a hacker in the future being put in jeopardy: ‘Strapped to a bed in a Memphis hotel, his talent burning out micron by micron, he hallucinated for thirty hours. The

damage was minute, subtle, and utterly effective.’ (Gibson, 1995: 12) The use of the drug has a profound psychological effect upon Case, as he is required to confront the fact that he is not invincible, and is unable to exist solely in cyberspace as he has been used to doing for a significant period of time: ‘For Case, who’d lived for the bodiless exultation of cyberspace, it was the Fall. In the bars he’d frequented as a cowboy hotshot, the elite stance involved a certain relaxed contempt for the flesh. The body was meat. Case fell into the prison of his own flesh.’ (Gibson, 1995: 12) Case is once more of his flesh, and he must confront the realities of his damaged body and the resulting effects upon his mind. His previous employers’ actions ensure that Case’s life as well as his career are damaged, and he is required to re-evaluate his status as a ‘cowboy hotshot’ once he becomes a physically and psychologically damaged ex-hacker with limited funds and no support system.

In the Marîd Audran series, Friedlander Bey forces Marîd to agree to a highly experimental procedure that results in Friedlander Bey being given the ability to cause unimaginable pain to Marîd should he refuse to do his employer’s bidding, as Marîd’s surgeon Dr Yeniknani informs him after the operation:

“Near the pleasure centre [...] there is an area that causes rage and ferociously aggressive behaviour. It is also a punishment centre. When it is stimulated, subjects experience torment as great as the ecstasy of the pleasure centre. This area *was* wired. Your sponsor felt that this might prove useful in your undertaking for him, and it gives him a measure of influence over you.” (Effinger, 2005: 174)

As is the case with the chosen employees in the Sprawl Trilogy (including Case), these modifications enable these employers to have a significant level of power over the general health and wellbeing of their employees. These employers understand the unique forces that drive their employees, and use this information to exert power and dominance over their employees in order to try and attain unwavering loyalty and discipline from their workers.

There is a focus on re-engineering the human body in these texts; the body becomes a canvas on which a myriad of experiments and modifications can be performed, and its status as both sacred icon and evolutionary success story is questioned. This status begins to be challenged at the moment at which modification of any form begins, as the modified subjects immerse themselves in technology designed to override – and often defy – the boundaries of corporeal reality. Technology offers a radical new form of “life”: a new way of interacting with the world which requires sacrifice and dedication on the part of the modified subject. This sacrifice and dedication plays a role in every aspect of the subject’s life, and the expectation is that they will defer to the tenets of the technology that promises to change the very nature of their existence. Much like theological doctrine, transhumanism offers the promise of a form of eternal “life” that is deemed unachievable without sacrifice. In a capitalist landscape, this is achieved through a focus upon the accumulation of wealth in order to be able to afford to effect the change required to become posthuman, and the modified subject is required to adhere to the doctrines as set by the multinational corporations that provide the subject with the potential to overcome the limits of the temporal human existence. With writers such as Brannigan (2004) questioning the accessibility and affordability of biotechnological interventions in society with others such as Chalmers (2004) focusing upon the ways in which advancements in biotechnology have been commercialised, the question of the extent to which the general global population will have access to technological advancements that are heralded as revolutionary is a key consideration for cyberpunk writers. The focus on the global north in relation to these technologies is central to this concern:

The biotechnology revolution has the potential to further widen the gap between the developed and developing world. As much as biotechnology is a transnational revolution, so too biotechnology should support partnerships between the developed and developing nations to secure an equitable distribution of the benefits of this revolution. (Chalmers, 2004: 12)

Whilst Gibson, Rucker and Effinger respond to this concern in different ways, the underlying message is that these advances in technology will lead to societies that are further stratified according to social, cultural and economic capital. These writers focus predominantly upon the tenets of contemporary transhumanist thought: one more focused upon the desires and requirements of the individual rather than a focus on the collective:

whereas the earlier thinkers endorsed socialism and/or communism, contemporary transhumanists are aligned with capitalism and enlist wealthy, private donors rather than governments to fund their projects; whereas the earlier generation believed in collectivist, planned solutions for human miseries, current proponents of [...] transhumanism insist on personal choice and freedom for unlimited self-expression (Tirosh-Samuelson, 2012: 56).

These texts focus upon the modification of the individual rather than the collective, and the characters in these texts take personal responsibility for transforming their bodies and minds. This individualistic focus comes as a result of a collective consciousness that is more concerned with the desires, needs and abilities of the individual rather than on a unified endeavour to change the very nature of what it means to be human in a technologically advanced society. Both Gibson and Rucker focus predominantly on the global north in these texts, on societies and countries where the populace is significantly more able to access revolutionary technologies. Whilst it is undoubtedly the case that countries such as Japan and China are now global leaders in the biotechnology industry, and other countries are also gaining momentum in the field, these changes have been especially rapid, and in the time period in which these texts were produced, the global north west was still very much at the forefront of the development of such technologies. It is clear that those who are not in the higher echelons of society are required to exploit – and arguably degrade – themselves in order to be able to utilise the myriad revolutionary technologies that are on offer. In Effinger's *Marid Audran* series, the inhabitants of the Budayeen must also allow

themselves to be exploited in order to be granted this access, however, Effinger's focus on a post-revolutionary Islamic state raises the question of the extent to which the previous world order – with the global north being at the helm of technological revolutions – had to be eradicated in order for those in the global south to be given equal access to such advancements in technology. Effinger's series and his various short stories set in the Budayeen do make vague references to other countries outside of the Middle East, but these references work to highlight the extent to which the power held by countries in the global north has been destroyed: 'Now that the once-great nations were growing helpless in their poverty and dissension, it was time for Islam to complete the conquest that had begun so many centuries before.' (Effinger, 2005: 256) Friedlander Bey is one of the patriarchs in the Budayeen who are in control of a vast empire, and they exert dominance over the population through the use of force, threats of violence and intimidation. The Budayeen is a city that adheres to a western aesthetic in terms of body modification, particularly in the context of the female body, and the women and trans women in the Marîd Audran series engage in radical body modification practices that stick to a typically porno chic aesthetic that enables them to work in a pervasive sex industry that impacts every aspect of the lives of the residents in the Budayeen. The male and female members of the Budayeen are both required to undertake potentially physically dangerous and psychologically damaging employment in order to be able to survive, and whilst the technology that is available may be revolutionary in this post-revolutionary state, the utilisation of the technology is very much differentiated based upon sex.

The Haves and the Have Nots

Theorists such as More have written at length about the ways in which the human condition can be enhanced and improved upon, and the steps that would be necessary in order to achieve the desired posthuman future:

Transhumanism is both a reason-based philosophy and a cultural movement that affirms the possibility and desirability of fundamentally improving the human condition by means of science and technology. Transhumanists seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values. (More, 2011: 137)

This, More's preferred definition, presupposes a number of assertions that More presents as facts. More asserts that transhumanism is a cultural movement, however, he does not define the parameters that he uses for his argument, thus drawing attention to a key criticism of transhumanism. By calling transhumanism a cultural movement, More, and other such theorists, automatically universalise a white, western viewpoint that does not take other approaches, concepts or cultures into account in the discussion of the potential future of humanity. Transhumanists do not work to define their terms when they make assertions about the future of humanity, and the assumption here is that the white, western, and ultimately male, viewpoint, is the default, universal *human* viewpoint. Humans have undoubtedly been concerned with technological advancements throughout history, and the ever-evolving relationship between humans and technology has already had a significant impact upon the human condition (Hayles, 2011). Technological advancements have already led to human beings, on the whole, leading longer, healthier lives, as improvements in healthcare, medicine, infrastructure, crop production and more have made a marked difference to the lives of human beings in the last few hundred years in particular. Transhumanists take this one step further by considering technologies that are designed to fundamentally alter the human condition. Increasingly radical and sophisticated interventions and techniques such as gene

manipulation, cybernetics and nanotechnology amongst others have enabled theorists to consider the extent to which the human could – and perhaps even *should* – be subjected to extreme technological manipulation in order to achieve a potential posthuman future that has been theorised and developed by almost exclusively white men living and working in the global north. These theorists focus predominantly upon a physically, psychologically and physiologically perfect posthuman entity that will be developed from an inherently fragile and vulnerable human one, and there is a fundamental question about whether these theorists have worked to engage with contemporary discourse concerning issues such as discrimination and stigmatisation of peoples based upon, amongst many others, their sex, class, financial capital, ethnicity, nationality and disability.

One of the most important questions to consider in terms of the transhumanist movement is what the posthuman is expected to look like, and due to the fact that a vast proportion of the theorists, advocates and companies who are promoting the concept of a posthuman future are in the global north in countries that have historically invaded, mistreated and – in the most extreme cases, eradicated – other countries, cultures and peoples, there is concern over whether transhumanism will be utilised as the next weapon of war within and without the global north. The question here is not only what the posthuman ought to look like, but also who will be responsible for making these fundamental decisions. Theorists have long posited the idea that transhumanism will enable humans to ‘find a way to engineer their own evolution and, in so doing, cause the emergence of a new species.’ (Coursen, 2012: 417) However, what is clear in the context of global politics is that this potential new species will be decided upon and developed by a small and privileged group of scientists, advocates and policy-makers in the most economically advantaged and technologically advanced countries in the world, and the expectation is that these decisions will be made using

an already and increasingly narrow set of paradigms relating to what is considered to be the idealised human, thus leading to the eventual creation of the posthuman Vitruvian Man. Created in 1492 by Leonardo da Vinci, the Vitruvian Man is based upon Marcus Vitruvius Pollio's *De Architectura*: a treatise on architecture that is thought to have been written between 30 and 15 BC. Da Vinci applied Vitruvius' work to his drawing and subsequent analyses of the "idealised" proportions of the human body, and this depiction of the Vitruvian Man has had a significant impact upon western understandings of the human body since the fifteenth century. The issue with the Vitruvian Man is that it has often been deemed to represent the universal human body:

Leonardo could spell out the relationship between nature and science/math in relatively simple terms. What could be more perfect than the mathematical rendering of natural proportions in art? The symbolism is clear: a human body had been put into a perfect square and a perfect circle. (Botz-Bornstein, 2017: 117)

The fact that this drawing of a white, western, able-bodied man has been taken to represent humanity as a whole has had a significant impact upon research and scholarship in the proceeding centuries since da Vinci's seminal work, and the Vitruvian Man is often cited in the context of transhumanism. This is in large part due to the fact that da Vinci's drawing represents key ideals that are central to transhumanist thinking: 'The rigid standards of perfection expressed by the Vitruvian man (who is also called *homo quadratus*) have brought about typical Enlightenment ideals such as individualism, autonomy, and self-determination.' (Botz-Bornstein, 2017: 118) As this thesis shows, the ideals listed by Botz-Bornstein are key cornerstones of transhumanist thinking, as transhumanists focus upon the myriad ways in which technological advances can in theory enable individuals to design and re-engineer their own bodies, minds and futures in their pursuit of a new technologically-infused ideal that has evolved from da Vinci's work in the fifteenth century.

This thesis shows that the transhumanist focus upon a technologically-driven transcendence in the pursuit of a new corporeal ideal does not consider the multitudinous barriers that exist in the pursuit of this exceptionally narrow ideal of humanity. As depicted in these cyberpunk texts, transformative technologies are readily available to those with the financial and cultural capital to pay for them, and Gibson, Rucker and Effinger make it clear that technological advances continue to discriminate in already discriminatory societies:

Problems of justice arise, not because a valuable innovation is an enhancement or because it is a biomedical enhancement, but because some lack access to it and their lack of access deprives them of benefits they are entitled to or makes them vulnerable to domination, exploitation, or unfair competitive disadvantage. (Buchanan, 2011: 245)

Cyberpunk makes it clear that domination and exploitation continues to be a central theme within society regardless of technological advancement, and in most cases, these technological advances lead to these issues becoming even more entrenched in such societies.

The traditionally and universally idealised human being has historically been male, white, able-bodied and from the north-western hemisphere, and transhumanist theorists have not acknowledged this issue in any great length in their advocacy and analyses of the future of humanity, and this is an area that cyberpunk writers have focused upon in their analyses of the effects of transhumanist thinking on women, minority groups and generally disenfranchised members of society. This focus upon the ways in which technology will enhance the human condition is centred upon this very narrow paradigm of what humanity is, and does not take into account variances based upon sex, race, disability or geographical location, and more nuanced and yet equally important factors such as differences in culture, language and customs are not considered either, and there is a concern that all of the research and advocacy that is being conducted into both the tangible and intangible aspects of the future of humanity

will ultimately lead to the development of an increasingly homogenous new race of posthuman that will embody the most desired characteristics of the western white male. The concern here is that the western white male is the blueprint upon which the posthuman will be developed, and the reason for this is that the vast majority of research that is conducted, particularly in the pharmaceutical and healthcare industries, still uses the male body to represent humanity as a default. Caroline Criado Perez's book *Invisible Women: Exposing Data Bias In A World Designed For Men* (2019)¹⁴ is a key text that exemplifies the ways in which a significant percentage of a society – in this case, women – have been routinely ignored when it comes to scientific research, provision of healthcare and policy development, as researchers, companies, institutions and even governments are still working on the basis that the male body is capable of representing humanity as a whole. This concept of the default male as representing humanity as a whole is also a key concern for AI researchers, as it has been argued that as the vast majority of computer programmers are white men, AI programmes are being built and imbued with biases against women and people of other ethnicities due to data bias. In a recent article in *The Guardian* entitled: 'Apple Made Siri Deflect Questions on Feminism, Leaked Papers Reveal', journalist Alex Hern revealed that Apple's Siri was designed to deflect and to not engage with questions about feminism and other topics such as sexual harassment and assault. In the article, Sam Smethers argues:

"The problem with Siri, Alexa and all of these AI tools is that they have been designed by men with a male default in mind. I hate to break it to Siri and its creators: if 'it' believes in equality it is a feminist. This won't change until they recruit significantly more women into the development and design of these technologies." (Hern, 2019)

¹⁴*Invisible Women: Exposing Data Bias In A World Designed For Men* by Criado Perez illustrates the myriad ways in which gender data gaps have resulted in women being disadvantaged in everyday life. Criado Perez's text shows how a lack of sex-disaggregated data has led to male bodies and lives being automatically accepted as the default in areas such as town planning, the designing of transport systems, medical research, the tech industry, the designing of PPE (personal protective equipment), and manufacturing.

Criado Perez also focuses upon Siri in her work on the gender data gap, and looks at the ways in which Siri's programmers initially imbued the AI with significant biases based upon sex:

When Apple launched their AI, Siri, she (ironically) could find prostitutes and Viagra suppliers, but not abortion providers. Siri could help you if you'd had a heart attack, but if you told her you'd been raped, she replied 'I don't know what you mean by 'I was raped.' (Criado Perez, 2019: 176)

The irony of having a female-voiced programme state that it does not understand the term "rape" was not lost on campaigners. Smethers, who is the chief executive of the Fawcett Society, argues, much like Criado Perez does, that the default male viewpoint permeates every aspect of society. This is a significant problem in technology, particularly in AI, where programmes are being created and developed using very limited data sets that do not reflect the diversity of the global population, as Zoe Kleinman argues in a BBC article on racist algorithms from 2017:

There is growing concern that many of the algorithms that make decisions about our lives – from what we see on the internet to how likely we are to become victims or instigators of crime – are trained on data sets that do not include a diverse range of people. (Kleinman, 2017)

Algorithmic and data bias¹⁵ are serious concerns in the technology sector (Tomalin and Ullmann, 2019), and they exist to a great extent due to a lack of diversity in the workforce of the biggest technology companies in the world. Algorithmic bias and the gender data gap are two key examples of how technological advancements are reliant upon the developers that create and implement them, and these developers bring with them a host of biases that are then ultimately included in the technologies that are supposedly being designed to improve human life. When it comes to these biased

¹⁵ There are many examples of algorithmic bias in AI, and they are shown to stem from AI programmes being developed using data sets that are inherently biased towards sex and race, and because the vast number of employees working in the largest and most influential technology companies in the world are white men, these biases have not been tackled and eradicated. The lack of diversity in companies such as Google, Microsoft and Facebook has been widely documented, and continues to be a serious issue in the sector.

technologies, “human life” is presupposed to mean the lives of white men rather than humanity as a whole, and women and all other ethnic groups become the outliers in this context. Programmers use the concept of the Vitruvian Man to develop technologies that adhere to specific biases that benefit the lives and lived experiences of predominantly the white, western male, and this idea of the Vitruvian Man representing the pinnacle of humanity is one that continues to inform and influence art, culture, politics and the creation and development of ever more radical technologies.

The concept of using transhumanist principles to upgrade the traditional image of the Vitruvian Man is one that has been considered by a number of theorists and proponents of transhumanism, and Ihab Hassan in his seminal 1977 article ‘Prometheus as Performer: Toward a Posthumanist Culture?’ argues:

At present, posthumanism may appear variously as a dubious neologism, the latest slogan, or simply another image of man's recurrent self-hate. Yet posthumanism may also hint at a potential in our culture, hint at a tendency struggling to become more than a trend. The Promethean myth, after all, contains an enigmatic prophecy. How, then, shall we understand posthumanism? We need first to understand that the human form – including human desire and all its external representations – may be changing radically, and thus must be re-visioned. We need to understand that five hundred years of humanism may be coming to an end, as humanism transforms itself into something that we must helplessly call posthumanism. The figure of Vitruvian Man, arms and legs defining the measure of things, so marvellously drawn by Leonardo, has broken through its enclosing circle and square, and spread across the cosmos. (Hassan, 1977: 843)

Hassan presupposes that the Vitruvian Man does indeed define ‘the measure of things’, and whilst this may undoubtedly be true if that which is defined is the western white, able-bodied male, the Vitruvian Man is not a reflection of a significant majority of the human population. While the Vitruvian Man has been used as a model of humanity for hundreds of years, and has had a significant impact upon art, culture, health and scientific research, texts such as Criado Perez’s highlight the extent to which this measure of normal is a fallacy that has had a detrimental impact upon those that are considered to be outliers of this mode of “normality”.

There is a defined hierarchy when it comes to society's understanding of what constitutes perfection in the context of the body: 'the modern body politic is based on an image of a *masculine* body which reflects fantasies about the value and capacities of that body.' (Gatens, 1996: 25) The vast majority of key transhumanist theorists are white, middle-class men, and thus their perspective of what would constitute the posthuman ideal needs to be challenged. Whilst the abstract concept of the posthuman can be theorised extensively, the reality of constructing a posthuman ideal is fraught with problems, particularly in terms of the danger of homogenising the human species and human experience in favour of the white, western ideal. The question of whether a utopian posthumanity can be achieved if it necessitates a homogenisation of the human experience is a key consideration; if the white western ideal becomes the blueprint for the posthuman, then this would result in either the decimation of all other races, cultures and languages, or the degradation of these races, cultures and languages, as these peoples will not be presented with the same access to revolutionary technologies, and therefore the opportunity to transcend the human will not be available to a numerically significant but effectively powerless section of the human species: 'The question is whether we should fear – in this push toward greater biotechnological symbiosis – a whole new wave of inequalities: the cyber haves versus the cyber have-nots.' (Clark, 2003: 168) Cyberpunk writers respond to this potentially significant inequality by focusing to a great extent upon characters who lack the social, cultural and financial capital to be able to engage with revolutionary technologies in a controlled and sustained manner, and are therefore unable to achieve the types of embodied realities that transhumanist theorists argue are possible with the advent of transformative technologies. Whilst characters such as Cobb in the *Ware Tetralogy* do possess the capital required to engage with transformative technologies, this engagement nevertheless leads to a loss of social and cultural capital, as Cobb's consciousness is

eventually transplanted on to a moldie body, and he comes to be reviled by human citizens – including his friends and members of his own family – who are disgusted and embarrassed by his new embodied identity. Although Cobb does in essence achieve the posthuman ideal, as his consciousness is able to survive outside of his human body, and he eventually comes to inhabit a body that incorporates the very latest in technological advancements, he becomes more isolated and thus more depressed with every new iteration of life, as his technologically superior physical self leads to his humanness being disregarded by the rest of society, despite his many attempts to reassert his identity as human. This lack of acceptance of his posthuman identity leads Cobb to finally reject the concept of immortality, and he makes a request to his friends and family that he be allowed to “die”, which in reality means that he does not want his consciousness to be reanimated and transplanted on to another physical form. Cobb’s experiences of posthumanity, particularly in the context of the development of his new identities and sense of self will be considered in greater length in later chapters, as Rucker’s central character in the tetralogy exemplifies the extent to which the abstract journey to posthumanity is fraught with difficulties relating to self-expression and self-identification. Whilst Gibson and Rucker use their perspectives to focus upon cultures that, to a great extent, are relatable to their own lived experiences as white, western, middle-class writers, Effinger’s writing diverges from this very particular early cyberpunk tradition by locating the Marîd Audran series in a post-revolutionary Islamic state in the farther future. Effinger imbues his writing with cultural and religious references and a historical precedent that enables him to explore the ramifications of subscribing to transhumanist values in a traditionally religious society. Rather than focusing upon the west, Effinger’s series examines the ways in which another culture responds to transhumanist values, although it is clear in these texts that this examination still takes place from Effinger’s essentially western perspective.

Cyberpunk makes it evident that the approach of enabling the most dominant groups in society to dictate the narrative in the potential development of the posthuman will lead not to the evolution of a new posthuman species, but to a divergence between the human and the posthuman. In this case, the human will be an increasingly exploited and degraded underclass, whilst the posthuman will be able to flourish as an ever more homogenous ruling class. It is therefore important to consider the ways in which contemporary research concerning the potential future of humanity is being undertaken, by whom, and for what purpose. This includes research into gene manipulation, cybernetics, nanotechnology and other forms of radical body modification that will, according to transhumanists, lead to the eventual development of the posthuman. Cyberpunk's method, which has been to analyse this trend, has been to focus predominantly upon the consequences of this approach by focusing exclusively – at least in the early works of writers such as Gibson and Rucker – upon the ways in which this approach to the research and development of radical technologies will affect individuals in comparatively wealthy countries in the global north. Effinger, on the other hand, focuses upon individuals in a country in the global south, which has come to wealth and prominence as a result of previous wars that have led to the demise of previously powerful regions such as Europe and the US. These analyses have enabled these writers to evaluate the impact of adopting the individualistic approach to radical body modification practices in the quest for the development of the posthuman rather than focusing upon the collective endeavour, which is a trope that cyberpunk writers tend to use in their work.

The Bioconservative Argument

The focus upon the potential for a human transcendence has also been met with resistance from so-called “bioconservatives” who have worked to warn governments

and the public about the potentially negative spiritual, theological and practical implications of a universal adoption of transhumanist principles, particularly in terms of governance, healthcare and contemporary culture. Critics of transhumanism have argued that an inherent adherence to the fundamental tenets of neoliberalism in ever more technologically advanced and economically stratified societies results in the creation of systems that are ultimately more exploitative, damaging and conflicted than before:

Many assume that the posthuman world will look pretty much like our own – free, equal, prosperous, caring, compassionate – only with better health care, longer lives, and perhaps more intelligence than today. But the posthuman world could be one that is far more hierarchical and competitive than the one that currently exists, and full of social conflict as a result. (Fukuyama, 2003: 218)

Fukuyama's reimagining of a potential posthuman world takes into account the idea that the development and implementation of increasingly sophisticated forms of technology within the existing societal framework has the potential to lead to an ever more ruthless and unstable system. The various revolutions that have taken place in the societies depicted in these cyberpunk texts have not led to a breakdown and restructuring of the ways in which capitalist ideals have impacted upon these societies. The neoliberal capitalist model continues to be the system under which these societies operate, and there is an individualistic outlook in terms of the adherence to transhumanist principles. These societies do not represent the utopias that transhumanists imagine, rather, as Fukuyama predicts, the advances in technology that have come to define these societies have led to increasing levels of inequality and adversity for citizens, and increasing levels of exploitation by those who own the means of production. However, Fukuyama's assertion that the contemporary world is 'free, equal, prosperous, caring, compassionate' is one that is not shared by cyberpunk writers. Gibson and Effinger more specifically focus upon societies that are more of a

reflection of the contemporary, albeit with more advanced technology. These societies have been developed using the structure of present-day societies and governing structures as their foundation, which has resulted in the development of societies that are ever more hierarchical, unequal and exploitative. Fukuyama, and other bioconservatives like him, have a somewhat utopian perspective of the world as it stands, and consider transhumanist principles to be a dangerous concept that will lead to the destruction and the denigration of the human spirit. Cyberpunk writers write against the bioconservative view of the world in much the same way that they write against the transhumanist view of the world; both bioconservatives and transhumanists argue that it is inherently possible to create a society that is caring, kind and thoughtful, with bioconservatives arguing that this world already exists whilst transhumanists claim that this will be made possible in a posthuman techno-utopia. Cyberpunk writers disagree with both concepts, and the key assertion in these texts is that a utopian world is not possible in either case because both viewpoints dismiss the self-interested, competitive, and destructive nature of the human condition. As far as cyberpunk writing is concerned, the nature of the human condition makes it impossible for any form of utopia to exist, because the very concept of utopia would go against the desires and needs of the human spirit, which is ultimately concerned with competition, self-preservation and survival.

A number of highly influential critics of transhumanism have taken issue with the idea that adopting transhumanist principles *would* lead to the enhancement of the human condition, arguing instead that such practices would not only lead to the denigration of the soul and destroy the integrity of the human spirit, but would also disenfranchise and alienate groups, cultures and societies that are already marginalised:

In the [early 2000s] a diverse coalition of “bioconservative” groups on the left, right and center emerged to promote laws and international treaties to restrict

individuals' rights to control their own genomes. Christian conservatives began to create conservative bioethics institutions such as the Center for Bioethics and Culture and the Center for Bioethics and Human Dignity, with the struggle against the coming of "technosapiens" as their rallying cause. Bioconservative groups on the secular and environmentalist Left emerged, such as ETC Group [Action Group on Erosion, Technology and Concentration] and the Center for Genetics and Society, to argue that enhancement technologies, from reproductive technologies to stem cell therapies to nanomedicine, would exacerbate inequalities and further disempower women, ethnic minorities and the developing world. (Hughes, 2008: I-II)

This somewhat disparate group have criticised the promotion of radical technologies by theorists such as transhumanists on the basis that present-day inequalities will become further entrenched in future technologically advanced societies. This is a key concern for bioconservatives on the left of the political spectrum, because while transhumanism focuses upon the ways in which a posthuman future could potentially overcome the ravages of illness and death, they do not give consideration to the question of how any society, be it posthuman or not, will deal with the consequences of sexism, racism and wealth inequality that continues to exist despite any and all attempts that have been made to eradicate such issues, whether that is through policy, governance or education. Whilst a number of critics have heralded transhumanism's concept of the technologically imbued evolution of the human, they have nevertheless questioned the lack of consideration that transhumanists have given to potentially tackling issues of bias and inequality, with Hayles (2011) arguing that transhumanist rhetoric does not focus upon inherent social and economic inequalities that exist in the world when considering the possibility of a posthuman future, and Fukuyama asking what will happen to the people that will be left behind in the technology race:

If we start transforming ourselves into something superior, what rights will these enhanced creatures claim, and what rights will they possess when compared to those left behind? If some move ahead, can anyone afford not to follow? These questions are troubling enough within rich, developed societies. Add in the implications for citizens of the world's poorest countries — for whom biotechnology's marvels likely will be out of reach — and the threat to the idea of equality becomes even more menacing. (Fukuyama, 2009)

Cyberpunk writers do consider this question; although they predominantly focus upon either the west or societies that have adopted western values, they nevertheless consider the ways in which citizens who lack the social, cultural and material capital needed to freely access revolutionary technologies will need to navigate and negotiate with the gatekeepers of such technologies in order to be able to utilise them. The techno-utopia that is imagined by transhumanists presupposes that the development of an intimate relationship with technological advances will lead to the development of better living conditions and embodied realities for every member of such societies: ‘A techno-utopian world where selves are untethered from bodies, where bodies are transformed into pure information, has been naively envisioned as somehow creating a freer, more egalitarian world’ (Cox, 2018: 128). Transhumanists do not answer the question of who will be living in these future posthuman utopias, and there is the question of whether these future posthumans will be based upon the transhumanists’ view of what the ideal human foundation upon which the posthuman will be developed from will look like.

Transhumanism can be further critiqued because of its potential impact upon human nature and the human condition:

in the hypothetical future depicted by transhumanist thinkers we might lose what I will call the “fleshiness of experience.” When we begin to see ourselves as technological products of our own rational calculative control and creation, we face a very real danger of being *consumers* of identity (to an even deeper extent than is already the case), and we stand to lose the orientation by which we discover the need to *wrestle* with our finite nature. This struggle plays an important role in human behaviour, and the technologies advocated by transhumanists hold the promise of radically altering our relation to both our embodiment and our mortality. (Bailey, 2014: 45)

Cyberpunk provides key examples of what happens when identity becomes a consumer product to be bought and traded at will. The concept of identity becoming a consumer product is prevalent in cyberpunk, as the technologies that are available in these texts enable the characters to, in theory, redefine their embodied identities according to the types of body modification practices they choose to employ. There is a further element

of body modification that needs to be considered in this context; whilst cyberpunk does focus in depth upon bodies that are either consumer or consumed products – or both at once – there are also the bodies that are modified to incorporate modifications that will enable characters to become tools or weapons for the use of individuals or corporations as needed. There are a range of examples of this type of body in these texts, from Johnny Mnemonic’s modification into a living data port; Marid’s modifications that enable him to ignore the physiological needs of his body so that he can be the ultimate fighting machine for Friedlander Bey; and Molly’s cybernetic modifications that allow her to be used to gratify the sexual fantasies of men. The characters in these texts embody a number of the fundamental tenets of transhumanism, such as the potential for “immortality”; mastery over the biological processes of the human body; and the ability to modify memory as needed, however, these characters are either forced or coerced into employing these body modification practices. With the exception of Cobb in the Ware Tetralogy, the characters in these texts do not engage with these practices because they are interested in becoming posthuman, they are forced to engage with these practices due to a lack of social, cultural and financial capital. This lack of capital does not only lead to these characters exploiting their labour, as would predominantly be the case in a pre-transhuman world, but also exploiting every aspect of their bodies and minds in societies where human bodies are separated into their disparate parts according to their use. This separation leads to these characters becoming defined by just one aspect of their embodied selves, whether that is their mind’s data storage abilities, their body’s fighting abilities or their sexual organs. These characters are not on a quest to achieve the posthuman ideal in their engagement with radical technologies, rather, they are on a fight for survival in ever more exploitative societies. In the case of Gibson’s *Sprawl Trilogy*, a significant proportion of the citizens have a meagre existence, and corruption and criminality are rife as a result. It is not the

populace that has achieved a posthuman existence in Gibson's trilogy, but rather, the vast corporations such as Tessier-Ashpool – which have been able to expand at exponential rates due to a lack of governmental control – that have been able to achieve a form of immortality across generations. These corporations hold all of the power in the Sprawl: their leaders are immensely influential and wealthy, and have access to transformative technologies that the rest of the populace will never be able to harness or experience. The result of this immeasurable wealth in Gibson's work is that those with such capital separate themselves from the rest of humanity through their use of radical technologies, leading to a new form of existence that ceases to be regarded as human.

In terms of Rucker's Ware Tetralogy, the issue is not that the technology has not been created or that multinationals control radical technologies in the way that those in the Sprawl Trilogy do, but that, rather, transformative technology in the context of re-engineering and redefining the human is not accepted by the populace. The issues pertaining to Cobb's identity and perceived sense of self in the Ware Tetralogy relate to the fact that the majority of the people around him, be they members of his extended family, friends, or strangers, refuse to accept him as human once he utilises technology to radically alter his embodied self, and Cobb finds himself having to reassert his identity and his perceived sense of self as a human continuously. This is especially the case once he becomes a moldie in *Realware*, where, due to the fact that he has a moldie body, he is denied entry to certain establishments, is denied the use of an alla, and is not considered a citizen (and therefore not a human) by the Tongan authorities: “‘Strictly speaking, there are no Tongan moldies,” said the King. “Only a native-born flesh-and-blood Tongan can be a citizen. This isn't the U.S. with its quixotic Moldie Citizenship Act. I have to take care of my own people first. You moldies are only our guests.’” (Rucker, 2010: 633) The Tongan authorities regard the US's establishment of

the Moldie Citizenship Act as an idealistic piece of legislation that is not desired by or readily applicable to the rest of the world. A potentially utopian ideal is not achievable in reality in the Ware Tetralogy, and despite countries such as the US choosing to adopt legislation that is designed to entrench the rights of moldies as citizens – and by extension, as humans – in law, this is a piece of legislation that is not adopted or accepted by other nations. Even within the US, there are citizens who refuse to accept the rights of moldies, and groups such as the Heritagists, who decry the evolution of the moldies and do not regard them to be worthy of being given the same status as humans, gain traction. Whilst the technology in the Ware Tetralogy enables the possibility of a posthuman future, there is a clear distinction between modified – or created – and unmodified beings in these texts; as an unmodified human, Cobb was regarded as a great scientist and thinker, perhaps the greatest of his time, as his work led to the creation and development of the boppers. However, once he has undergone transformative and revolutionary body modification, his status as a human is called into question by his contemporaries. There is an ideological split between humans and non-human beings in the Ware Tetralogy, with each side believing that they are the more intelligent and evolved being, and Cobb's reality necessitates existing between the two factions. Each group considers the other to be less intelligent, less cultured and more barbaric; humans on the whole refuse to develop meaningful relationships with boppers and moldies, and boppers and moldies develop their own societies and subcultures that exist outside of human society.

In the Marîd Audran series, cultural attitudes to body modification are established by the ruling religious order, and leaders such as Friedlander Bey and Abu Adil work alongside the imams to interpret the Quran's attitude to body modification, and there is tension over the types and degree of modification that are deemed to be acceptable. Once Marîd undergoes the modifications that Friedlander Bey coerces him into

accepting, his own attitude towards these modifications begins to change, and he develops an understating for and appreciation of the possibilities that the moddies and daddies afford him. In *A Fire in the Sun*, Marîd distrusts his partner in the police force, Shaknahyi, who has not undergone any form of body modification:

My first impression of Shaknahyi wasn't so good, either. He didn't have his brain wired, and that meant he was one of two kinds of cop: either he was a strict Muslim, or else he was one of those guys who thought his own naked, unaugmented brain was more than a match for the evildoers. That's the way I used to be, but I learned better. (Effinger, 2006: 38)

This illustrates the tension that exists in the Budayeen: there are leaders such as Friedlander Bey and Abu Adil who require their workforce to submit to body modification in order to make them better fighters, and therefore better employees, whilst imams and traditional Muslims view body modification as impure or going against the wishes of Allah.

These texts make it clear that a cultural and societal shift is needed in order for a posthuman future to become possible; the technology to achieve a posthuman future does, to a great extent, exist within these texts, and there are a number of examples of these. Using Bostrom's list of posthuman capacities, it becomes clear that many of the various types of technology available in each of these texts adhere to these capacities in different ways. Gibson, Rucker and Effinger all consider the concept of a longer lifespan and even immortality in their work, and the characters in these texts work to achieve a semblance of an increased life span or immortality in different ways through the use of radical technologies.

A number of transhumanist theorists do accept that there are a number of potential issues with the concept of transhumanism that need to be addressed: Bostrom contends that whilst transhumanism has numerous potential benefits – with the potential for a future utopia being one of them – it still presents a number of dangers for the future:

While future technological capabilities carry immense potential for beneficial deployments, they also could be misused to cause enormous harm, ranging all the way to the extreme possibility of intelligent life becoming extinct. Other potential negative outcomes include widening social inequalities or a gradual erosion of the hard-to-quantify assets that we care deeply about but tend to neglect in our daily struggle for material gain, such as meaningful human relationships and ecological diversity. (Bostrom, 2005: 4)

Bostrom is aware of the significant potential for misuse that such radical technologies present, and will continue to present in the future, and the negative outcomes that he considers here range from the catastrophic possibility of the annihilation of intelligent life through to the chance that posthumans will not be capable of developing important human relationships as a direct result of the drive for technological advancement and material gain. Gibson, Rucker and Effinger consider a number of these potential negative outcomes in their texts, and the inability to develop these meaningful relationships is a key consideration in their works.

A New Eugenics?

The concept of a state or populace sanctioned collective transcendence that is aimed at achieving an idealised form of posthumanity raises questions about transhumanism's ideological foundations. Whilst contemporary transhumanists argue that they have focused upon the ways in which continuous progress can be achieved in terms of the future of humanity, which is a central tenet in transhumanism, the origins of contemporary transhumanist thought have come to be associated in part with eugenics due to the works and lives of Huxley et al. Huxley's association with the British Eugenics Society even after the horrors of Nazi Germany leading up to and during the Second World War have led critics to question the extent to which key transhumanist principles can be aligned with eugenics. When considering the works of J.B.S. Haldane,

J.D. Bernal and Hermann J. Muller¹⁶ in the early twentieth century, Thweatt-Bates writes:

The notion that humanity might transcend or technologically transform its own nature collectively, rather than sporadically and individually, in these intellectual and historical precursors to transhumanism brings with it the specter of eugenics. (Thweatt-Bates, 2012: 44)

This ‘specter of eugenics’ has had a significant impact upon contemporary understandings of transhumanism, particularly in the context of efforts to think about a collective human transcendence for the greater or common good.

When considering the concept of the common good, critics have questioned the extent to which transhumanism resembles eugenicist thought, particularly in terms of the potential ways in which disadvantaged groups in contemporary society may be treated:

Disability theorists are not convinced by the supposed differences between historical eugenicists and modern transhumanists; they argue that even under “liberal eugenics,” the message is clear that disabled lives are not worth living (McGregor, 2012: 411).

The issue here is that a number of influential transhumanist theorists approach the human body as a problem to be solved, and their analyses involve a focus upon the ways in which the body is fragile, vulnerable, and difficult to control, and the need that there is to therefore radically alter the human body in order to be able to transcend this fragility. This approach does not take into account the extent to which so-called “disadvantageous” characteristics, such as disability, are fundamental aspects of an individual’s embodied identity, and consequently depicting these characteristics as problems to be solved leads to opponents of transhumanism to critique transhumanism’s lack of appropriate engagement with contemporary body politics. Transhumanists take the medical model approach to disability, thus the social, cultural, political and financial issues associated with disability, such as lack of access to

¹⁶ Muller was a geneticist and was offered his first research position at the William Marsh Rice Institute by Huxley. He won the Nobel Prize in Physiology or Medicine in 1946.

services; lack of potential opportunities in both the workplace and society; mistreatment by wider society; and many more, are explained and understood to happen as a result of the medical diagnosis of disability, rather than being a social, cultural and political issue that arises as a result of a lack of understanding and prioritising of disabled individuals' lives and needs.

Whilst a number of key transhumanists have focused upon what are perceived to be the potential universal benefits of transhumanism, the argument that transhumanism can be used for the common good becomes a difficult one to make without this discourse sounding like a new form of eugenics. This is especially challenging given Huxley's involvement with the British Eugenics Society. Transhumanism, particularly in the context of working towards the greater and common good would necessitate defining which human characteristics, traits and abilities are deemed to be desirable and "worth" protecting, and which need to be eradicated or modified in order to achieve a posthuman future. The fundamental question here is about how these decisions will be made and by whom, and in the context of cyberpunk, corporate power far exceeds the power of governments, which raises the question of how transhumanist principles will be applied by such corporations that are essentially concerned with their own profits, interest and shareholders above all other issues. These corporations use radical technologies to modify their workers in order to make them better, more evaluable employees rather than for any altruistic concern for their welfare or for any perceived improvement of the human condition.

Transhumanists consider a posthuman future in the abstract, rather than analysing the ways in which governments and corporations will take advantage of radical technologies to create more useful, malleable and exploitable citizens and workers. When it comes to more vulnerable members of society, the question of how they will

be protected in societies that are focused upon creating a posthuman ideal is a key concern. Science fiction writers have long considered the ways in which the most vulnerable members of society are treated, particularly in societies that are undergoing or have undergone significant change, whether that is through the use of technological advances, natural disasters, war or other catastrophes, and the overwhelming consensus in the vast majority of science fiction texts is that the most vulnerable members of any society will be the ones that are most adversely affected in such instances.

Cyberpunk writers focus upon the ways in which the abstract concept of transhumanism may be applied in practice. Transhumanists consider the ways in which the human can be transcended in the abstract, but the adoption of transhumanist principles in reality would be vastly different, and dependent upon the social and political stance of the time, depending upon the nature of the idealised Vitruvian Man in any particular time period. Cyberpunk considers some aspects of the ways in which transhumanist principles may come to be adopted in societies that are undergoing periods of significant change in order to demonstrate the potential impact that the adoption of transhumanist values may have upon the human condition and society as a whole.

Conclusion

Transhumanism is a contentious and polarising concept, and its application to the works of cyberpunk writers offers an insight into the various ways in which transhumanist principles have been adopted by contemporary writers and theorists in their analyses of the ways in which the very concept of what constitutes a human being will come to be redefined and re-imagined in technologically advanced societies. Cyberpunk's approach to analysing transhumanist principles centres predominantly on this redefining and reimagining of humanity, as writers such as Gibson, Rucker and

Effinger work to analyse the extent to which the human can be modified before it comes to be viewed as both *more* and *less* than human in technologically advanced societies, with Rucker taking this one step further in the Ware Tetralogy by considering the ways in which developing seemingly conscious and autonomous beings using the latest technological advancements including revolutionary forms of biohacking will lead to a conflict between humans and the new beings they have created.

As this chapter has shown, transhumanism has been critiqued at length by writers on all sides of the political spectrum: from proponents of posthumanism who argue that transhumanism is limited due to its reliance on the existence of a capitalist framework; writers who argue that irrespective of abstract transhumanist rhetoric, access to revolutionary technology will ultimately depend upon material capital; those who assert that the very concept of transcending the body is only relevant to the most privileged members of society; and critics who assert that transhumanist ideology fails to adequately account for the complexity of human existence and the lived human experience. Cyberpunk writers consider all sides of the political spectrum when it comes to the application of transhumanist principles in their work, and they fundamentally exemplify the unknowable, uncontrollable and ultimately inconceivable nature of technology.

This chapter has considered the ways in which key transhumanist principles can be applied to the works of Gibson, Rucker and Effinger as a whole, and the subsequent chapters in this thesis focus upon specific aspects of transhumanism and radical body modification in these cyberpunk writers' texts to analyse the extent to which the posthuman dream is possible in the cyberpunk universe. A key aspect of this analysis is concerned with the myriad ways in which the body is consumed and commodified in these cyberpunk texts, and this is the central focus for the next chapter.

Chapter Two

Transcending the Meat: the Consumer, the Commodity and the Cannibal

‘All the meat [...] and all it wants.’¹⁷

The fragility of the human body is a key focus of transhumanist discourse (Bostrom, 2009; More, 2011; Saniotis, 2012; Waters 2014), and this is a concept that is a focal point for the cyberpunk texts in this thesis. It is necessary to overcome the fragility of the body in these texts; the inherent vulnerability associated with the natural human body in conjunction with the ephemeral nature of the human existence presents a key concern for both transhumanists and cyberpunk writers. The body – whether modified or not – is a symbol which has come to represent both concerns regarding the future of humanity as well as the changing nature of humanity’s relationship with technology. The body is at the forefront of these changes, as the characters in these cyberpunk texts use their bodies as canvases upon which they are able to experiment with radical technologies that will enable them to partake in a culture of body modification that has permeated every aspect of the societies in which they live. Through their bodies, individuals in these texts are able to demonstrate their changing relationships with their embodied selves, as radical body modification practices require a continuous reassessment of the individual’s relationship with their embodied identity. Tensions relating to body modification are reflected in the wider discourse concerning the continuous development and use of radical transformative technologies, and these

¹⁷ (Gibson, 1995: 17)

cyberpunk texts use the body as the focal point for discussions relating to the status of the human in ever more technologically advanced societies. In these texts, the body has become a problem to be solved. The body itself has become a symbol upon which the social, cultural and economic capital of its owner is displayed; however, rather than this display taking the form of clothing, jewellery or other accoutrements, the body has become the ultimate status symbol, it has become the symbol of humanity's potential triumph over the ravages of aging, ill health, and eventual death.

These texts make it clear that while the potential to overcome the transient nature of the human existence has the capability to exist, the societies in which these texts are set are not able to harness the truly ground-breaking possibilities afforded by revolutionary technologies – both in terms of the potential to transform the individual and society as a whole – due to the increasingly hierarchical and exploitative structures that continue to exist in these societies. As a result of this, the characters in these texts are forced to commodify their bodies and minds in ever more exploitative ways in order to be able to participate in societies that demand citizens have increasingly intimate relationships with radical technologies. This chapter focuses upon what happens to characters in these cyberpunk texts who either choose to or are coerced into commodifying themselves in their pursuit of radical body modification, especially in terms of what happens when the natural human body, and human flesh in particular, becomes an object of shame, disgust and fear as a result of changing perspectives on the unmodified human body. These changing perspectives in cyberpunk not only lead to such negative connotations about the body, but they also challenge the privileged status of the human being that has come to dominate contemporary society. Transhumanists not only challenge the status of the human, they reject the concept altogether: 'transhumanism and posthumanism have in common that they both reject the categorically special status of human beings which has been connected with

humanism.’ (Sorgner, 2013: 86) These cyberpunk texts analyse the extent to which this re-evaluation of the human, particularly in terms of its status, leads the societies and characters that are depicted in these texts to both distance themselves from the natural, fragile and vulnerable human as well as to devalue the human body and human flesh in their pursuit of technological transcendence.

Meat in the Machine

The relationship between the human and the machine is an inherently contentious one in cyberpunk; the characters in these novels develop ever more destructive relationships with their bodies – whether technologically enhanced or not – and the vast majority of these characters increasingly come to view the natural body as a problem to be solved rather than as an acceptable corporeal identity. This negative approach to the unaltered body is encouraged by global conglomerates that have made it their business to create a culture in which these characters’ identity and sense of self are intrinsically tied to their ability to overcome the fragility of the natural body in favour of partaking in ever more invasive and transformative body modification practices. Rather than being considered an acceptable form of life, choosing to remain unaltered in the vast majority of cyberpunk texts comes to be viewed with pity, derision, and even suspicion. This lack of understanding of, and appreciation for, the unaltered body can be found in a vast number of cyberpunk texts, and there are many examples where a character’s decision not to alter their body is questioned. In Pat Cadigan’s *Mindplayers* (1987) for example, when Deadpan Allie’s boss, Nelson Nelson, realises that she has not modified her eyes, he remarks: “‘You don’t see a lot of people wearing the eyes they were born with any more. I thought maybe you were queer for organics or something.’” (Cadigan, 2000: 104) Nelson Nelson is perplexed by Deadpan Allie’s lack of ocular modification, and this leads him to wonder if she has a fixation with

maintaining a natural body that would be deemed to be strange and nonconformist to the status quo, and as her employer, he is keen to establish whether Deadpan Allie's politics aligns with both his own and that of his company. Both Gibson's *Sprawl Trilogy* and Effinger's *Marîd Audran* series adhere to the idea that those who choose not to take part in body modification practices are not conforming to the overriding culture of embodying body modification principles, whereas Rucker's *Ware Tetralogy* takes an alternative approach. Whilst there are characters and groups of people in Gibson's and Effinger's texts that dismiss and distrust radical body modification practices – such as Corto in Gibson's *Neuromancer* and, initially, Marîd in Effinger's series – in Rucker's texts, the vast majority of the human inhabitants of both earth and the moon refuse to engage with technologies that have been designed to radically modify the body, because there is the sense in the tetralogy that to modify the human body to any great extent would lead to the questioning of an individual's humanity. Whilst the technology to radically modify the body is available in the *Ware Tetralogy* – as evidenced by Cobb's experiences – the majority of the humans in the tetralogy resent the technological advances that have not only led to humans being able to modify their bodies, but have also led to the development of two new races of sentient beings capable of conscious thought – the boppers, and later, the moldies. The development of the moldies in particular represents a significant shift in the humans' understanding of consciousness and sentience in the *Ware Tetralogy*, and in the context of Rucker's texts, the arrival of the moldies heralds a new chapter in the history of the world. Much like Raulerson's description of the long-expected Singularity being 'an epochal event – a rupture so abrupt and radical that it cannot be comprehended except by those who experience it directly' (Raulerson, 2013: 4), the development of the moldies over a relatively short period of time results in a state of confusion and tension whilst humans and moldies attempt to work out how to coexist. This epochal event takes place when

mould is released into the boppers' Nest on the moon, and this form of biowarfare leads to the initial development of moldie flesh, and later, to a new race of beings that have the capability to think critically, emote as humans do, and reproduce both "sexually" and asexually.

The tensions that arise as a result of the development of the moldies are twofold: firstly, humans become concerned that the moldies are in the process of attempting to take over and become the dominant species on earth. In *Wetware*, Cobb envisages a potential future in which the technology he has helped to create will lead to a further evolution involving the boppers: 'what if the bopper phase was just a kind of chrysalis for a new wave of higher humans? What a thought! Bopper-built people with wetware processors! Meatbops!' (Rucker, 2010: 199) Cobb's question is answered in *Freeware* with the arrival of the moldies; beings who are capable of feeling and thinking in the same way as humans, but whose flesh is stronger, more malleable, and less prone to damage and the ravages of age than human flesh. The fear that the moldies may attempt to overpower humans and become the dominant race on earth is further compounded in *Wetware* during a discussion between Cobb and Berenice, a lab worker, where Cobb asks why there would be a need to switch back to having bodies made of human flesh when the available technology is so much more advanced: "If we can live on Earth like this, then why bother switching back to meat?" (Rucker, 2010: 199) Berenice responds: "Because it would put the stinking humans in their place [...] We want to beat them at their own game, and outbreed them into extinction." (Rucker, 2010: 199-200) It is accepted by society that there is the potential to create a new being that will challenge the superior status of the human being on earth, and in *Software* and the subsequent texts in the Ware Tetralogy, boppers are working to create this being that will have the consciousness and sentience of human beings but with infinitely superior physical forms, as Berenice is working to do in *Wetware*: 'She and the other

tankworkers were trying to find a way to put bopper software onto all-meat bodies and brains. Their goal was to merge bopperdom into the vast information network that is organic life on Earth.’ (Rucker, 2010: 169) The moldies are the new, superior being that the boppers envisaged in *Software*, and their arrival has a significant impact upon the human population. Rather than working to enhance the human body using revolutionary technology, Rucker’s texts focus upon the development of a new type of far superior flesh that has the potential to accommodate both new beings using bopper consciousness as the foundation, and human consciousness such as is the case with Cobb’s transplants, without having to contend with the inherent fragility associated with the human body. The boppers contend that what they envisage is a new type of evolution, as Manchile, who is the first robot-built human says to Willy Taze in *Wetware*:

“All the boppers really want is access. They admire the hell out of the human meatcomputer. They just want a chance to stir their info into the mix. Look at me – am I human or am I bopper? I’m made of meat, but my software is from Berenice and the LIBEX library on the Moon. Let’s miscegenate baby, I got two-tail sperm!” (Rucker, 2010: 220)

Manchile makes it clear that he is aware that he is asking for a joint evolution, and his statement about having two-tail sperm denotes that he considers himself to be an amalgamation of both human and bopper; Manchile represents the initial stages of a potential evolutionary ideal. He is made of flesh and has sentience and is capable of conscious thought, however, he has been created by boppers using data and algorithms on the moon, and represents the very latest advances in technology.

In terms of the moldies, whose creation is somewhat accidental as it is the result of biowarfare, the point at which the mould is realised into the Nest signifies the point at which the limits and regulations set by the humans on bopper technology is irreversibly changed. Mould and algae represent biological systems that are able to reproduce at an exponential and uncontrollable rate, and the merging of technological and purely

biological plant matter – rather than human matter as is often the case in science fiction – represents the point at which humans are unable to dictate or keep up with the rate of change of the technology that they initially created. The “birth” and development of the moldies represents a new form of symbiotic evolution – that between technology and plant matter rather than technology and human flesh – and does not require human involvement in order to be created, maintained or controlled, and as such, the humans are required to work retrospectively in order to develop the legislation necessary to deal with a new life form. Whilst in countries like the US, moldies are given citizenship, moldies are seen by certain countries and cultures to be a separate life form from humans, and thus undeserving of human privileges. The moldies are retrospectively granted rights as citizens in countries like the US when it becomes apparent that they possess the same faculties as humans do in terms of intelligence, consciousness and sentience. This retrospective granting of rights is another example of where the rate of technological advancement has far superseded attempts at controlling and legislating for these developments, and texts such as the Ware Tetralogy work to highlight – much like Gibson’s and Effinger’s writing – that when it comes to checks, balances and legislation, governments struggle to keep up with advances in radical technologies that work to fundamentally alter the very fabric of societies that are ill-equipped to deal with significant changes to the lives of citizens.

While the moldies are initially created using bopper technology and biowarfare, they come to have more in common with Raulerson’s description of an epochal event akin to the Singularity, because it becomes possible for them to reproduce outside of human control. Moldies come to be able to reproduce either “sexually” or asexually:

Ordinarily, moldies reproduced in pairs, each acquiring half the necessary imipolex for new scion and each contributing about half of the newborn’s nervous system and software. But [...] a moldie could reproduce all alone. If you gave a moldie a seventy kilogram chunk of imipolex, it could replicate itself

in seconds – provided it hadn't done so within the last six months. (Rucker, 2010: 642)

While moldies do have significantly short life spans if they do not refurbish or replicate themselves using new imipolex, which is a form of intelligent, lab-grown flesh, they nevertheless are able to control their own reproduction, and could, in essence, be immortal if they are able to afford to buy new imipolex as needed. The stumbling block for the moldies, however, is the same stumbling block that all characters who wish to modify themselves face in cyberpunk: financial capital. The vast majority of the moldies are employed in lower-paid roles such as in the service industry, and as such, their ability to purchase enough imipolex as needed, whether that is for the purposes of reproduction or rejuvenation, is extremely limited, meaning that they, on the whole, have very short life spans. As with the vast majority of cyberpunk texts, the technology exists and is available, however, individuals require significant amounts of financial capital in order to be able to have access.

Rucker's Ware Tetralogy focuses upon both the immediate and longer-term aftermath of fusing technology with animal and plant matter, and focuses upon what happens when the privileged status of the human is questioned by the creation and arrival of another being. The characters in the tetralogy that work to convince the population that there is little difference between humans, boppers, and eventually moldies do so by asserting that the human's privileged status can also be re-evaluated, as Willy says to his aunt, Amy, in a discussion about whether or not boppers should have the same rights as human beings: "“You're just a machine too [...] You're just made of meat instead of wires and silicon.”" (Rucker, 2010: 160-161) As advances in technology become ever more transformative and revolutionary, the distinction between the human and the non-human becomes increasingly hazy, and in the same way that human qualities become attributed to non-human beings, such as moldies in the Ware Tetralogy,

humans come to be described and designated using terms and expressions that have hitherto been solely used for non-human beings and inanimate objects. Humans in these cyberpunk texts come to be viewed as simply no more than a sum of their parts, whether that is in terms of their bodies or their minds; they become simply meat and bone in the way that, as Willy describes, machines are comprised of wires and silicon. In cyberpunk, flesh becomes data and data becomes flesh: flesh becomes imbued with and invaded by technology and data, and a new, enhanced, bioengineered flesh is created as a result. Flesh – particularly human flesh – is no longer an inert and universally understood substance in cyberpunk: it is colonised, disrupted and commodified according to the tenets of the increasingly unequal and exploitative capitalist systems that the characters in these texts find themselves in. When considering the concept of “data made flesh” in Gibson’s *Neuromancer*, Hayles states:

The metaphoric slippages between urban sprawl, computer matrix, and biological protein culminate in the final elliptical phrase, “data made flesh.” Information is the putative origin, physicality the derivative manifestation. Body parts sold in black-market clinics, body neurochemistry manipulated by synthetic drugs, body of the world overlaid by urban sprawl – all testify to the precariousness of physical existence. If flesh is data incarnate, why not go back to the source and leave the perils of physicality behind? (Hayles, 1999: 37)

Hayles’ question about why it is that the physical is not left behind in these texts is an important one, and is one that has been analysed at length by Rucker in particular. Whilst the technology exists that can in practice enable characters like Cobb to “exist” on storage devices and interact with the world without a physical body, Cobb nevertheless desires a physical body, and continuously references his changing embodied identity across the four novels. At the end of *Realware*, Cobb asks that his consciousness is not transplanted on to another body, thus in essence requesting that he be allowed to die, as he has become disillusioned with the way that he is treated by a society that still views boppers, and then moldies, as being fundamentally inferior to humans. Cobb does not envisage a future in which he can exist without a physical body,

therefore his desire to remain inert in storage rather than exist in any form of cyberspace signals his rejection of a disembodied existence. This rejection acts as Cobb's second death; his first death took place at the moment in which he agreed to the boppers' plan to upload his consciousness to a bopper body, and his second death comes at the point in which he accepts that the Cobb that once existed cannot be replicated regardless of how advanced and radical technology has become in the intervening years. With the Ware Tetralogy, Rucker in essence answers a key question that has been considered by transhumanists for a number of years, whether data can replace flesh: 'It is debatable whether or not a mind made of software can ever be the same as a mind based in flesh.' (Rothblatt, 2013: 317) Rucker considers this debate in his writing, and the conclusion in terms of Cobb's experiences is that data cannot replace flesh. While Cobb's experiences of having his software uploaded onto new, technologically advanced bodies is initially a positive one, he quickly becomes disillusioned with his new embodied identities, particularly because it leads to those around him questioning his status as a human being and in some cases making the argument that he does not have the same rights as human citizens. The concept of embodiment is an important one in cyberpunk, especially in terms of the characters' experiences of existing in cyberspace for extended periods of time. While characters such as Case in *Neuromancer* purport to prefer to exist in cyberspace, they are nevertheless required to engage with their physical bodies, and are not able to escape from the basic needs of their corporeal selves for extended periods of time.

In every case, despite the countless new technologies that exist in these texts, and the many ways in which they have been designed to, in theory, overcome the innate vulnerability of the human body to illness, disease, and ultimately death, they nevertheless fail to fundamentally alter the innate fragility of the body. At every juncture, the characters in these texts are required to confront the fragile and vulnerable

nature of their corporeal selves. Despite cyberpunk's focus upon technologies that are designed, in theory, to overcome the inherently delicate nature of the human body, in practice, these technologies do not achieve these aims, and in a number of cases, work to further highlight the extremely vulnerable nature of the human form. In an interview with Gibson, McCaffery states: "There are lots of scenes in both *Neuromancer* and *Count Zero* that are very moving from a human standpoint. Beneath the glittery surface [of] hardware is an emphasis on the "meat" of people, the fragile body that can get crushed so easily." (McCaffery, 1991: 280) The fragile "meat" bodies of cyberpunk are ever more susceptible to getting crushed, particularly in societies that are increasingly unequal and exploitative. The characters themselves do not draw parallels between their undeniable exploitation and the societal structures in which they exist.

Despite these inherently hierarchical and exploitative societal structures, a number of the characters in these texts embrace the potential of revolutionary technologies, and work to define and redefine themselves using their bodies as a canvas, and the myriad body modifications that are available in these societies enable their owners to attempt to utilise technology to create new embodied realities. Whilst the characters in these texts interact with radical technologies in many ways, and to greater and lesser extents, it is clear that each society is significantly and irrevocably changed as a result of a widespread acceptance and utilisation of revolutionary technologies. Whilst these technologies are not limited to those that focus upon body modification, it is the subject's intimate relationship with technologies which leads to a reconfiguration of embodied identities that is a key concern for cyberpunk writers. In ever more technologically advanced societies, the unmodified body represents a state of fragility that becomes culturally unacceptable; body modifications become not only a status symbol as they allow the individual to demonstrate their financial and cultural capital,

they also represent a sense of power and dominance over the natural world that is deemed as infinitely desirable.

A number of theorists focusing upon the future of humanity in the context of radical technologies have argued that revolutionary body modification practices will be employed by people at the point in which their natural bodies need them: 'Expanding our senses, enhancing our physical powers, or enlarging our minds is seductive, but until our flesh loses its vitality or becomes diseased or damaged, few of us want to replace it.' (Stock, 2002: 29) Stock's assertion that for the most part individuals will only want to replace their flesh when it has been damaged in some way goes against both cyberpunk and the work of key transhumanist theorists such as Bostrom and More, who argue that transcending the fragile human body is a key aspect of a potential posthuman future, and will be a necessary aspect of the posthuman revolution regardless of whether an individual's natural body has succumbed to the ravages of illness or disease at the point of transformation. In terms of cyberpunk, the unaltered body is derided for its *potential* to succumb to illness, disease and death by a vast majority of the characters in these texts, and they work to overcome the natural processes of the body in an effort to display their mastery over their flesh. The natural processes of the body, particularly in terms of the effects of time in respect to aging and eventual death, are a key concern for the characters in these texts, because this fundamentally disturbs the concept that humans have a higher status and exist on a higher plane than other animals on the planet: 'The dissolution of the human form, its slow, agonized decline into mere animal or matter, figures the breach of psychic and cultural categories.' (Tromanhauser, 2019: 19) Upon death, the human becomes simple matter, much like every other previously living being, whether it be plant or animal matter, and the human's consciousness, identity, memories and sense of self cease to be of any importance as the body begins to decay.

Gibson, Rucker and Effinger all focus upon different aspects of this fragility that is associated with the body, and aspects of this discourse invariably focuses upon notions of disgust and exasperation with the natural human form. The inherent fragility of the body is a key aspect of these texts, and is an aspect of the human experience that is becoming increasingly more widely studied and accepted. There is a concerted effort to transcend the banality of the unaltered body in these texts, and this feeds into the transhumanist ideal of moving beyond these trivialities of the human experience in order to ascend to a higher plane of existence. While the abstract concept of technologically advanced body modification is viewed as a positive necessity by characters such as Marîd and Case, these texts make it clear that there is a fundamental lack of control in regards to the human body: technological advances do not make it easier to control either the physical or physiological processes of the human body nor the psychological or emotional states of the mind. The body and the mind do not respond to technological interventions with detachment or ease: there is a continuous sense of conflict between the natural and the technological in these texts, and the characters that engage with technological interventions experience varying degrees of physical, psychological and emotional harm either as a direct result of engaging with these interventions or as a result of needing to partake in exploitative industries in order to have the financial capital needed to access revolutionary technologies.

These cyberpunk texts represent the transitory, or transhuman, phase of human evolution as imagined in the writing of Bostrom et al, and the characters in the vast majority of cyberpunk texts experience significant levels of pressure to submit to changing their bodies in order to conform to the expected and acceptable standards of body modification that are apparent in their societies. Having a modified body is an important status symbol in cyberpunk, because it signifies that an individual is at the forefront of change and revolution; they are working to accelerate the evolution of the

human into the posthuman ideal that is being imagined by contemporary transhumanists. In the same way that having an altered body signifies a person's rank in these texts, having an unaltered body also provides an insight into an individual's standing in their community. Body modifications – whether superficial or profound – are so ubiquitous in the works of Gibson and Effinger in particular, that those characters who are unmodified are viewed as either being unable to engage with radical technologies, or unwilling to engage for the purposes of making a political statement about such technologies. With the majority of the characters in Gibson's and Effinger's texts, they lack the finances to engage with radical technologies in systematic and sustained ways, and as such are at the mercy of both their employers and the companies that offer these modifications in order to be able to afford to engage with transformative technologies. In terms of those characters who choose not to partake in body modification practices, even if, as is the case with Marîd, this stance changes during the course of the texts, the inference is that these characters are not embracing revolutionary ideals and are standing in the way of the progress of both the human condition and society as a whole.

Flesh and Disgust

The conflict between the natural and the artificial – or technological – in cyberpunk is represented by the sustained references to the body as “meat”, with the concept of the body being just meat being posited as a negative trait by a significant number of the characters in these texts. This sense of dysphoria in the context of the natural body is encouraged by the conglomerates that not only rely upon the body modification industry for their profits, but also need a steady stream of employees who are willing to engage in increasingly physically, psychologically and physiologically dangerous work in order to be able to afford to partake in the types of body modification practices

that have come to be deemed necessary by those characters who wish to participate in the various cultures and subcultures that exist in these societies. In *Neuromancer*, Case views his natural body with a sense of revulsion, as his flesh serves as a permanent reminder of his lack of control over his embodied reality; he is not able to control his physical self or the physical spaces he inhabits in the way that he is able to control his disembodied self in the physically liberating environment of cyberspace. He works to try and separate his unwanted embodied reality from the desired environment that exists for him in cyberspace, and he views his body as a point of vulnerability and potential failure that must be transcended. At the start of the novel, Case has been fired from his job as a cowboy hotshot on account of his theft from the company, and has been injected with a neurotoxin as punishment by his ex-employers. As such, he has lost his status as a cowboy hotshot and is required to once again confront the limitations of his damaged body, and he keenly feels the loss of his status. There is a desire to reach a higher plane, both spiritually and in terms of technological advancement, and this contempt for the flesh arises out of Case's need to reaffirm his relationship with the technological advances that underpin the very fabric of society in order to once again become one of the revered cowboy hotshots. Case transcends the "prison" of his flesh through both immersing himself in the physically liberating and socially emancipating medium of cyberspace and using and abusing drugs designed to take users on to a seemingly higher plane of consciousness. Case needs to partake in both of these acts in order to provide himself with an authentic form of embodied reality and the moments in which he is reminded of the prison of his flesh serve to anger and disgust him. Case has an antipathy towards his embodied reality, and his references to the flesh of his body illustrate the extent of his detachment towards his embodied identity. The body, for Case, is an uncontrollable, animalistic entity, and the desires associated with the body, both in terms of the general physical and physiological needs

as well as psychologically and emotionally charged desires work to highlight the extent to which he has been unable to achieve his ultimate goal of ascending on to a higher plane of existence. Case must continue to traverse through his physical, psychological and emotional needs regardless of both the increasingly lengthening amount of time he spends in cyberspace and his overwhelming desire to inhabit an ever more technologically sophisticated environment. Case's use of drugs – much like Marîd's use – serves to enable him to overcome what he perceives to be the physical barriers that limit his ability to transcend his embodied reality.

Case's work in cyberspace enables him to move beyond the limitations of his physical body; Case considers himself to be a console cowboy, and he is wary of using any type of technology that would detract from his status as a hacker: 'Cowboys didn't get into simstim, he thought, because it was basically a meat toy.' (Gibson, 1995: 71) As far as Case is concerned, there are those who have to rely on their meat bodies, and those, like Case, who are able to transcend the meat altogether and exist on a higher plane. Cyberspace allows Case to elevate himself beyond the limits set by the natural world, and he distinguishes himself from others based upon their engagement with cyberspace in particular, and other forms of radical technologies in general. Cyberspace represents a domain that is free from physical and social constraints where individuals are able to transcend their physical selves in a sphere that sits outside of normative social conventions:

There is no need to take your loathsome mortal body with you; in cyberspace, your mind can wander freely. There is no need to be tied to your real-life social relations; you can have a different social identity and make new friends, who can be physically located anywhere on the planet. Unconstrained by social or physical limits, the user reaches a romantic-religious liberation. Thus, the user desires a kind of transcendence by technological means. Even the biological body is transcended, or so it seems: in true (neo-)Platonic fashion one is liberated from the constraints of the body, that repulsive prison. (Coeckelbergh, 2017: 139-140)

Coeckelbergh considers what cyberspace has come to represent to a contemporary user: it is a space that allows the user to have a transcendental experience that poses no limits – physical or otherwise. In the 1980s, cyberspace represented an uncharted territory, a new, alternative space in which cowboy hotshots like Case are free to digitally recreate themselves according to their desires, and be a part of and exploit new technology regardless of cultural or financial capital.

While at the start of *Neuromancer* Case refuses to acknowledge the importance of his embodied identity, as he becomes aware of both Armitage's and Corto's shared history during the course of the mission and also witnesses the death of Ashpool – who in essence, rejects a form of cryonic immortality – Case comes to develop a deeper understanding of, and appreciation for, his physical body. *Neuromancer* ends with Case developing a new understanding of his embodied self, as *Neuromancer* enables him to temporarily hallucinate that he is living a simple life on a beach with Linda Lee, who has returned from the dead. Case encounters Linda Lee, his ex-lover who was killed at the start of the novel, on the beach courtesy of *Neuromancer*, and this meeting results in him questioning the extent to which the embodied self can be transcended through technology:

It was a place he'd known before; not everyone could take him there, and somehow he always managed to forget it. Something he'd found and lost so many times. It belonged, he knew – he remembered – as she pulled him down, to the meat, the flesh the cowboys mocked. It was a vast thing beyond knowing, a sea of information coded in spiral and pheromone, infinite intricacy that only the body, in its strong blind way, could ever read. (Gibson, 1995: 284-285)

The body here is given an alternative, amplified status: the body here becomes a site of indecipherable knowledge, a site of memory, love and understanding that cannot be replicated by machines or algorithms. At the end of *Neuromancer*, Case uses the money he has earned to replace his pancreas and liver so that he is able to metabolise drugs

once again, and he is able to once again actively choose the type of embodied reality he wishes to live in, rather than having the choice made for him by his employers.

Transhumanists focus to a great extent upon the inherent vulnerability of the natural human body, and the desire to move towards posthumanism necessitates a focus upon the ways in which this fragility can be overcome. However, leading theorists such as More argue that transhumanists are not disgusted by the natural body, but rather, are occupied with improving a naturally fragile system:

Transhumanists do seek to improve the human body, by making it resistant to aging, damage, and disease, and by enhancing its senses and sharpening the cognition of our biological brains. Perhaps critics have made a flying leap from the idea of being dissatisfied with the body to hating it, despising it, or loathing it. In reality, transhumanism doesn't find the biological human body disgusting or frightening. It does find it to be a marvellous yet flawed piece of engineering. (More, 2013: 15)

Whilst transhumanists such as More make the argument that those who wish to transcend the limitations of the natural body do not do so out of a sense of disgust, cyberpunk works to analyse the ways in which such critical rhetoric regarding the fragility of the natural body can have a significant impact upon the ways in which the human body is regarded and treated in technologically advanced societies. These texts take the most important principle of transhumanism, which is the need to transcend the limitations of the natural human body, and apply it to technologically advanced civilisations that are, to all intents and purposes, a mirror of contemporary societies, with the writers having amplified the extent to which the global corporations in these texts control these societies instead of governments and other public institutions. The societies in these texts are controlled and manipulated by vast conglomerates that dictate the social, cultural and political customs of the populace, and this results in the development of a fixation upon the implementation of body modification practices that are designed to transcend the human.

Cyberpunk takes this idea of transcending the human and analyses what this will mean in practice for the characters in these texts – primarily that for a significant subsection of society, the notion of transcending the human will become synonymous with body dysmorphia:

Disgust at the reality of existing in an intrinsically vulnerable and fragile state of being is apparent in the experiences of the characters in these texts: “‘meat’ typically carries a negative connotation [...] It is an insult to be called meat in these texts, and to be meat is to be vulnerable. (Springer, 1999: 39)

The reasons for this disgust and exasperation are manifold, and can include an awareness of the inherent fragility of the body; a fear of the effects of aging, both in terms of the aging of the physical body and its effects on mental acuity; concerns regarding illness and disease, and the potential disabling properties of both; and, perhaps most significantly, the fear of eventual decrepitude and death. These concerns lead to subjects developing a relationship with radical technology that can be both life-changing and liberating on the one hand, and exploitative and destructive on the other. The notion of disgust in the context of the body has been considered at length by a number of theorists, with Mary Douglas’ seminal text *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (1966) providing key analyses of how societies deal with the idea of “dirt” and “filth”, particularly within the contexts of lifestyle, rituals and theology. This idea of dirt or filth being a disruptive force in society has been taken forward by theorists such as Julia Kristeva in order to consider how this can be applied more specifically to discussions around the disruption of order and the transgression of boundaries in the context of abjection: ‘Kristeva takes from Douglas [...] the proposal that what each society calls ‘filth’ is that which threatens a social or moral order.’ (Goodnow, 2014: 47) Kristeva’s work on abjection was influenced by Douglas’ writing on pollution (Schippers, 2011), and Kristeva’s writing builds upon Douglas’ text in its focus upon this disruption of social order. In the context of

cyberpunk, this disruption is most keenly felt in the inability to control the human body. The body is impervious to control in these texts, it is a site of abjection, the causes of which, as Kristeva states are 'what disturbs identity, system, order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite.' (Kristeva, 1982: 4) The body in these texts does not adhere to the rules or systems associated or developed in conjunction with the technologically advanced societies that they exist in, thus the body remains the link between the contemporary technologically evolved society and the past technologically naïve one. The body is a disruptive force in these texts, and these characters are required to negotiate with their bodies in order to circumvent the sense of fragility and vulnerability that exists in relation to the body in cyberpunk. The characters in these texts are required to negotiate with their bodies in order to recreate new embodied identities, and these new identities are at once radically transcendent and repressively primitive. An intimate relationship with technology does not necessarily lead to a pared down relationship with the body, but can, instead, work to further complicate this relationship. Gibson analyses this complicated relationship in *Count Zero*, where Joseph Virek, a wealthy businessman who exists within a set of computer simulations, is required to still have a tenuous connection with his physical body, as he says to Marly during her job interview, which he has arranged to take place in a simulation of Güell Park in Barcelona: "'You must forgive my reliance on technology. I have been confined for over a decade to a vat. In some hideous industrial suburb of Stockholm. Or perhaps of hell.'" (Gibson, 1995: 25) Joseph associates the reality of his new form of existence with that of hell; because he has not been able to transcend the body using the available technology, he has instead made himself susceptible and vulnerable, as his body remains dormant within a vat that he is not able to physically control. Later on in the novel, he further describes his physical location in Stockholm: "'When I last requested a remote visual of the vat I

inhabit in Stockholm, I was shown a thing like three truck trailers, lashed in a dripping net of support lines.” (Gibson, 1995: 243) Whilst the unaltered body is seen as a site of disgust, Gibson’s texts make it clear that radical technologies have not enabled people to move beyond the physical – the meat of their bodies – but rather, they have had to develop an ever more complicated and ever more chaotic and troubling relationship with their corporeal selves.

The meat of the body is posited as a negative consequence of embodied reality in these novels, and there is a focus on overcoming the limits posed by this meat by embracing invasive technology that has the potential to radically alter the makeup of the human form in order to create a posthuman future in which the fragility of the human form will no longer be a concern, and the information required to create this future will be readily and easily removable from the meat it is contained within: “‘The soul is the software [...] The software is what counts, the habits and the memories. The brain and the body are just meat.’” (Rucker, 2010: 62) Much like the Ware Tetralogy, the Marîd Audran series is concerned with separating the biological from the technological, and Marîd, whilst initially concerned with the potential ramifications of using cybernetics, comes to embrace the technology that enables him to circumvent the physiological needs of his body. This is particularly evident in *The Exile Kiss* when he becomes lost in the desert with Friedlander Bey and uses his moddies and daddies to avoid feeling the extreme thirst, hunger and fatigue that would otherwise have killed him had he not been cybernetically modified. Marîd’s appreciation for the cybernetic modifications becomes further apparent after the particularly gruelling mission, when an attempt is made by one of his rescuers to remove the particular moddies and daddies he has been using, and Marîd is overwhelmed by the rush of both emotions and physical symptoms that had hitherto been suppressed, as he states: ‘the daddy had told my brain and the meat part of me to ignore injury and fatigue’ (Effinger, 2005: 229). Marîd begins to

compartmentalise his body, and thus his relationship with his embodied identity, as he comes to view the natural and technologically-infused parts of his body as separate entities that are required to work together in order to enable him to utilise his body as needed. Much like Case in *Neuromancer* and Cobb in the Ware Tetralogy, Marîd's sense of his own identity becomes dependent upon the body modifications that he embodies; he becomes the living manifestation of the very latest in radical technologies, and he eventually comes to revel in his new corporeal identity. As Marîd comes to embrace his new modified body, his sense of his pre-modified identity is called into question, and he comes to regard the unmodified aspects of his body with a sense of disdain, as they represent not only the lack of control that he has over his own body, but that his status as the physical embodiment of revolutionary ideals is tenuous due to his dependence upon his fragile, meat body. Effinger's focus on the body as meat illustrates, much like Gibson's does, the ways in which the human body in its natural state is downgraded in a techno-centric society: there is a significant dichotomy between the altered and the unaltered body, and cyberpunk writers as a whole work to question how the human body will come to be categorised in increasingly technologically advanced societies. These texts exemplify the extent to which the need to suppress – and more importantly transcend – the meat of the human body lies at the forefront of transhumanist thinking. The unaltered body presents transhumanists with an opportunity to create a revolutionary new form of humanity, and the continual evolution of technology necessitates the continual evolution of humanity's relationship with revolutionary and transformative technologies.

In the Ware Tetralogy, Rucker considers the ways in which those who have embraced technological advancements will need to re-evaluate their relationships with both their modified selves and those around them. Cobb's experiences as an unaltered human are vastly different from those as first a bopper and then a moldie, and he undergoes periods

of adjustment in every new iteration of his embodied self. Whilst he is initially perturbed by his new form in *Software*, he begins to develop an appreciation for his changing form, as he is able to perform physical feats that he was incapable of doing with his unaltered body. The most revolutionary of these is the fact that he is able to exist in different physical forms across a significant period of time; Cobb achieves, to some extent, the transhumanist ideal of immortality. Initially, Cobb works to reassert his status as the respected founding father of the boppers, but over time it becomes clear to him that he must accept the changing nature of his identity, and thus his status within his community, resulting in him coming to the realisation in *Realware* that it may be more beneficial to be a moldie than a human: “‘I’m starting to think that being a moldie is better than being flesh and blood’” (Rucker, 2010: 650). Having tried to reassert the status he had in his unaltered form, Cobb begins to question the necessity of clinging on to this identity. Cobb’s moldie body enables him to perform physical feats that an unaltered individual would find impossible to achieve, and he does not feel the effects of old age in the way that he did prior to his initial upload. Cobb is able to continuously alter his physical form as the technology he initially developed becomes ever more sophisticated, and he responds to these technological breakthroughs by embodying the physical forms that are being made possible over time.

Large sections of society in the Ware Tetralogy refuse to engage with moldies as a result of the revulsion they feel at being in close proximity with moldie flesh, which is, arguably, a far more technologically advanced and intelligent form of flesh that is infinitely more controllable, malleable and invulnerable. Whilst moldie flesh does possess these superior qualities, it does nevertheless elicit disgust by the vast majority of the human population in the Ware Tetralogy, and this is in large part due to its smell: ‘moldies didn’t smell very good. Depending on the exact strains of fungi and algae that

a given moldie incorporated, the smell might resemble mildewed socks or brussels sprouts or an aggressively ripe cheese.’ (Rucker, 2010: 299) Children in the Ware Tetralogy are also wary of moldies, and are both disgusted by and frightened of them: ‘they instinctively feared moldies, with their odd motions and their alien stench.’ (Rucker, 2010: 347) This sense of fear and disgust towards moldies, their flesh and their smell gives rise to a feeling of abjection on the part of the vast majority of the human subjects in Rucker’s texts, and a key reason for this antipathy towards the moldies is that they represent a potential disintegration of the privileged status of the human:

Abjection is the affect or feeling of anxiety, loathing and disgust that the subject has in encountering certain matter, images and fantasies – the horrible – to which it can respond only with aversion, nausea and distraction. Kristeva argues that the abject provokes fear and disgust because it exposes the border between self and other. This border is fragile. The abject threatens to dissolve the subject by dissolving the border. (Longhurst, 2001: 28)

The existence of the moldies brings the fragility and the vulnerability of the human, and by extension, the potential dominance of the moldies, into sharp focus in the Ware Tetralogy. A new being has been created that has consciousness and sentience; whose physical form is inherently stronger and more resilient than human flesh; is capable of controlling human beings by infiltrating their brains; and who has the potential to have an immortal existence. The posthuman ideal is being created in the tetralogy, however, the human being is not the foundation from which this new race has evolved. In Rucker’s text, the moldies have achieved a number of the fundamental tenets of posthumanism, and this is a significant risk for the human population, who have in essence become the beings who are being left behind in this transitional phase, and their fear of, and disgust with, moldies – who have come into existence in a very short period of time – is paramount in these texts. For the citizens in the Ware Tetralogy, more intelligent flesh does not equal universal progress or transcendence, but rather, it

exemplifies the tenuous grip that the humans now have on their status as the dominant species on earth.

While in the case of the Ware Tetralogy, revulsion comes as a result of being in close proximity with a type of flesh that seems at once inhuman, subhuman, and *posthuman*, revulsion in the Sprawl Trilogy comes from being in close proximity (or having to inhabit) human flesh. This is a key difference in these texts: the Ware Tetralogy focuses upon a society that has become further stratified as a result of humanoid speciation; there are a range of different types of being that are deemed to have sentience on a par with humans throughout the course of the tetralogy, and these various life forms are required to traverse through cultures and laws that designate the human as sacred above all other life forms. While this is the case in the tetralogy, in both Gibson's and Effinger's texts, the fundamental desire for transcendence at all costs has led to the denigration of human flesh, which is perceived to represent the inherent fragility and vulnerability of the human body. The reason for this difference of outlook is that Rucker's text analyses the periods directly before, during, and in the eventual aftermath of a Singularity-like event, which is the moment in which the mould is released into the bopper Nest. The focus upon every period in the lead up to the development of the moldies enables Rucker to analyse the extent to which the development and evolution of a new posthuman species can affect the unaltered human population, and lead to significant amounts of tension between the two species as they vie for dominance. Both Gibson and Effinger focus instead upon the periods of transition between the human, the transhuman and the posthuman, when individuals are attempting to transcend their human bodies by engaging with radical technologies in order to significantly modify their bodies. The characters in Gibson's and Effinger's texts therefore develop an antipathy towards their natural bodies as they work towards emulating new embodied identities that are being designated as representing the future of humanity.

The unaltered human body is held in higher esteem by the human population than the technologically engineered bopper hardware or moldie flesh in the Ware Tetralogy. In *Software*, the boppers desire to merge their robotic systems with human flesh due to the nature of the biological system and its ability to store and process information:

The imperative of getting bopper software into human flesh was all important. What would it be like to be bopper...and human, too? [...] There were indeed some odd, scattered results suggesting that the very messiness of a biological system gave it unlimited information storage and processing abilities! (Rucker, 2010: 172)

This is reminiscent of the way in which Johnny Mnemonic's brain is used as a storage device in Gibson's short story, and the importance of infiltrating biological systems rather than creating purely robotic ones indicates that biological systems are vital when it comes to storing, processing and sharing data in these texts. The body presents unique challenges to the creators of technological and biotechnological systems: the body in its natural form is at once both limitless and uncontrollable, and the characters in these texts work to either subvert the nature of the human body or exploit it in order to achieve feats that would otherwise be impossible. The human body continues to have a higher status than other robotic or biological forms in the Ware Tetralogy, as Yoke tells Kevvie in *Realware* when he asks her if her father is growing a clone of her mother, Darla who has passed away: "The new Darla's gonna have a bitchin' real meat body, not an imipolex fake like Cobb's [...] she'll have a meat body" (Rucker, 2010: 531). Meat is at once desired and derided; it is desired because the alternative is to reside in a corporeal space that is not recognised as human, and it is derided due to the vulnerability of the unaltered human form.

It is not just flesh itself that is treated with fear, disgust and disdain in these texts, but also the various bodily fluids that emanate from the flesh, often in an uncontrollable fashion, which Kristeva argues results in a sense of abjection: 'what goes out of the body, out of its pores and openings, points to the infinitude of the body proper and

gives rise to abjection.’ (Kristeva, 1982: 108) Kristeva’s assertion that, as with flesh, the lack of control over these fluids denotes an overall lack of control over the body is a compelling argument in the context of cyberpunk, because these texts analyse the extent to which the body – and by extension bodily fluids – in essence battles against the radical technologies that are being employed in an effort to control and manipulate its natural processes. Regardless of the technological advances that are available in Gibson’s, Rucker’s and Effinger’s work, the characters in these texts nevertheless have to deal with their bodies and resultant bodily fluids, be it blood, sweat, urine, tears or saliva, regardless of the extent to which their bodies have been transformed by radical technologies. Bodily fluids are a contentious issue in these texts, because they force these characters to confront the fact that their efforts at transcendence are ultimately futile, as the needs of the body take precedence over all else, as Grosz states when considering bodily fluids:

They are engulfing, difficult to be rid of [...] Body fluids flow, they seep, they infiltrate [...] they assert the priority of the body over subjectivity; they demonstrate the limits of subjectivity in the body [...] They force megalomaniacal aspirations to earth, refusing consciousness its supremacy (Grosz, 1994: 194).

Grosz argues that the mind is not able to overcome the natural processes of the body, and the existence of bodily fluids irrespective of the desires of an individual’s consciousness do not allow the mind to override nature or the natural body, thus rendering the concept of supremacy over the body obsolete. The existence of bodily fluids in essence does not allow the human to attempt to transcend on to a higher plane of being or consciousness, because these fluids continuously ground the human within the realm of nature and the natural. Gibson, Rucker and Effinger incorporate this idea in their texts, as a number of key characters in these works are locked in a constant battle with bodies that refuse to be controlled by radical technologies, and they are therefore required to make adjustments and allowances to their body modifications in

order to be able to incorporate practices that are necessary for the continuation of their natural physiological processes. For Marîd, this means that while he is able to activate his daddy socket in order to be able to override the physical needs of his body for extended periods of time, thus feeling no hunger, thirst or tiredness, this is a short-term solution, as he is eventually required to re-activate these needs, meaning that he will be met with an overwhelming crash as all of the physiological processes he had been able to ignore are brought to the forefront of his consciousness in one fell swoop. In *Neuromancer*, Molly's modifications to her eyes require her to re-engineer the pathway of her tears, as her eyes are now encased in sockets that are impenetrable. Molly overcomes this by having her tears rerouted, as she explains to Ashpool when he asks her how she manages to cry with her modifications: "I spit [...] The ducts are routed back into my mouth." (Gibson, 1995: 219) Ashpool's response to this is "Then you've already learned an important lesson, for one so young [...] That is the way to handle tears." (Gibson, 1995: 219) Molly is required to continuously spit in order to deal with her tears, and this continuous action enables her to disassociate herself from her emotions; her tears become a nuisance that are expelled from her body in an inherently disgusting and antisocial way that allows her to disengage from her emotions. Ashpool's response reinforces this idea, as he commends Molly's approach to handling her tears, as he finds it unacceptable for a person to show emotions, particularly when, as is the case with Molly, they are on a mission that will test their physical strength as well as their emotional state.

When it comes to Case, despite his desire to transcend on to a higher plane of consciousness and leave his meat days behind him, his body and his physiology are used against him on numerous occasions throughout *Neuromancer*. At the beginning of the text, Case is suffering from the after-effects of being injected with a mycotoxin by his previous employers as punishment for having stolen from them, and he

encounters this type of treatment again when he begins working for Armitage. Armitage informs Case that he has once again been placed under the power of this mycotoxin in order to ensure that he completes the job he has been assigned:

“You have fifteen toxin sacs bonded to the lining of various main arteries, Case. They’re dissolving. Each one contains a mycotoxin. You’re already familiar with the effect of that mycotoxin. It was the one your former employers gave you in Memphis [...] You have time to do what I’m hiring you for, Case, but that’s all. Do the job and I can inject you with an enzyme that will dissolve the bond without opening the sacs. Then you’ll need a blood change. Otherwise, the sacs melt and you’re back where I found you. So you see, Case, you need us. You need us as badly as you did when we scraped you up from the gutter.” (Gibson. 1995: 60)

Armitage is able to exert a significant degree of control over Case because he knows that Case is afraid of experiencing the after-effects of the mycotoxin once again, as it had a significant physical and psychological effect upon Case the last time the drug was used on him as a form of punishment. Despite his desire to transcend his physical form and redefine himself as the ultimate cowboy hotshot who is able to exist within and manipulate cyberspace, Case is continuously re-placed within the “prison” of his own flesh; while his mind is not susceptible to control by his employers, his body is, and this weakness is used against him, in the first instance as a form of punishment, and in the second, to ensure that he remains a loyal and successful employee if he wishes not to have his central nervous system destroyed once again.

Gendered Flesh

In the context of flesh and embodiment, there is ultimately a significant distinction between the male and female characters in these texts, as Yaszek and Ellis state when discussing *Neuromancer*:

While many characters in Gibson’s novel, including the AIs Wintermute and Neuromancer, the ROM construct of the deceased McCoy “Dixie Flatline” Pauley, and even the human hacker Case, who longs to escape “the prison of his own flesh,” represent the posthuman as digital and disembodied, other characters, including the cyborg “razorgirl” Molly and the clone Lady 3Jane

Marie-France Tessier-Ashpool, depict the posthuman as biological and embodied. (Yaszek and Ellis, 2016: 79)

Ultimately in *Neuromancer*, as with the other cyberpunk texts considered in this thesis, the male characters are represented as working to transcend the limits of the flesh, and the modifications they have and the jobs they do embody this ideal, whilst the female characters are defined exclusively by their bodies, and the modifications they have are either a demonstration of a sexualised ideal or – as is the case with Molly – are a fetishised manifestation of the ultimate desires of the male gaze. This distinction between male and female characters is apparent in every series considered in this thesis; the technological advances that are available in these texts are used very differently depending upon the sex of the user, and this distinction has been critiqued at length since the early days of cyberpunk. This is as true for the texts by Rucker and Effinger as it is for Gibson's work, as the women in all three series are tethered ever more tightly to their bodies as a result of technological advances:

Rucker's *Software* (1982) and *Wetware* (1988), for example, contain almost no female characters, save for Della Taze and Darla in the later novel, both of whom are primarily surrogate mothers for Bopper progeny [...] George Alec Effinger's *When Gravity Fails* (1986) concentrates, almost exclusively, on the entirely male-dominated world of the Budayeen where the few female characters – whether biologically or surgically female – are either wives or prostitutes (Nixon, 1992: 222-223).

Women are of the flesh in cyberpunk, regardless of the focus upon creating a posthuman ideal, and they are unable to work to transcend the limitations of their bodies because they are required to use their bodies in order to afford and obtain the types of body modifications that only work to reinforce gender stereotypes and place them in harmful situations, such as working in the sex industry. The female body remains an object of cliché and lust, and a symbol of powerlessness in these texts, and the female characters in these texts are required to not only deal with the myriad dangers that are present as their male counterparts do, but must also traverse through inherently, and increasingly, misogynistic societies. While the male characters in these texts work to

transcend the prison of their flesh using radical technologies to try to achieve some semblance of the posthuman ideal, the body modifications that the female characters engage with work to further imprison them, as the modifications that are used are increasingly more sexualised and focused upon male desire and the male gaze. A number of the male characters are working to transcend human flesh entirely in these texts, whereas the modifications that the female characters engage with reinforce damaging gender stereotypes. Being flesh-bound is regarded as a negative state in the societies that are depicted in these texts, whilst transcending the flesh is seen as a highly desirable and necessary step on the road to posthumanism. However, only male characters are depicted as desiring this transcendence, whilst the modifications that the female characters seek in these texts are neither transcendental nor particularly revolutionary. The women and trans women in Effinger's *Marîd Audran* series who modify their bodies do so in order to successfully work in the sex industry, and they therefore modify their bodies to fit in with a porno-chic ideal. While Molly has often been regarded by readers as a contemporary heroine, she nevertheless embodies key male fantasy tropes through her body modifications and general physical appearance; she is a leather-clad, highly athletic and highly sexual ball-buster who has the ability to destroy the men who stand in her way. In the context of Rucker's *Ware Tetralogy*, whilst the majority of the human characters do not partake in body modification practices, advances in technology have been used to create a new type of edible meat that is based upon the human cells of Wendy Mooney, who is a beautiful and highly desirable and desired famous woman, and her image and her body are used to sell the meat that has been created using her cells; therefore rather than using technology to transcend the flesh, in the case of wendy meat, technology has been used to create yet another way in which female flesh can be commodified and consumed. In the *Ware*

Tetralogy, it is not just the flesh of human females that is fetishised, moldie flesh is also given the same treatment:

It went without saying that a moldie's intelligent, malleable flesh could provide a very unique multipronged personal massage for those humans who sought sex in strange forms. The unnaturalness of the act was of appeal to certain individuals; indeed the very reek of a moldie was something that most cheeseballs found powerfully arousing. Sad to say for the men of this world, cheeseballs were almost always male. (Rucker, 2010: 299)

The physical properties of moldie flesh means that moldies are able to manipulate their bodies into an infinite number of different shapes, and this has resulted in individuals, the vast majority of whom are men, fetishising moldie flesh, and in certain cases – such as when Randy uses a superleech on Parvati, which enables him to control her every action – systematically abusing, coercing and even raping moldie women in order to fulfil their desires.

Gibson's, Rucker's and Effinger's texts make it clear that when it comes to the female of the species, it will be possible to use revolutionary technologies against women's interests in order to create societies in which women's bodies are used, fetishised and commodified in ever more invasive, degrading and destructive ways. The ways that the women in these texts are depicted is not a mere accident or oversight on the part of these authors, but rather, enables them to illustrate the myriad ways in which radical technologies can be utilised to further entrench inequalities in societies where the individualistic pursuit of the posthuman ideal takes precedence over all else. The women in these texts are required to navigate inherently misogynistic and exploitative societies in order to be able to access and utilise new technologies, and their bodies are their prime source of income in societies where revolutionary thinking has not extended beyond the technological. Gibson, Rucker and Effinger depict near-future societies that have not progressed in terms of culture, but rather, present the reader with their analyses of how prioritising technological advancements will come at the cost of social and

cultural progression, which, in the case of these texts, means that women's rights are not a consideration in these societies.

The Commodified Self

The concept of production and consumption is key in cyberpunk, as it is in any inherently exploitative system, and the meanings associated with, and importance of, the body changes over time in order to be incorporated into evolving systems of production and consumption: 'The human body is socially constructed in historically changing settings of production and consumption, and by the institutions that characterize these settings.' (Freund, 1988: 851) As the traditional power structures disintegrate and governments collapse, the body itself becomes the ultimate consumer product in cyberpunk. Technological advances become increasingly inwardly-focused, and companies turn their attentions to the vast profits that can be made by creating societies where posthuman sensibilities, intellectual curiosity and body dysmorphia come together to develop cultures in which the yearning for life as something *other than* is the overriding aspiration for the vast majority of citizens. The commercialisation of the body is inherent in these texts: 'The treatment of human enhancements as commercial products is apparent in a range of literature that has discussed the emergence of biotechnologies.' (Miah, 2013: 294) In cyberpunk, it is not just the enhancements that become commercial products, but also the individuals who embody those enhancements, whether that is those who become walking data ports, such as Johnny Mnemonic; objects for sexual gratification such as the moldies and a significant number of the women and trans women who work in the sex industry; or weapons to be wielded by powerful patriarchs, as Marid becomes in Effinger's texts. The boundary between the human and the product becomes ever more blurred in these texts, as individuals work to define their existence in societies where their worth is measured

according to the needs of the marketplace rather than according to their status as human beings. Every type of flesh is commodified in cyberpunk, whether that is human flesh, moldie flesh, or – as in the case of Jeff Noon’s Vurt series – vurt flesh, which provides those that eat it with other-worldly hallucinations.

This commodification of the body has a significant impact upon an individual’s relationship with their corporeal self:

At a certain point, the relation one has to one's self – which is certainly in large part a matter of one's vulnerable, mortal, finite body, its moods and appetites and physical capacities, and these things as they come into harmony and conflict with our reasons and longings – would necessarily change if it became a consumer option (Baumann, 2010: 75).

Cyberpunk considers the ways in which an individual’s relationship with their body, their embodied reality, and their sense of self will fundamentally change once the body itself becomes a consumer option, and this is the only path through which a potential posthuman future can be developed. Cyberpunk writers have analysed this potential development of the posthuman through a contemporary lens and this potential future requires an increasingly intimate relationship with the tenets of consumer capitalism: ‘Many of transhumanism’s most alien features, especially its problematic entwining with consumer capitalism, emerge from a fetishization of the material pathways toward an evolutionary future’ (Pilsch, 2017: 3). In cyberpunk, posthumanism is, in essence, an individual consumer option rather than being an attempt at creating a new species for the common good. Cyberpunk analyses this individualistic voyage towards posthumanism through a focus upon the ways in which every aspect of the self will ultimately be for sale and consumption in societies where the human has become passé.

Cannibal Animals

In an article for *The Conversation* entitled: ‘Cannibalism is common in the animal kingdom – here’s why for humans it’s the ultimate taboo’, Jared Piazza and Neil

McLatchie argue that even in situations of life and death where starvation is a real concern, '[The] deep connection between personhood and flesh can mean that careful reasoning in certain situations over the merits of cannibalism is overridden by our feelings of repulsion and disgust.' (Piazza and McLatchie, 2019) The concept of cannibalism in various forms is referenced by Gibson and Rucker in different ways, and there is a strong element of the taboo in their writing on the subject, with the notion of cannibalism being treated not only with fear and disgust but also with a macabre fascination. Theorists have long argued that the act of cannibalism constitutes a breakdown in social conventions: 'Variously understood as a taboo, a pathological fixation, an anthropological anomaly and, of course, a crime, cannibalism [...] is undoubtedly an extreme act of social deviance.' (Priest, 2016) This 'act of social deviance' is apparent in cyberpunk texts where social norms and acceptable standards of behaviour are being continuously re-evaluated and redefined as societies undergo periods of war, revolution, and significant transformations as a result of radical technological advancements. In *Virtual Light*, cannibalism is attributed to those who live on the peripheries of society, as Freddie, a hired assistant, tells Rydell when discussing the bridge: "“that bridge, man, that’s one *evil* motherfucking place. Those people anarchists, antichrists, *cannibal* motherfuckers out there”" (Gibson, 2011: 138). The thought of cannibalism has the ability to instill fear in the characters in Gibson’s trilogy, and cannibalism is listed alongside other deviant behaviour and ways of life that are regarded as being inherently evil or dangerous.

In Rucker’s Ware Tetralogy however, the concept of cannibalism takes on a new meaning with the advent of new technological processes. A simulated form of lab-grown human flesh is made commercially available and comes to be physically consumed as the latest delicacy; Wendy Mooney, the wife of ex-senator Stahn Mooney, whose consciousness exists on a specially designed cloak that she is able to transfer

from her aging body onto a replicated twenty-five year old version of herself whenever she desires, has allowed for her cells to be used to create lab-grown flesh that is available for human consumption, and her flesh becomes a consumer product just like any other type of meat: 'The tank contained four perpetually self-renewing loaves of meat: chicken, beef, pork, and wendy – *wendy* being the human-cloned flesh which had taken such a hold on people's palates in recent months.' (Rucker, 2010: 297) Wendy meat becomes an accepted part of the human food chain, and the consumption of wendy meat denotes a breaking down of long-held values regarding the elevated status of the human in the natural world. Consumption is a key concept in these texts, and in cyberpunk more generally, and Rucker critiques this idea through the focus on a form of cannibalism that has become socially acceptable in the Ware Tetralogy. The body in this series develops from being a consumer of technology, to being consumed by technology, to finally being consumed as a result of technological advancements. The body becomes a consumer product, and wendy meat becomes a highly desired commodity despite the fact that other forms of meat are easily cloned and readily available. The proliferation of wendy meat represents a breakdown of the natural in society, as human flesh becomes an acceptable food source, thus defying the taboo that was cannibalism:

Whenever the taboo is broken [...] we are allowed a brief glimpse into human society without civilization, without boundaries, without limitations. The knowledge that [...] human beings are really capable of such behaviour, is the ultimate cause of the fear of social, psychological and bodily disintegration/collapse – the very fear that makes us human. (Brottman, 2001: 238)

The society in the Ware Tetralogy is certainly without these boundaries and limitations; advances in technology have resulted in a society where different – and often competing – forms of "humanity" exist, from the boppers and the moldies through to altered and unaltered humans. The humans in the tetralogy have become capable of

creating cloned human flesh as a consumer product in reaction to the reassessment of what it means to be human in their society; once the sacrosanct nature of the human condition becomes challenged, and various new forms of embodied reality are created alongside new forms of technologically advanced flesh, the future of humanity is called into question:

Although acts of autophagy do not presuppose any one particular body-type, they suggest a reorientation of everything for which *humanitas* stands. To practice cannibalism is to shear the human from itself, to cross a line to the no-longer-human; the body performing this transgression is thus posthuman by default. (Sheehan, 2015: 257)

Sheehan's argument that those who partake in acts of cannibalism – whether as the producer or the consumer – become something other than human, and posthuman by default, is a compelling one in the context of the Ware Tetralogy. Posthumanism fundamentally requires the disintegration of the concept of the privileged status of the human, as it is only through such a collapse of status that the posthuman can be developed and begin to evolve. Rucker's tetralogy analyses the initial stages of this breakdown through a focus upon the ways in which long-held taboos that attract fear and disgust by humans, such as cannibalism, will become acceptable practices as the status of the human becomes reduced to mere animal, with human flesh becoming simple consumable animal matter. In the context of meat consumption, humanity's place at the top of the food chain demonstrates power: 'Consuming the muscle flesh of other highly evolved animals is a potent statement of our supreme power.' (Fiddes, 1992: 2) In the context of the posthuman, the ingestion of human flesh, thus reducing it to mere animal matter, represents the posthuman's budding power over the human. In the Ware Tetralogy, cannibalism calls the status of humanity as the supreme power into question, and gives rise to the potential development of posthuman supremacy. Through an analysis of the initiation and effects of cannibalism, Rucker's texts consider the consequences of radical technologies: 'in art and in politics, we have turned

cannibalism into a potent metaphor for thinking through some of the deleterious effects of the processes of modernisation that we elsewhere celebrate as evidence of our triumph over nature.’ (McCorry, 2019: 112) Rucker’s texts show that while radical technological advances do have the potential to fundamentally change the world, they can also lead to the devaluing of human existence, ultimately resulting in people being willing to, or being forced into, partaking in ever more dehumanising acts for personal gain.

Wendy meat represents a destruction of the sanctity of the human body, and rather than being instinctively repulsed by the idea of eating human flesh, consumers in the Ware Tetralogy are intrigued by it, and this represents a move away from considering the human body as a sacred entity. As different forms of flesh are developed in the Ware Tetralogy through processes such as cloning and biohacking, the boundaries between the human and the non-human become ever more blurred, leading to a revision of what ought to be considered sacred and what ought to be considered physically and culturally appropriate for consumption. While the development and proliferation of wendy meat does indeed represent a move towards posthuman sensibilities in the Ware Tetralogy, the eating of wendy meat does denote a more regressive sensibility and set of values in regards to women’s rights in these texts. The only type of human flesh that is available for consumption is the flesh of a woman, and her body and her flesh are objectified in order to sell clones of her body for use and her cloned flesh for consumption, as an advertisement for wendy meat demonstrates:

The ad was a vast translucent hollow made up of seven kinds of funny-shaped creatures pecking each other’s butts and heads and adding up to an image of an impossible beautified man and woman whose expressions kept cycling through an ever-escalating but never repeating spiral of joy. The man was modelled on ex-Senator Stahn Mooney and the woman on his wife Wendy Mooney, sexily wearing nothing but her Happy Cloak. (Rucker, 2010: 305)

This advertisement sexualises Wendy's body whilst making it clear that her flesh is available for consumption. The fact that her husband, an ex-Senator is included here is significant; Wendy's flesh is clearly a more superior form of flesh. Wendy is a young, sexually attractive, wealthy and influential woman: she is prime rib, and by consuming her, whether by purchasing a cloned copy of her body or by literally consuming her flesh, less fortunate citizens are able to take one step closer to embodying her and her lifestyle. An entire industry has been created based around Wendy's body, and this industry is concerned with creating multiple consumable versions of her: from cloning her entire body for sale to others who wish to base their embodied reality upon her physical form through to enabling the populace to literally consume her flesh as a foodstuff, and Wendy herself makes use of this industry when she needs to: "Wendy Meat and W.M. Biologicals do, in fact, grow clones of me, I can do something better than get patched up. I can start over in a blank twenty-five-year-old Wendy. My 'Cloak could transfer all the information.'" (Rucker, 2010: 436) Wendy becomes a lab-grown product, and she no longer holds the sole rights to her body: her body belongs both to the conglomerate responsible for distributing her parts – whole or disparate – and to the consumers who purchase her, either to eat or embody. Wendy's flesh becomes part of the system of production and consumption in the Ware Tetralogy, and the popularity of her flesh results in her developing a cult-like celebrity status where every aspect of her body becomes purchasable and consumable. Wendy's meat is fetishised, and her flesh becomes a commodity that leads to a disintegration of the boundary between the consumable flesh of the animal and the sacred flesh of the human.

There is a growing field of research into the ways in which the consumption of meat directly relates to society's values regarding the justification of violence; the notion of the human's supreme power over the natural world; and man's subjugation of women, and these elements can be seen in Rucker's analysis of cannibalism in the Ware

Tetralogy. In terms of the act of eating animal flesh, the treatment of the body of the animal becomes a symbol for the values of society: 'The animal body [...] is the surface on which capitalist modernity first perfected many of its characteristic techniques of alienation and rationalised violence.' (McCorry and Miller, 2019: 4) This 'alienation and rationalised violence' is paramount in the contemporary meat industry, in which billions of animals are slaughtered around the globe every year for human consumption. In Rucker's texts, this 'alienation and rationalised violence' has found a new subject in wendy meat. In the Ware Tetralogy, it is a woman's body that has become the surface upon which this violence is performed, as Wendy's body parts and her flesh are portioned out as required for consumption in their various forms. Wendy becomes part of a 'cycle of objectifications, fragmentation, and consumption' (Adams, 2004: 58), a cycle that Adams argues relates to both the global oppression and exploitation of women and the global oppression and exploitation of animals in the meat industry. In Rucker's texts, this dual oppression and exploitation become intertwined with a central subject, and Wendy Mooney becomes the central product upon which this cycle is enacted.

Women are exploited in different ways in these cyberpunk texts. In Gibson's *Neuromancer*, Molly, the central female character, works in the sex industry in order to be able to afford her body modifications, whilst in Effinger's Marîd Audran series, a significant majority of the women and trans women in the texts are involved in some aspect of the sex industry. The women and trans women in these texts all experience physical and psychological forms of male violence and experience the forms of oppression, exploitation and alienation that are an integral aspect of the sex industry, and they enable or are forced into enabling their bodies to be used and consumed by an industry that is inherently violent and degrading. Rucker's texts take this one step further, as Wendy uses images of her young, idealised, lab-created body to sell her flesh

for physical consumption. In these cyberpunk texts, radical technological advances are enabling societies to find ever more damaging and invasive ways to exploit women than were previously possible, whether that is through the literal consumption of female flesh as is the case with Wendy; by employing cerebral modifications designed to reduce women working in the sex industry into “meat puppets” as is the case with Molly; or creating entire industries designed to provide an increasingly intimate relationship between actresses in the porn industry and their consumers, as is the case with the availability of moddies and daddies that enable the consumers of pornography to have realistic sexual experiences with their favourite actresses such as Honey Pilar in Effinger’s series. In these texts, when it comes to a significant proportion of the female characters, their bodies are being exploited and consumed in ever more imaginative ways, as the radical technologies that are available are increasingly used against them for the purposes of oppression and exploitation.

Conclusion

In these cyberpunk texts, the unmodified body is critiqued not only due to its status as a fleeting and finite state of being, but also in terms of being a sight of derision and disgust. The body remains a problem to be solved in the works of Gibson, Rucker and Effinger; the body is a symbol of humanity’s inability to successfully and intricately merge the natural and the technological. The body comes to exemplify the relatively slow pace of progress that continues to hinder the posthuman ideal. Despite the significant advances in technology in its myriad forms, the body remains inherently vulnerable to the ravages of age, disability and disease in these texts. The characters in these texts are no closer to creating the posthuman ideal that theorists, theologians and philosophers have been concerned with for – according to Bostrom at least – thousands of years, and rather than offering a solution, technological advances in regards to body

modification lead these characters to develop psychologically damaging relationships with their embodied selves. In the *Sprawl Trilogy* and the *Marîd Audran* series, the unmodified body represents a lack of social, cultural and economic capital, thus introducing a new form of inequality in these societies that is based upon a lack of access to transformative technologies:

if enhancements are expensive and therefore available only to the better off, existing *distributive* inequalities – inequalities in resources, opportunities, or welfare – will worsen. The economically advantaged will become biologically advantaged to boot. (Buchanan, 2011: 209)

Gibson and Effinger focus upon the types of distributive inequalities that Buchanan references in their analyses of the impact of radical technologies on societies that are already stratified according to social, cultural, and economic capital, and the characters in these texts are required to move beyond simply existing in these texts, and are expected to develop a disdain for the unaltered flesh. The enhanced bodies in these texts are given an elevated status by the rest of society; these bodies represent a personal and intimate relationship with technology that moves beyond a simple need to augment and improve upon the unaltered human form; Marîd in particular is able to demonstrate his elevated status to his peers through his augmented body, as he moves through to the higher echelons of society as a direct result of the modifications he has undergone. Marîd goes from being a hustler on the streets of the Budayeen to becoming Friedlander Bey's right hand man. Rucker's texts go one step further to consider the ramifications of radical technologies that will allow for the literal consumption of the female body, and what this will mean for women's rights in societies where the female body can be consumed in myriad ways by a number of different – but nevertheless exploitative – industries. The consumption of meat represents power: 'Meat has long stood for Man's proverbial 'muscle' over the natural world' (Fiddes, 1992: 65), and in Rucker's texts, this power and "muscle" has been extended to include the flesh of a human female,

thus raising questions about women's place in a posthuman world in which every aspect of their bodies may become consumer products as a result of increasingly radical technologies.

Whilst the vast array of body modification practices that are available in these texts can, in theory, enable these characters to redesign their bodies in ways that have never been possible before, the revolutionary technologies that exist in these texts nevertheless present their users – and society at large – with, often unexpected, additional problems that need to be faced up to and overcome. The types of technological advances that are depicted in cyberpunk, whilst undoubtedly revolutionary and sophisticated in inception and scope, are nevertheless difficult to create, maintain and control. The technological advances depicted in these texts are disordered and chaotic, and they have more in common with the biological systems of the humans that have created them than the humans may have envisaged, and whilst the potential and scope of these technologies may be limitless, these revolutionary systems must in most cases by necessity exist within the boundaries and limits that they have been created within, thus their ability to naturally evolve through a transitory phase into a posthuman future as envisaged by transhumanists is called into question in these texts. These new technologies are not neutral: they have been created with specific political and business interests in mind, and as such, their implementation in these societies continues to adhere to specific prejudices that already exist. This is especially apparent in the context of the female characters in these texts. As this chapter has shown, new technologies are used to further sexualise and commodify the female body in increasingly more invasive and dehumanising ways, and the bodies of characters such as Wendy Mooney become public property as new industries are created that are solely focused upon deconstructing and repackaging female flesh.

The characters in these texts have dysfunctional and complicated relationships with their embodied selves, and their attempts to either redefine or even completely re-engineer their innately fragile, human bodies raises significant ethical issues. The desire to transcend beyond the limits of human flesh is explored at length in cyberpunk, and Gibson, Rucker and Effinger consider the numerous potential ramifications of this ultimate goal in their writing. The following chapter focuses upon a different form of transcendence apparent in these texts – one that is theologically informed, and uses key transhumanist principles to analyse the extent to which transformative body modification practices will be suffused with religious doctrine as the characters in these texts work to overcome the inherent vulnerability of the human body in their desire for posthumanity.

Chapter Three

Theology, Immortality and the Sacred Self

‘Science is our religion.’¹⁸

Religion is a contentious topic in transhumanist discourse, and theorists who focus upon religion in the context of transhumanism take a number of different approaches when it comes to defining, firstly, the impact that religious doctrine has had and continues to have on transhumanism, and secondly, the extent to which religion will affect transhumanist discourse both in contemporary society and in the future. At face value, it can be argued that transhumanist and religious thought are at odds with each other: ‘The cultural work of the religion/secular binary lends transhumanism the mantle of the modern, the rational, and the progressive, positioning religion as its antiquated, superstitious, and regressive opponent.’ (Cady, 2012: 84) This binary, however, is too simplistic and reductive when it comes to critiquing religion through a transhumanist lens. Both religious thought in the broader sense and transhumanist theory in particular focus on the desire of creating a type of utopia in different forms. The tenets of the two share similarities when considering the ways in which the human being’s place in the world can be improved upon, both in terms of the embodied human experience and in regards to the human’s relationship with the physical and metaphysical aspects of the world.

¹⁸(Gray, 2002: 177)

The tactics employed by transhumanists in working to create a specifically defined utopia would be different to those that religious leaders, and humanity itself, have historically focused upon; transhumanism would focus upon a technologically enhanced evolution of the human whilst religious doctrine tends to focus upon a spiritual evolution. Both forms of evolution have the concept of transcendence in common: the need to move beyond the contemporary limits of the human condition and experience and exist on a new, higher plane. The desire for transcendence is one that is universal to the human condition: ‘The quest for transcendence, then, is the humanizing force of human history. It is that which sets history in motion and directs it toward its end. But it is a quest for a reality that can never become fully present in history’ (Dalferth, 2012: 147). This desire for transcendence is inherently theological in nature (Shoop, 2018 and Fuentes, 2020), and this overarching vision of attaining an alternative, improved way of life that lies beyond contemporary limits is a vision that theology shares with transhumanism. As a theoretical framework that has been predominantly developed by white, male theorists living and working in the global north west hemisphere, transhumanism does particularly share fundamental tenets with Christian theology, and this has been noted by a number of writers: ‘The utopian transhumanist vision clearly derives much of its power from traditional Christian theology. Like transhumanism, Christianity looks forward to a transfiguration of the human species’ (Clay, 2012: 159). Christianity, and indeed religious doctrine in general, as with transhumanist principles, focuses to a great extent upon the continuous progress of humanity: a spiritual form of advancement whereby there never will be a defined end-point in the evolution of the human condition, as humanity is always liable to be improved upon: ‘At the very core of Christianity is the dynamic of human redemption and transformation. Christian theology grounds this transformation in its distinctive view of God, who enters the human condition in order to transform it.’

(Cole-Turner, 2011: 4-5) While in Christianity it is God who has the power to transform the human condition, in transhumanism, as in cyberpunk, it is technology that holds this ultimate power, and this power must be controlled and harnessed by humans who want to work towards a posthuman future in which the human subject will come to be redefined in accordance with technologies that will enable humanity to transcend the current limits of the human condition.

This chapter is concerned with the ways in which Gibson, Rucker and Effinger combine the central tenets of transhumanism with aspects of theology, mythology and spirituality to analyse the ways in which the human subject is currently, and will eventually come to be, defined, and the ways in which this is affected by radical technologies that allow individuals to strive to reach higher planes of existence that have hitherto been impossible for humanity, irrespective of the teachings of the major world religions, in which transcendence is promised to the most fervent of believers. In cyberpunk, technology offers a new form of transcendence that surpasses that which has been promised by religion: technology, particularly the type of technological advances that are predicted to take place by transhumanists and have been analysed by cyberpunk writers, offers transcendence in the here and now, and gives individuals the opportunity, however dangerous and exploitative the process may be, to redefine and re-engineer their embodied realities in the hope of shaping their own future selves.

Transcendence

Transhumanism and theological doctrine share a fundamental guiding principle when it comes to the prospective future of humanity, and that principle is a focus upon the concept of transcendence, from what humanity currently is, to what it could potentially be. This desire for transcendence is apparent in the work of key transhumanists, as it represents a crucial step towards a posthuman future: ‘The philosophies and practices

of transhumanism exhibit a will for *transcendence* of the flesh as an innate and universal trait, a drive to overcome physical and material reality and strive towards omnipotence, omniscience, and immortality.’ (Graham, 2002: 69) While it is generally argued that technology has an essentially atheistic outlook (Epstein, 2013), this is not the case when it comes to transhumanism, as while transhumanists may argue that their work does not have anything in common with theological doctrine, there are significant overlapping values that link the two:

Although many transhumanists perceive religion as, for the most part, a constant hindrance to biological and technological progression, the tenets and structure of transhumanism have an uncanny resemblance to those of the world’s religions [...] In addition to transcendence, the yearning for eternity, and the ideal of perfection (more bodily in orientation than the perfection of virtue that we see as a laudable pursuit in the Catholic tradition, for instance), other features include salvation with/in science (here, from disease, disability, ageing, inborn lack of talent), [and] concern for and liberation from the blight of suffering (Labrecque, 2017: 248).

The examples given here by Labrecque in terms of the shared values that exist between transhumanism and religion are reminiscent of a number of the key principles that Bostrom et al argue that the posthuman will embody, particularly in terms of the possibility of having a significantly extended life – with the potential for immortality – and living free from disease, the ravages of ageing, and disability. The notion of transcendence is a key human concern, as it forces humanity to consider not only the limits of contemporary human existence, but also the myriad possibilities that may be available outside of the current way of life: ‘We are *Homo religious*, not in our desire for creeds or institutions, nor in our commitments to specific gods and theologies, but in our existential striving toward *transcendence*: toward that which lies beyond the manifest world.’ (Aslan, 2018: 25) Aslan’s argument that there is an innate human desire to move beyond humanity’s current limits is one that is analysed at length by Gibson, Rucker and Effinger in their work and by science fiction writers at large. The notion of transcendence plays into key science fiction tropes and works to shape the

genre's approach to analysing contemporary technological advances and their potential effects upon the future of humanity: 'Science fiction is not merely a literature of ideas but also one of transcendence. It plays a key cultural role in how we dream our futures into reality, understand our humanity's boundaries, and reconfigure our histories.' (Clarke, 2019: 252) Clarke's evaluation is applicable to science fiction writing as a whole, and cyberpunk is no exception. Cyberpunk's analysis of the concept of transcendence follows a tradition in science fiction writing of focusing upon the innate human trait of working towards self-improvement in order to overcome a general feeling of dissatisfaction with the contemporary human condition. In Frank Herbert's seminal novel *Dune* (1965), which combines theological elements with spiritualist thought in its analysis of declining empires and potential environmental disaster, the future of the human condition is a key concern for the inhabitants of the planet Arrakis, and they determine that religion has an important role to play in this future, as Toure Bomoko, a Chairman of the Commission of Ecumenical Translators states: "‘Religion must remain an outlet for people who say to themselves, ‘I am not the kind of person I want to be.’ It must never sink into an assemblage of the self-satisfied.’" (Herbert, 1988: 423) A lack of satisfaction with the status quo in regards to the human condition is a recurring theme in science fiction, and there are a number of examples of characters in major science fiction texts turning towards religion – whether an established world religion or not – in order to try and answer fundamental questions about the nature and future of the human condition. This desire to answer such fundamental questions results in the development of a new religion in Philip K. Dick's *Do Androids Dream of Electric Sheep?*, as Iran, Rick's wife, is one of many thousands of people who abide by the tenets of Mercerism, which has 'evolved into a full theology' (Dick, 2007: 27) in order to – it is believed – be able to provide hope, succor and a shared religious experience to devotees living in a post-apocalyptic wasteland through the use of an Empathy Box.

As is the case with the inhabitants of Arrakis, the remaining residents on Earth in Dick's text use religion to analyse their lives and their place in societies that are inherently and increasingly harsh and challenging. These two texts, written by authors who are often cited as being inspirations for cyberpunk writers, exemplify the ways in which religion can be used in science fiction to examine not only the human's place in the world, but also the human's relationship with their embodied self, particular in terms of the potentially transformative nature of the self.

Transhumanism, theology and cyberpunk are all inextricably linked due to the focus upon transcendence, whether that is based upon the notion of an individual or a collective endeavour, and this focus informs the writing of Gibson, Rucker and Effinger, particularly in terms of the ways in which the characters in these texts respond to the radical technologies that offer different forms of transcendence, whether that is in terms of moving beyond the current limits of the human body or eschewing the human body altogether in order to exist on a different plane of consciousness. The rapid and radical advances in technological capacity that are depicted in these cyberpunk texts promise these characters more than body modification – they offer them a physical manifestation of that which religion has sought to provide humanity since its inception, and which is increasingly being desired and even expected from technology: 'we routinely expect far more from our artificial contrivances than mere convenience, comfort, or even survival. We demand deliverance.' (Noble, 1999: 6) Cyberpunk writing harnesses this desire for deliverance, and uses the fundamental tenets of transhumanism to consider the extent to which the human subject can be modified into something that is altogether *other*. Cyberpunk writers attempt to answer the question of what it means to be human, and how the concept of human may begin to change and adapt over time, particularly in the context of a rapidly changing social, political and

ecological landscape in which technological advances are far outpacing humanity's ability to acclimatise to, control, or even legislate for them:

Progress in the life sciences and biotechnology has called into question what it means to be a human being. [...] The more life sciences advance, the more significant is the question, what is a living human being? And from this fundamental question, come others: What is the essence of a human being's life? When does the life of a human being begin and end? And what does it mean to "live"? Although biotechnology brings us wonderful tools for health and medical care, it also confronts us with what appears to be the increasing materialization of human life. (Ida, 2004: 25-26)

Cyberpunk takes these questions of what it means to be human one step further, as these writers question not only what it means to be human but also what aspects of humanity remain desirable in transhumanism, and this questioning of what it means to be human is one that has become increasingly relevant in contemporary discourse:

the concept of the human has exploded under the double pressure of contemporary scientific advances and global economic concerns. After the postmodern, the post-colonial, the post-industrial, the post-communist and even the much contested post-feminist conditions, we seem to have entered the post-human predicament. (Braidotti, 2013: 1)

Braidotti's assertion that scientific advances combined with global economic concerns have created a set of circumstances in which the very concept of the human is under a significant degree of scrutiny and analysis is one that is shared by cyberpunk writers. Cyberpunk is fundamentally concerned with the contemporary, and as such, cyberpunk writers focus not on imaginary future worlds in which the posthuman may have come to exist in the ways in which transhumanists envisage, but upon the periods of time before such a being is likely to exist, when individuals work to redefine themselves using key transhumanist principles as the foundation for their transformations into something that is altogether *more* and *less* than human. Gibson, Rucker and Effinger present characters who exist in the transitory phase between the human and the potential creation of the posthuman, and these characters struggle to define themselves in this phase, as the category of human enters a period of flux in which societies work

to understand the implications of developing and utilising radical and transformative technologies in a free market economy free from most forms of governance and control.

Science fiction and religion have historically had a complicated relationship (Clarke, 2019), however, both are fundamentally concerned with analysing the future of humanity and providing potential answers to humanity's most elemental questions regarding what it means to be human, and the human's place in an ever-changing world. Science fiction's focus upon the future, whether that is the near future in the case of cyberpunk, or the far future in post-apocalyptic worlds that are favoured by other science fiction subgenres, plays into humanity's desire to envisage what may lie in store, whether that is a form of transcendence onto a higher, or simply different, plane, or whether it will mean the end of humanity altogether. This desire to imagine what future worlds may look like, and how they will impact upon humanity's understanding of itself is an essentially theological concern:

anytime we talk about the future, our hopes or our fears, we are in the realm of religions. You can dress it up with science and mathematics, technology and innovation, but it is still faith of a sort that can no more be proven than a belief in God or in an afterlife. Projecting a utopic or dystopic future is a kind of religious activity that changes how we think and act in the world today. Science fiction, in this view, is a genre of theological anthropology and has contemporary political consequences. (Grassie, 2011: 263)

Cyberpunk writers understand and accept this commonality that exists between science fiction and theological doctrine, and Gibson, Rucker and Effinger – and a number of other key cyberpunk writers from Sterling through to Noon – all combine aspects of theology and mythology in their writing, as this reflects their focus upon the contemporary:

not only did these renowned first-wave authors rely on a mythological base for their works, they also used cyberspace imagery to rework more traditional mythological figures, in effect exploring new techno-archetypes. In many ways, this is representative of cyberpunk's quintessential postmodern pastiche – taking and reconfiguring all sorts of cultural images, from Biblical falls to Japanese creation myths to fairies and magic spells. (Lavigne, 2013: 114)

Cyberpunk is ultimately concerned with the human condition, both in terms of its contemporary status and its potential future, and as such, writers use theological and mythological elements in their writing as they also work to try and define the human condition and provide analyses about what the future of humanity will look like. Cyberpunk, however, goes one step further in its analysis, by examining the effects of technological advancement upon the human condition. Whilst cyberpunk does combine elements of mythology and theology in key texts – from the use of Greek mythology in Noon’s *Pollen*; Gibson’s utilisation of Rastafarianism in *Neuromancer*; Sterling’s depiction of religious fundamentalism in *The Artificial Kid*; Effinger’s depiction of a post-revolutionary Islamic state in the Marîd Audran series as well as general themes and motifs concerning mysticism and spirituality in the Ware Tetralogy – it nevertheless focuses specifically on the ways in which technological advances will come to affect these belief systems, and the extent to which they will work to adapt to a rapidly changing global landscape, in which, as Noble (1999) argues, the population will turn ever more readily towards the artificial in their quest for deliverance. In cyberpunk, technology in essence picks up where religion has left off; it provides people with a new, alternative belief system in which they are able to alter their embodied realities in the hope of reaching a stage of nirvana in which they are finally happy and content with their bodies, their minds, and their selves.

Characters such as Case, Marîd and Cobb focus upon the potential for transcendence as they desire to reach a higher plane of consciousness that has hitherto been unavailable and inaccessible to humans. For Case and Marîd, this higher plane is directly related to new forms of existence that have only become possible as a result of radical technologies; Case spends more and more time in cyberspace and in communication with AIs in the hopes of moving beyond his fallible human body, while Marîd works to transcend the banal workings of his body by using moddies and daddies

to overcome his basic human needs. Cobb, however, ultimately decides to eschew radical technologies altogether. The more technologically advanced his embodied selves become over time, the more dissatisfied Cobb becomes with his new iterations, until eventually, as he becomes increasingly preoccupied with religion and spirituality, he asks to be allowed to “die” as he desires to meet the afterlife rather than existing in various forms and across extended periods of time on Earth. Cobb, in essence, seeks to leave his physical self behind in order to meet the afterlife as pure consciousness rather than as matter, and the existence of this pure consciousness is the defining difference between what is human and what is constructed or replicated to seemingly possess human attributes. The AIs in *Neuromancer* are a prime example of this difference, as despite their vastly superior intelligence, the AIs are unable to transcend beyond the physical:

the defining element of humanity is the ability to access pure consciousness as the internal observer. Although Wintermute as a computer is hardwired to seek transcendence, it can only transcend from one level of physical being or physical extension to another; it cannot transcend physicality altogether into the spiritual dimension. The only two characters who express any desire for real transcendence are Case and Dix. But Dix can only long in vain for transcendence based on his memory of what it was like to be a living human. (Haney, 2006: 97)

The spiritual realm is only accessible by humans in these texts, and this is a source of contention for created beings that are unable to imitate consciousness despite their intelligence. The AIs in *Neuromancer* are able to access the thought processes of humans and manipulate them at will, as Wintermute does to both Corto and Case throughout the course of the novel, however, they cannot create any form of their own consciousness, meaning that they are unable to truly replicate the embodied human experience. Access to religion and religious experiences is also a source of contention between humans and created beings, particularly in Rucker’s Ware Tetralogy. There is continuous tension between humans and moldies in Rucker’s texts, and the underlying

cause for this tension is that the majority of the human population refuse to class the moldies as fellow citizens, and are reticent to engage with them and to afford them the same rights as the human population enjoys. While the majority of moldies have come to accept that while they do have legal rights as citizens due to the Moldie Citizenship Act, they will nevertheless be treated as second class citizens in their daily interactions with humans, others work to more forcefully confront human attitudes towards moldies, and, as is the case with Monique's mother Andrea (who are both moldies), use religion to try and improve human-moldie relations. Andrea uses vernacular associated with the bible to try and improve relations, as she transforms herself into the bible with a new commandment inscribed across her body: 'THOU SHALT NOT HATE MOLDIES' (Rucker, 2010: 305) and she declares: "'Moldies are sentient beings with genuine religious impulses'" (Rucker, 2010: 305). Andrea attempts to appeal to the humans' religious sensibilities in order to try and encourage them to treat moldies with the same respect that they would show their fellow humans, and she tries to do this by demonstrating that moldies are also capable of religious thought and impulses – character traits she deems to be important to the human experience. Monique, however, is concerned that Andrea's actions place her in significant danger, as she warns her mother: "'One of these days a Heritagist tourist is going to pour alcohol on you and light you. A lot of Heritagists are Christians. Do you really think they dig seeing you like imitate their sacred book?'" (Rucker, 2010: 306) The Heritagists are a group of humans who abhor the moldies and all technological revolutions that may lead to potentially questioning the elevated status of the human in society. The Heritagists are concerned with preserving the human race in its natural form, and stand against radical technologies that infiltrate the human body and psyche in the quest for achieving posthumanity. As Monique states, the majority of the Heritagists are Christians, and they would respond to Andrea's actions with violence, as they would perceive her

imitation of the bible as blasphemous. In the case of the moldies, much like the humans, they are working upon transcendence; however, for the moldies, who already possess far superior physical forms, their desire for transcendence rests upon their need for recognition as something equal to human, thus more than machine.

The concept of transcendence is universal in these texts, whether that is a religious, spiritual, societal or technological transcendence, and the characters in these texts, whether human, AI, moldie, cyborg or other, work to move beyond what they perceive to be the limits of their current existence towards an altogether new way of life. The radical and transformative technologies that exist in these texts go some way to allowing these characters to imagine these new ways of life, as these technologies have impacted society to such a significant extent that moving beyond their current realities is now within the realm of possibility, and these characters are able to imagine new ways of life and new ways of living that, in the abstract at least, offers them a way of moving beyond the current limits of their existence. Whilst transcendence – in its myriad forms – is desired by the characters in these texts, there is a distinction between the male and female characters in terms of how this is realised in practice. As this thesis shows, the female characters in these texts become increasingly more shackled to their bodies with the advent of ever more radical technologies, as these new technologies result in the development of increasingly invasive and degrading ways of exploiting the female body in the sex industry to fulfil the basest aspects of male desire. The reality of a technologically-driven transcendence for the women in these texts does not lead to a heightened sense of spirituality, or increasing levels of social, cultural and financial capital – as it does for the male characters – but rather, leads them to living increasingly in challenging and harmful circumstances. The women in these texts are not able to transcend beyond their bodies; their social, cultural and financial capital rests upon and within their bodies. This is an important distinction to consider in the context of

cyberpunk and transcendence, and the role of women in these technologically advanced societies will be considered at length in a later chapter of this thesis.

The Sacred Self

The relationship that exists between the individual and their religious belief is continuously challenged by both transhumanism and cyberpunk, as both question the extent to which the human ought to be considered as a sacred being as asserted by traditional theological doctrine. The fundamental belief in terms of the human's relationship to God is that humanity has been created in God's image:

In a tradition shared by Jews, Christians, and Muslims, man is created in God's image. For Christians in particular, this has important implications for human dignity. There is a sharp distinction between human and nonhuman creation; only human beings have a capacity for moral choice, free will, and faith, a capacity that gives them a higher moral status than the rest of animal creation. (Fukuyama, 2003: 88)

While theorists such as Aslan (2018) would disagree with Fukuyama's argument that this belief of humanity being created in God's image is indeed the case in Islam as it is in other world religions, it is nevertheless the case that religious teachings dictate that God created humanity, and therefore inscribed a sacredness to the human form that is being challenged by radical technologies. The doctrine of *imago dei* that exists in key religions such as Christianity (Thweatt-Bates, 2012) is an important tenet of religious teaching, as it denotes the existence of a sacrosanct relationship between a god and humanity. In terms of the teachings of the bible, the concept of the human having been made in God's image is explicitly stated in the Book of Genesis 1: 26-8: 'And God said, Let us make man in our image, after our likeness [...] So God created man in his own image, in the image of God created he him; male and female created he them.' This statement gives humans an elevated status above all other beings, and is a significantly important ideology in the context of both the human's relationship with their god and humanity's relationship with the world at large.

The types of radical technologies as depicted in these cyberpunk texts, and as envisaged by transhumanists, challenge this relationship between gods and their sacred subjects, as technological advances allow humans to drastically alter their bodies in search of achieving a sense of perfection that has hitherto been missing from their embodied identities. Transhumanism is one such system of belief that questions this relationship between the creator and the creation; while religions teach subjects that while the human was created in their god's image, god has ultimate power and dominion over nature and humanity's place within it, transhumanism disputes the power of a god – instead focusing upon the power of technology in order to create an altogether different type of being: 'Curiously, from the point of view of the original humanism, the project of transhumanism looks remarkably theological. After all, Kurzweil's ultimate dream is of men made into gods.' (Baumann, 2010: 84) Theorists such as Kurzweil dream of the potential creation of beings who will have the type of power and dominion over the natural world that has until now been assigned as being the sole right of a god – in whatever form – and these posthumans will be able to dictate the course of their lives to a degree that is unimaginable in the contemporary sphere. Fundamentally, these posthumans may potentially have the power to control their own mortality, as technology may make it possible for the posthuman to have a significantly extended life span, thus potentially making the need to worry about the afterlife obsolete. In the context of the future of humanity, transhumanism takes a particularly theological stance, and critics such as Dinello have argued that, when it comes to theorists such as More: 'Disguising their spiritual quest as science, the ministers of machine ascension express technologically induced dreams of becoming like gods, of possessing supernatural powers.' (Dinello, 2005: 31) The focus upon continuous progress is a tenet of both religious doctrine and transhumanism, and much like theorists such as Kurzweil, More's brand of transhumanism calls for the development of an inherently

theological approach to creating the posthuman, the difference being that rather than adhering to the assumed wishes of a god, technology will allow posthumans to become their own gods.

The focus upon continuous progress is a central theme in both religious doctrine and transhumanist thought, and parallels have been drawn between the transhumanist trope of technology as a saviour of humanity and fundamental Christian principles: ‘Transhuman argumentation *does*, in an overly reductive mode, boil down to a faith that technology in the future will arrive and save us, not unlike the Second Coming in Christianity.’ (Pilsch, 2017: 6) The betterment of the human species is of paramount importance here, and whilst the approaches to achieving this end are different, the desire to perfect the imperfect lies at the heart of both religious doctrine and transhumanist thought:

What the transhumanist foresees is a future in which the human body shall transcend its biological constraints and be enhanced via genetic and molecular engineering, cybernetics and nanotechnology. The transhumanist movement towards body enhancement may also be viewed as the ancient human drive to alter and improve upon the human form. (Saniotis, 2012: 156)

This drive to alter lies at the heart of cyberpunk writing; the human body is a canvas in these novels, it is the starting point rather than the ultimate desired state of being. This canvas offers myriad possibilities in terms of creating an idealised physical form, expanding the limits of the mind, and enabling for authentic self-expression. The body is an enduring project that will never be completed, as the possibilities offered by ever more advanced and ever changing technologies ensure that satisfaction with one’s embodied identity is not possible in a posthuman society. As with religious teachings, transhumanism views the body as a dynamic system: ‘Both the Abrahamic religions and transhumanism do not deem the body as being a static corporeal entity, but rather dynamic.’ (Saniotis, 2012: 158) The effects of this concept of dynamism in the context

of the body result in the continuous endeavour to develop new – and perfect existing – technologies that enable the advancement of the body to be possible.

The fundamental difference between the ways in which religion and transhumanism approach the idea of perfecting the human lies in religion's focus on a higher power to provide the path to achieving perfection, as Mahootian argues in the context of Islamic teachings in relation to faith in human progress: 'Whereas Islam places ultimate faith in God [...] transhumanists firmly and unselfconsciously believe that science and technology can and will pave the way to endless improvement and human happiness.' (Mahootian, 2012: 142) This faith in a higher being is applicable to all religious teachings, and illustrates the essential contradiction that exists between theological and transhumanist principles. Transhumanists focus upon a saviour that is created by humanity, rather than one that is deemed to have created humanity, and transhumanists in the main argue for a systematic approach to a technologically enhanced future, rather than one that is heavily reliant upon faith.

Whilst transhumanists envisage an idealised utopian future, Gibson, Rucker and Effinger critique this concept through their focus on imperfect societies that have adopted transhumanist ideals to greater or lesser extents. The societies depicted in these texts are inherently exploitative, as the transhumanist principles that have been embraced and adopted have been done so through a capitalist lens. The societies in these texts exist with increasing levels of inequality. Poverty, racism and sexism are endemic, and the characters in these texts work to exploit their bodies in myriad ways in order to be able to transcend the fragile nature of their material existence. As considered in previous chapters, an overwhelming majority of the female characters in these texts are involved in some aspect of the sex industry, whilst male characters such as Case, Johnny Mnemonic and Marîd exploit their minds and bodies for both social

capital and financial gain. Instances of racism and sexism are frequent in these texts, and the vast majority of the citizens in these societies are involved in some aspect of inherently degrading and exploitative work. Rather than having created a utopian ideal, radical technological advancements have resulted in those in the higher echelons of society developing newer and more sophisticated means of exploitation.

Religion in societies such as the Budayeen in the *Marîd Audran* series is still an important aspect of everyday life, and religious leaders are respected and revered and continue to exert a great degree of control over the lives of the citizens despite the significant advances in technology. Theorists have argued that religion and technology are not necessarily diametrically opposed to one another, and Bushra Mirza argues that working to understand the potential societal impact of technological advancements is a key area of focus for scholars of Islam:

Islamic teachings hold that the applications of biotechnology are not only permissible but also obligatory if they result in either alleviating human suffering or in saving human life. According to the Holy Quran, “whoever saves a life, it would be as if he saved the life of all the people.” In this light, any opposition to biotechnology does not at all mean that Islam is opposed to technological progress. Rather, Muslim scholars seek to examine and understand all aspects of particular biotechnological applications to ensure that these applications are consistent with the basic teachings and fundamental principles of Islam [...] any serious discussion of the moral justifiability of biotechnology must consider all kinds of potential risks such as political abuse, commercial exploitation, and adverse effects upon interpersonal relationships. (Mirza, 2004: 113)

However, while Mirza makes the argument that using technology would not be haram¹⁹ in the context of saving a life or alleviating suffering, transhumanism moves much further beyond this context. While transhumanists do consider the ways in which human suffering can be alleviated using radical technologies, the central premise of transhumanism is to alter the nature of the human condition to such an extent that the human itself will cease to exist, and the posthuman will take its place. The risks that

¹⁹ The term “haram” means that which is forbidden by Allah in Islamic law.

Mirza mentions that may come about as a result of biotechnology, such as abuse, exploitation and adverse effects upon relationships, are the risks that cyberpunk writers focus upon in their writing. In the context of Effinger's series, which focuses exclusively upon an Islamic society, the biotechnological revolution has not focused upon saving lives and alleviating suffering, but rather, the available technology has been utilised to enable individuals to exist within simulated personality modules, has led to the development of new forms of dangerous and addictive behaviours, and has significantly expanded the sex industry by creating new ways of further exploiting women and trans women.

Effinger's Marîd Audran series focuses upon a post-revolutionary Islamic state in which the body as sacred icon is being challenged by a technological revolution. Whilst the religious leaders of the Budayeen do not have a choice but to accept the central role that technology plays in the everyday life of the citizens in the Budayeen, there is concern regarding the ways in which technology leads to the development of addictive behaviours and creates new forms of intoxication, as Marîd states in *A Fire in the Sun*:

The more conservative imams taught that the implants fell under the same prohibition as intoxicants, because some people got their pleasure centers wired and spent the remainder of their short lives amp-addicted. Even if, as in my case, the pleasure center is left alone, the use of a moddy submerges your own personality, and that is interpreted as insobriety [...] I'm with that twentieth-century King Saud who demanded that the Islamic leaders of his country stop dragging their feet when it came to technological progress. I don't see any essential conflict between modern science and a thoughtful approach to religion. (Effinger, 2006: 17)

Marîd's argument that there does not need to be a conflict between science and religion does not take into account the fact that the ways in which technology is used in the series do contravene fundamental principles of Islam; these technological advances do cause harm and suffering to their users, and they have helped to further entrench addiction, inequality and exploitation within society. Marîd considers the conflicts within this relationship between science and religion in the second text in the series,

long after he himself has been coerced into accepting invasive body modifications in the form of two sockets being installed into his brain that allow him to plug in moddies and daddies that can control his physiology, provide him with new physical and mental skills, and enable him to change aspects of his personality at will. In *When Gravity Fails*, Marîd was initially terrified of the prospect of having these modifications, as he was concerned that they would change his way of thinking to such an extent that he would no longer remember who he was prior to the surgery, and he would wake up to a new personality. Once he has had the surgery and comes to accept and even revel in the power and skill sets that his modifications afford him, he comes to change his mind about the use of such technological interventions. By the second novel in the series, when he considers this relationship between science and religion, it becomes clear that he has become submerged within the technology, and his thoughts and feelings regarding his modifications, and the use of infiltrative technologies at large, has significantly altered as a result of the effects of his modifications on his psyche. Marîd works to justify the use of radical technologies despite the very real harm they cause to his friends, colleagues and associates, and attempts to rationalise his new stance by invoking the arguments of a religious leader from two centuries ago.

As stated in the main introduction to this thesis, early cyberpunk writers such as Gibson, Rucker and Effinger were not concerned with providing their readers with hope; cyberpunk is neither a utopian nor a dystopian movement, and it presents the reader with a detached assessment of contemporary advances in technology suffused with a critique of capitalist ideals. Thus, whilst transhumanism provides the framework for developing a technologically advanced utopian society, cyberpunk writers – particularly in the 1980s – worked to critique the extent to which such technologies can be utilised in inherently exploitative capitalist systems. As a result, cyberpunk writers focus upon the limits of revolutionary technologies in terms of their application rather

than their efficacy. These limits centre upon the ways in which access to these technologies will be limited due to factors such as personal wealth, social status, geographical location and so on. In countries where access to basic healthcare can often be limited or lacking, or where the healthcare system that does exist is already struggling to meet demand (McGee, 2008), the advent of cutting-edge technologies focused upon extending life or transcending the human body will have a limited effect on the vast majority of the population. The governments of such countries would need to weigh the potential benefits associated with transformative surgeries alongside the need to provide adequate healthcare for the entire population, a goal that is not currently being achieved in the vast majority of cases in contemporary society (FitzGerald, 2008). Transhumanists focus solely upon the capabilities of such transformative technologies rather than the practicalities pertaining to cost, availability and implementation. A lack of access to radical and transformative technologies further entrenches social inequality in these texts, and the characters in these narratives resort to ever more physically, psychologically and physiologically damaging acts in order to be able to access these technologies.

The Immortal Self

The focus on immortality and what it means to be immortal lies at the heart of both religious doctrine and transhumanist discourse (Tirosh-Samuelson, 2011 and Waters, 2011). Transhumanists often use concepts that are bound in religious thinking when focusing upon the ways in which transhumanism can overcome the limiting nature of human mortality:

Posthuman discourse confuses functionality with ontology, and in doing so pursues a salvific course that can only lead to annihilating what it seeks to save. Humans must be saved from their finitude and temporality. Consequently, their flesh, to invoke a biblical concept, must be transformed into information that

can be organized into more enduring patterns. It is not the Word made flesh that redeems, but flesh made data which enables survival. (Waters, 2006: 143)

In a more recent chapter on salvation and eschatology in relation to both transhumanism and Christianity, Waters (2011) considers three possible types of immortality: biological immortality (through the use of biotechnology and genetics), bionic immortality (with the utilisation of robotics and nanotechnology) and virtual immortality (through AI and digitisation). Cyberpunk writers consider all three types of achieving immortality in their writing, and analyse the extent to which all three possible routes to salvation will fail due to their existence within an inherently exploitative capitalist framework, in which access to technologies is not granted in accordance with an adherence to the idea of a collective transcendence for the greater good, but rather, radical technologies are the playthings of an increasingly diminishing elite.

Discourse concerning transhumanist principles tends to posit ambition as the key driving force behind the need to strive for a posthuman future, as the posthuman is seen as the next logical and necessary step in humanity's evolution. The argument here is that a focus on the posthuman is a natural step forward in the history of humanity; as leaps in both technological knowledge and application combined with a deepening understanding of the human body take place, the combining of the biological with the technological becomes ever more relevant in contemporary discourse. Cyberpunk's focus on the nature and application of invasive and revolutionary technologies posits this focus on the posthuman as being the logical next step in human evolution. However, this does not mean that this step is viewed as a positive development, but rather as a logical one. The writers considered in this thesis do not argue for or against this focus on posthuman ideals; as has been stated in previous chapters, Gibson, Rucker and Effinger do not offer a moral stance on the development of the posthuman, but

rather, analyse the various ways in which such principles can be applied in technologically advanced societies. Rather than focusing on external elemental forces in its analysis of the future of humanity, cyberpunk focuses on the relationship between technology and the individual, which is a focus that is shared by transhumanists and contemporary theorists considering the future of humanity's relationship with technology: 'No longer can the species secure its future by manipulating the external environment: survival technology must be turned inward, toward the adaptation and re-invention of humans themselves.' (Raulerson, 2013: 48) Cyberpunk embraces this concept of turning technology inwards in order to enable humanity to have a degree of control over not only its evolutionary future, but also, potentially over its mortal nature. Theological doctrine and transhumanism are fundamentally concerned with the concept of eschatology, however, whilst the world's religions wait for their saviour, transhumanism teaches its advocates that they must use every tool at their disposal to save themselves:

connecting the transhuman faith in technology's radical evolutionary potential to Christian theories of eschatology [...] Both these futurisms await the arrival of a savior; where Christian eschatology awaits the return of God, transhumanism awaits the arrival of a host of radical posthuman-making technologies. (Pilsch, 2017: 6)

Pilsch's argument is not just relevant to Christianity but to all religions that adhere to the notion of an ultimate saviour of humankind, and with this idea of salvation comes the concept of different understandings of eternal life. While it can be argued that 'Religion brings acceptance of death, and comfort with that acceptance' (Peters, 2011: 160), it is nevertheless the case that this acceptance hinges in large part upon the notion of life after death, in which those humans who have lived their lives in accordance with the religious teachings that they ascribe to expect to be rewarded, with everlasting afterlives free of all suffering and pain. Humanity is ultimately defined by its mortality, and any attempts at changing this central aspect of the human experience will result in

the creation of an altogether different being: ‘From the time of the Homeric writings, *mortal* has been a synonym for *human*: humankind, in specific contrast to the immortal gods, is defined by death.’ (Jantzen, 2002: 142) Transhumanism promises the potential for creating a different form of eternal life, one that can be enjoyed on earth without the need for death, with technology being the salvific force upon which this new form of life is based: ‘Technophiles view bio-enhanced, bio-engineered or even nano-constructed bodies as a temporary stopgap on the road to incorporeal resurrection and immortality – the central promise and propagandist lure of Christianity and other religions.’ (Dinello, 2005: 21) This potential future as offered by transhumanism would necessitate the creation of an altogether different species:

Advocates of transhumanism argue that recruitment or deployment of [...] various types of technology can produce people who are intelligent and immortal, but who are not members of the species *Homo sapiens*. Their species type will be ambiguous – for example, if they are cyborgs (part human, part machine) – or, if they are wholly machines, they will lack any common genetic features with human beings (McNamee and Edwards, 2006: 514).

However, while transhumanists argue that the pursuit of immortality can eventually lead to the development of a new species – the posthuman – Gibson, Rucker and Effinger do not focus upon these future gods who have defeated death, but rather, upon individuals in the near-present who attempt to partake in the posthuman dream with any and every means at their disposal. The strive for immortality – whether through continuous, uninterrupted life or with the use of technologies such as cryonics – is apparent in a significant number of cyberpunk texts, from Mark Teppo’s short story ‘The Lost Technique of Blackmail’ (2010); David Marusek’s short story ‘Getting to Know You’ (1998), in which immortality is offered to the highest echelons of society; Cobb’s experiences with the concept of immortality through the downloading and uploading of his consciousness in the Ware Tetralogy; Sterling’s analysis of extended life through Moses Moses, who spends seven centuries in cryosleep in *The Artificial*

Kid; and the various forms of attempted immortal life that exist in Gibson's *Neuromancer*, which include the one-hundred and thirty-five year old Julius Deane's focus upon rejuvenation therapies, the Tessier-Ashpools' use of cloning and cryonics, and the transferring of McCoy Pauley's mind into an AI to enable him to exist forever in cyberspace. In Effinger's texts, characters such as Friedlander Bey are able to use their wealth and influence in their pursuit for extended life spans, which in Friedlander Bey's case means going so far as to develop a black market organ trade whereby those at the top of the list are able to demand organs from their underlings as needed, with Friedlander Bey naturally being at the top of the list.

The characters in these texts respond to a burgeoning posthuman sensibility by engaging with any and all forms of technology at their disposal, and their attempts to overcome the great equaliser that is death is of paramount importance, as unlike with religion doctrine, there is a lack of acceptance of the eventuality of illness, decrepitude and ultimately death in transhumanist thought. Immortality in this context has a number of different meanings, and does not solely refer to physical immortality, as technological advances open up new possibilities for existing beyond the natural limits of the human body:

The transhumanist vision includes immortality. Two roads might lead to overcoming death, one via the body and the other via the mind. First, perhaps with just the right genetic selection and genetic engineering, our enhanced physical health may make us immune to aging and ward off the diseases that might kill us prematurely [...] second, technogeniuses might find a way to upload our brain capacity, including our self-consciousness, into a computer. Then, in our minds, we could live forever as software within computer hardware. (Peters, 2011: 64)

These two potential roads to immortality have both been considered by cyberpunk writers. In Gibson's *Sprawl Trilogy*, there are characters that have opted for either one or the other of these routes to potential immortality; Julius Deane uses the latest advances in medicine to keep himself in good health whilst significantly extending his

life span, and he uses his wealth in order to be able to access the very latest and best healthcare in order to do so. Characters such as Julius Deane are not wary of revealing the extent of their body modifications to those around them; their ability to be able to partake in such revolutionary and radical procedures are an important status symbol, as their ability to be able to access and afford such procedures denotes the significant amount of social and financial capital that they possess. Whilst characters such as Julius Deane work to modify and enhance their embodied identities in the pursuit of a significantly extended life span, others are more concerned with a disembodied form of immortality: one that can potentially be achieved through cyberspace. Case, and other cowboy hotshots like him buy into the promise of this alternative form of immortality due to the developments of cyberspace and AI technology, which offer the possibility for an individual to upload their thought processes onto computer programmes that will enable them to exist forever in the virtual sphere, as McCoy Pauley does in *Neuromancer*. Effinger's series focuses exclusively upon embodiment in the context of body modification, and the concept of cyberspace does not feature in the *Budayeen* in the way that it does in other cyberpunk fictions. Much like Julius Deane, the kingpins of this society such as Friedlander Bey and Abu Adil utilise radical technologies, however, alongside this, they also exploit other human beings in order to significantly extend their lives and ensure that their power and status remain intact. Rucker's *Ware Tetralogy* takes yet another approach to the concept of immortality, by analysing one individual's relationship with radical technologies that offer the potential for eternal life. Unlike other cyberpunk characters who use cryonics to enable them to exist in and experience different periods of time – such as Moses Moses and the Tessier-Ashpools – Cobb instead chooses to first allow his natural and aged body to be killed in order for his thought processes to be extracted and stored for the purposes of uploading to different physical forms as needed, potentially in perpetuity. This means

that there are periods of time in which Cobb exists only in cyberspace, and while he is able to communicate during these periods, he makes it clear that existing within a physical body is important to him. While he ultimately comes to reject the concept of immortality, as he is unable to reconcile with the changing nature of his various embodied identities and he refuses to accept that he is no longer considered to be human by his peers, Cobb does in essence represent the posthuman ideal as imagined by transhumanists. He is able to choose his embodied identity, he can exist in different forms across time, and he is able to control his own mortality. Cobb chooses death on two occasions, first when he allows himself to be killed so that his thought processes can be extracted, and the second time when he requests that he not be uploaded onto another body again. Through this final request, Cobb comes to be the master of his own mortality, and he is able to make informed decisions about his life, his embodied identity, and ultimately, his death.

Cobb becomes increasingly religious and spiritual as he becomes more and more dissatisfied with his various embodied identities, and this new-found perspective begins in the years when he does not have a physical body, and his thought processes are in storage, as he explains in *Realware*:

“My original human personality was stored on an S-cube for over twenty years, [...] that was more or less the same as being dead. That me is dead forever, and it’s the same as the me right now. Memories of it? A big white light. The SUN. Endlessly falling into it, but never reaching the core. A cloud of other souls around me. The end of time, forever and ever [...] I mean capital S-U-N. At least that’s the name I use. The Divine Light, the universal rain that moistens all creatures [...] the SUN is about love and peace.” (Rucker, 2010: 535)

Cobb has a communal, transcendental experience during this time, and this significantly alters his perspective on what death does, and can, mean for an individual. Cobb’s description of the effects of the SUN is very much linked to Christian understandings of heaven, and he comes to regard the SUN as a divine entity that brought him peace during the periods in which he was “dead”. Due to his increasing

disappointment with his various modified lives on Earth, Cobb's desire to return to this period of contentment and communal sense of love becomes ever more pronounced, and he eventually decides that he is unable to reconcile his initial hopeful expectations of a posthuman future with the realities of existing as a being that is at once considered to be both *more* and *less* than human by his peers, and so he chooses to once again "die". When at the end of *Realware* Willy asks if Cobb wishes to be brought back using the data on the S-cube once his trip with the Metamartians is over, he replies: "'Please don't do that [...] I don't want anyone bringing me back to Earth again. I'm done here. I'll travel on with the Metamartians, but when this trip plays out, I want to finally make it into the SUN.'" (Rucker, 2010: 742) Cobb has found a truly transcendental existence in his experience of the SUN, and he chooses to return to the state of being in which he last felt truly at peace, rather than chasing a potential physical form of immortality that places him at the forefront of technological advancement. His experience of "death" enables him to consider the concept of the soul, and to analyse what it means in the context of human life.

Cobb's experiences of the SUN have a profound effect upon his understanding of his own place within the grand scheme of things, and this sense of an alternative form of existence after death in which souls merge within an environment of peace and love is one that has deep biblical roots:

Many people in the Western world have forgotten that they are communal. Many of us understand ourselves as individuals. But there is actually a strange correlation of the theory of cybernetics and the biblical understanding of the soul. Both understand humans as deeply embedded in community and both see the environmental influence on the individual so profoundly that any understanding of a single human depends on knowledge of her community; in the Bible, this is expressed with the term "soul" (Foerst, 2005: 118).

Cobb's experiences of a communal sense of connectedness and his subsequent feelings of peace as a result come as a great surprise to him, and his desire to return to that state of being – or non-being as the case may be – leads him to evaluate his own

understanding of the soul, and its importance in defining identity. Rucker's texts repeatedly refer to the concept of the soul, as the beings within these texts, whether human or otherwise, work to understand their place within an ever-changing world that is on the cusp of posthumanity, and in the case of characters such as Cobb, this leads them to revert back to considering and using religious doctrine in order to try and develop and retain harmonious relationships between themselves, their peers and the world around them.

Cyberpunk places a great deal of importance on the concept of the soul. The soul is regarded as the single most important aspect of embodied reality in the texts in this thesis, and it is the integral aspect of the human that needs to be cared for, protected and, ultimately, saved (to be transplanted, uploaded or encoded) in order to transcend past the fragile body and begin to exist in a posthuman reality. The soul must be protected in order to overcome temporality; it must be saved and encoded in such a way that the essence of the human remains regardless of the method or timeframe over which storage and eventual transplantation and reanimation takes place. What is meant by the soul is a question that has been considered at length by religious leaders, philosophers, theorists and humanity at large for many years, and in the context of cyberpunk, and this thesis more specifically, the soul can be defined as:

A very special part of a human being, in addition to the body, that gives a person at least one of the following: life, a personality; or, the ability to move oneself, to think and feel, to leave the body, to know right from wrong, to survive death and perhaps be reincarnated, to exercise free will, or to have a spiritual relationship with God. (Elbert, 2003: 243)

In Elbert's definition, the soul can survive death, and is therefore immortal, and this sense of the immortality of the soul is fundamental to the work of a number of cyberpunk writers. Whilst physical immortality is the ultimate dream of transhumanists, cyberpunk writers consider the ways in which what is considered to be the soul can be removed from the constraints of the physical body and potentially exist

in other forms, whether that is in other physical bodies, as is the case with Cobb; in cyberspace as McCoy Pauley does in *Neuromancer*; or in storage in order to be given the opportunity to exist in alternative forms with the advent of new technologies.

Post-Revolutionary Posthumanism

Whilst Gibson and Rucker consider elements of religious doctrine and spiritualism in their writing, Effinger's Marîd Audran series focuses exclusively upon a society that practices an established religion, and he directly confronts the relationship between religion and technology through his analysis of a post-revolutionary Islamic state. Effinger's novels and short stories detailing life in the Budayeen were written at a time when tensions between the US and the Middle East, and more specifically, Iran, were at an all-time high as a result of the events of the preceding decade. The 1970s were marked with growing feelings of discontentment and disenchantment with the current political situation amongst the Iranian people, and these tensions culminated in the Iranian Revolution taking place at the end of the decade. On April 1st 1979, Ayatollah Ruhollah Khomeini announced that Iran was now an Islamic Republic after a period of civil resistance, strikes and demonstrations aimed at opposing the rule of the Shah of Iran, Mohammad Reza Pahlavi. The revolution, and the events that took place in the months afterwards, resulted in renewed tensions between Iran and the US, with the US seeking to reassert authority over what was deemed to be an uncooperative Iran. Mohammad Reza Pahlavi (who was supported by the US as leader) was deposed, and a national referendum declared Iran an Islamic Republic. This resulted in a period of international tension and political upheaval, with relations between Iran and the US being severely damaged. Iran was no longer in the control of the United States, and this

development caused an irreparable rift between the two nations.²⁰ In his article entitled ‘Iran and the United States: A Clash of Hegemonies’, James A Bill makes the argument that the inability of the US – as global hegemon – to retain control of Iran, had a significant effect on the United States’ depiction of Iran:

Hegemons seek to expand their power and to promote their ways of life across the globe. Clashes of power among hegemonic actors are most intense where gaps in worldview are the greatest. As global hegemon, the US considers itself protector of the international status quo [...] Viewed from the perspective of hegemon theory, Iran assumes a special importance to the United States. Its independent nature, born of the 1979 Revolution and the trying years of the Iran-Iraq war, clashes with America's existence as global hegemon [...] The US has even developed a new terminology to describe those states that stubbornly refuse to abide by its dictates. Such countries are referred to as “rogue” or “renegade” states. (Bill, 1999: 45-46)

The revolution became not only a regional issue, but an international concern, as the media outlets focused upon the events leading up to, and the aftermath of, the Shah’s deposal, including the hostage crisis in which fifty two US workers were held for many months. The situation in Iran garnered international attention, and the new regime’s refusal to cooperate with the US was seen as a rejection of western ethics, morals and ideals. Iran came to be portrayed as a rogue nation espousing principles of terrorism, and the American public’s perceptions of the country were moulded by the information disseminated through the contemporary news outlets. The relationship between Iran and the US was at the forefront of discourse concerning international politics in the 1980s, and the period in which Effinger wrote the *Marîd Audran* series is categorised as being an era in which contemporary notions of the perceived dangers of religious fundamentalism were beginning to develop in the wake of the Iranian Revolution: ‘The Iranian revolution changed the geopolitical map of the Middle East. Every regime in the region became nervous [...] The United States lost a very dependable and strong

²⁰ For more on the relationship between Iran and the United States pre- and post- the Iranian Revolution, see Fred Halliday (1980), Adam Tarock (1996) James A Bill (1999), Ali M Ansari (2006) and Alethia H Cook and Jalil Roshandel (2009).

ally' (St. Marie and Naghshpour, 2011: 143). Effinger's focus upon the establishment of a post-revolutionary Islamic state that has become global hegemon in the wake of numerous wars and crises that have destroyed large swathes of the north-western hemisphere and have led to the collapse of governments enables him to analyse the extent to which the development, implementation and widespread utilisation of ever more radical and invasive technologies will transcend religious and cultural barriers. While Effinger does focus heavily on Islam and Middle Eastern cultural practices in his series – from the way in which business is conducted through to cultural traditions regarding hospitality and the treatment of guests – he nevertheless does so through a specifically western aesthetic, particularly in terms of his focus upon consumerism, ideals of female beauty in the context of body modification, and his analysis of the ways in which a pervasive sex industry will come to infiltrate and eventually define every aspect of popular culture and the entertainment industry. Effinger's novels and short stories chronicle the destructive nature of the consumerist culture which was gaining momentum in the 1980s with his depiction of a society in which bodies and minds can be graded and traded as consumer products, and the advent of surgical procedures which are capable of breaking down and rebuilding bodies has resulted in a society that has to some degree lost its own cultural and religious identity. In the Marîd Audran series, an adherence to key transhumanist principles leads to the employment of the very worst excesses of western consumerist culture on an Islamic society, and the human body becomes the ultimate consumer and consumed product within the marketplace. There is a significant shift in acceptable cultural norms as the sex industry permeates every part of society, and the women and trans women in the series become tradable commodities in an industry from which it is impossible to escape. Rather than delivering on the utopian promise of a free and egalitarian society in which human beings will have full control over their own bodies and their own

destinies, a focus upon transhumanist ideals in relation to body modification has led to the development of a society that is increasingly hierarchical, damaging and exploitative, particularly for the women and trans women that live in the Budayeen. This society, which through the advent of ever more radical technologies is in the transitory phase between the human and the posthuman, is undergoing a period of flux in the context of its cultural and religious identity. As an essentially white, western theoretical framework that does not consider the ways in which the pursuit of a western ideal of the posthuman will affect people of other nationalities, races, cultures and traditions, transhumanism works on the basis that the form of posthumanism that is idealised by key theorists is the only form of posthumanism that can and ought to be desired. Effinger's series illustrates the extent to which this adherence to a very specific type of transhumanism will lead to the homogenisation of cultural attitudes towards technology and the body – overriding significant differences between different nationalities, cultures and religions. This is in essence a form of cultural imperialism whereby western hegemony will come to ultimately define and dictate the future of humanity and the (post)human condition. The body modifications on offer in the Budayeen are essentially not any different to the modifications on offer in Gibson's Japan or Rucker's US; technology is used against all citizens who lack the means to resist exploitation, and the female characters in these texts are doubly exploited as a result of their sex. Technology takes precedence over all else in these texts, and Effinger's series demonstrates how no other aspect of society, be it religion, culture or traditional codes of practice are able to oppose the significant transformative effects of radical technologies upon the very fabric of a country or its people.

Conclusion

While it can be argued that transhumanists are essentially secular atheists in their outlook, there are clear ontological links between the tenets of transhumanism and

theology, and cyberpunk writers analysed and responded to these links in a number of ways in their writing. Gibson's *Sprawl Trilogy*, Rucker's *Ware Tetralogy* and Effinger's *Marid Audran* series all encompass key elements of both transhumanist and theological principles that relate to the human being's relationship with her body, her mind and her environment. The human's embodied identity relies upon these various relationships in order to be able to develop an embodied consciousness and sense of self, and these cyberpunk writers consider the ways in which the debates around the future of humanity that rest upon both transhumanist and theological notions of the self can disrupt this embodied consciousness. Transhumanism promises a salvific transcendence for humankind (Cave and Norris, 2012; Thweatt-Bates, 2012), and this promise of salvation is not unlike that which is promised by the world's religions. In terms of the potential future of humanity, both theology and technology essentially say the same thing, that the human being's journey to eventual salvation is incomplete, and humanity must continuously work to improve the species with any means at its disposal. However, the ways in which this salvation will be achieved is the source of disagreement between the two camps:

Modern transhumanism is a statement of disappointment. Transhumans regard our bodies as sadly inadequate, limited by our physiognomy, which restricts our brain power, our strength, and, worst of all, our life span. Transcendence will not be found in the murky afterlife of the usual religions, but in technological and biological improvement. (Alexander, 2004: 51)

Whilst transhumanists work on the premise that physical transcendence towards posthumanity will be achieved with the utilisation of radical technologies, religious leaders are more focused upon spiritual transcendence and the transcendence of the soul through an adherence to religious doctrine and codes of conduct. Cyberpunk considers these various types of transcendence in tandem, and Gibson, Rucker and Effinger are concerned with the ways in which any form of betterment of the human condition – be it physical, physiological, emotional or spiritual – will be possible in

societies that are concerned first and foremost with finding ever more invasive and brutal ways of exploiting an increasingly vulnerable citizenry.

Cyberpunk writers work on the premise that religion will not cease to have an influence in technologically advanced societies, but rather, will exist in some form during such periods of significant societal change, as citizens work to re-evaluate their embodied identities and sense of self as they engage with transformative body modification practices. In order for a posthuman future to be achievable, there needs to be an element of faith in the progressive nature of the human, because the intelligence, resilience and transformative aspects of human nature will be required in order to be able to take the first steps to creating a potential posthuman future. Humanity will in essence need to take a leap of faith in order to begin the process of creating the posthuman, and there is a theological element to this idea, as it requires a deep sense of desire for change and belief in the transcendental nature of the human condition – both concepts that are fundamental to theological doctrine. Gibson, Rucker and Effinger show that neither the trans nor post human subject will necessarily be free of some form of religious belief. There are numerous characters in these texts who still follow established world religions, including Christianity, Islam and Rastafarianism, and characters who adhere to newer forms of worship, such as the moldies in the Ware Tetralogy who believe in the concept of the One, and Cobb who desires to return to the SUN upon his “death”. These texts demonstrate the extent to which these characters need a form of belief that lies outside the remit of technology in order to continue to have a sense of community with their peers and a belief system that enables them to come to terms with a radically changing society that continuously challenges their embodied identity and sense of self. Cyberpunk writing shows that despite the advent of radical and invasive technologies, geopolitical crises and historic and current revolutions in near-future worlds, the

influence of religions and spiritual belief systems continues to have a significant impact on these societies, as humans work to decipher their place in an ever-changing world.

A number of the characters in these texts struggle to come to terms with the radical body modifications they either choose or are coerced into undertaking, and these modifications have a significant impact upon their mental health and their sense of their embodied identity. As this chapter has shown, re-engaging with religion helps these characters to make sense of both their modified selves and the world at large to a certain degree, and the fact that religious doctrine and transhumanism share key principles in the context of the potential transcendence of humanity in its myriad forms ensures that religion continues to play a significant role in these transitory, transhuman societies. However, it is not the case that every character in these texts is successful in coming to terms with their new embodied identities, and even those who do engage with religion continue to face considerable challenges in this regard. The next chapter in this thesis focuses upon characters who continue to struggle to redefine and accept their new embodied identities in the wake of significant body modification, and analyses the extent to which the formation of alternate identities necessitates a degree of anxiety, trauma and distress on the part of the modified subject.

Chapter Four

The Reluctant Posthumans: Memory, Identity and the Perception of the Self in the Modified Subject

‘Could a current human become posthuman while remaining the same person[?]’²¹

Discourses on cybernetic and corporeal modification are prevalent in cyberpunk; the social, cultural and political implications of biotechnological and medical interventionist practices associated with this form of modification are of fundamental concern to the cyberpunk produced in the late twentieth century. The perspectives offered by writers such as William Gibson, Rudy Rucker and George Alec Effinger in relation to corporeal and psychological fracture, modification and “restoration” exemplify one of the elemental concerns of the movement – the extent to which a person’s identity and perceived sense of self is challenged during and after significant body modification: ‘The technologies of human enhancement raise a puzzling question about the transformation of the human individual: Is the enhanced person still the same person?’ (Cole-Turner, 2011: 10) The characters in these cyberpunk novels analyse and re-evaluate their understanding of their own sense of humanity during the various stages of modification, and their relationship with their modified selves – whether the modification is physical, psychological or physiological – presents a crisis of identity, both in terms of the perceived sense of self and the public perception of the self. This crisis results in the necessity to reconstruct and often restructure the innate sense of

²¹(Bostrom, 2008: 123)

self, creating a period of physical and psychological vulnerability, particularly in the case of those characters that have been forced or coerced into becoming modified.

In the context of these novels, rapid technological advancements alongside the emergence of ungoverned corporate states and territories has allowed for and encouraged an adherence to transhumanist values in the context of body modification, and the expansion in radical technologies in the pursuit of developing a posthuman future has led to societies in which the modification of the human body has come to represent an adherence to a transhuman ideology that focuses upon the body as project. The technologies that are depicted in these novels are vulnerable to abuse by those that have the means to own and implement such technologies, and this is demonstrated in the exploitation of characters that lack the social, cultural and financial capital required to resist the harmful and abusive practices that they are subjected to.

Cyberpunk's focus on these revolutionary technologies allows for an analysis of not only the technologies themselves, but also the ways in which medical and scientific breakthroughs are capitalised upon and controlled by ever more powerful and opaque industries and corporations. The modifications that are available and encouraged by these corporate behemoths in these societies ensures that citizens remain faithful and loyal subjects to a system that has the capability to either enhance, "restore", rejuvenate, or fracture, destroy, "degenerate" them. Cyberpunk's focus upon the body as project creates a system whereby the link between the body and the self in terms of the construction and reaffirmation of identity and the perceived sense of self is tenuous and often transitory.

The modifications depicted in these texts are undertaken for an array of reasons, such as for the purposes of reconstructing the body after significant war trauma in the case of Gibson's *Neuromancer*; enhancing the biological and cybernetic capabilities of the

body in Effinger's Marîd Audran series; or working towards posthuman "immortality" in Rucker's Ware Tetralogy. The characters within these texts circumvent normative boundaries regarding the construction and affirmation of identity and the perceived sense of self. The ways in which identity can be constructed and reconstructed through modification of the body, mind or brain – particularly in the context of exploration of this perceived sense of self – is a crucial facet of these texts. Body modification allows for this exploration to take place in numerous ways, however, this concept becomes inherently challenging when considering those who have been coerced into undergoing invasive and experimental surgeries.

Consciousness

The concept of consciousness is important when analysing cyberpunk; there are a vast array of texts in the movement that consider what consciousness means, and more significantly, what it will come to mean in increasingly technologically advanced societies in which the body, the brain and the mind have all been infiltrated by radical technologies. "Consciousness" is a term that has been at the centre of philosophical discourse throughout the history of humanity, and it is a term that does not have a clear, agreed-upon definition (Murphie and Potts, 2003; DeBaets, 2014; Gennaro, 2018; Jorgensen, 2018). A concept which incites continuous debate, consciousness is not easy to define:

What then is consciousness? For some theorists it is simply the state of being aware; for others it entails self-awareness [...] For a long time, discussions of consciousness centred on rationality, but some recent theories have emphasized the role of emotion. Perception and cognition have long been foregrounded in studies of consciousness, but an expanded definition also includes creativity, memory and the sense of self. (Murphie and Potts, 2003: 143-144)

Murphie and Potts present an array of potential definitions of consciousness, and whilst these definitions are fiercely contested, there are key concepts here that are fundamentally important considerations for the cyberpunk texts in this thesis: self-

awareness, memory and the sense of self. These three concepts are considered at length in this chapter through the experiences of three central characters: Colonel Willis Corto in Gibson's *Neuromancer*, Marid Audran in Effinger's series, and Cobb Anderson in Rucker's Ware Tetralogy. Leading on from the definitions provided by Murphie and Potts, another aspect to consider in the context of consciousness is the notion of looking inwards: 'Some philosophers [...] insist that consciousness is a matter of turning one's attention inward and thinking about what is going on in one's own mind.' (Tye, 1995: 5) This idea of turning inwards is also considered in these texts; as each of these characters undergo significant and life-altering body modification procedures – whether having elected or been coerced into doing so – they are required to come to terms with the fact that their relationship with their own embodied identities must adapt, and it becomes essential that they re-evaluate their perception of their own identities in order to be able to establish a new relationship with their altered selves. As this chapter will show, this attempt to establish a new relationship is not always successful, and can lead to the development of serious mental health issues, as significant body modifications can result in the development of a difficult relationship between the modified subject and their new embodied identity.

The concept of consciousness is important in relation to discussions concerning personal identity, particularly in the context of cyberpunk, as the characters in these texts are required to define and re-define their identities continuously as a result of the physically and mentally transformative body modification practices they either choose to, or are coerced into, undertaking. The link between consciousness and personal identity has been a key area of focus for philosophers for a significant period of time, and is a key consideration for the texts analysed in this thesis. As such, it is important to analyse these texts within the context of this link between consciousness and personal identity in order to ascertain the extent to which an individual's relationship

with their embodied identity can shift and change as a result of body modification. This is an important area to consider in the context of this thesis, because it raises questions about the transhumanist desire for a technologically-driven transcendence. The work of John Locke has been fundamental in discussions around this link between consciousness and personal identity since the publication of his highly influential text *An Essay Concerning Human Understanding* (1690), and his treatise is highly relevant in the field of transhumanism. A leading British empiricist, Locke's argument is that consciousness is fundamental to the development and continuous assertion of personal identity:

Consciousness makes personal identity [...] For it being the same consciousness that makes a man be himself to himself, personal identity depends on that only [...] For as far as any intelligent being can repeat the idea of any past action with the same consciousness it had of it at first, and with the same consciousness it has of any present action; so far it is the same personal self. For it is by the consciousness it has of its present thoughts and actions, that it is self to itself now, and so will be the same self as far as the same consciousness can extend to actions past or to come; and would be by distance of time, or change of substance, no more two persons than a man be two men, by wearing other clothes today than he did yesterday, with a long or short sleep in between: the same consciousness uniting those distant actions into the same person, whatever substances contributed to their production. (Locke, 1996: 138-139)

Locke's assertion that consciousness is the foundation for personal identity is one that is apparent in the texts in this thesis. Gibson, Rucker and Effinger use the concept of personal identity to analyse the myriad ways in which an individual's understanding of their own identity is irrevocably altered once they begin the body modification process and their consciousness becomes disrupted during the period of change. Locke's argument that personal identity is retained as long as consciousness remains constant is one that is considered in these texts, particularly in the context of the ramifications associated with the disruption of consciousness, where an individual is no longer able to connect their past thoughts and actions with themselves in the present, as is the case with Colonel Willis Corto in Gibson's *Neuromancer*.

War Trauma, Disability and Mental Health

William Gibson's ground-breaking novel *Neuromancer* is considered by both readers and critics to be an exemplary work of cyberpunk: one which focuses on technology that can not only modify the body but also invade the mind. While a number of critics have focused upon Gibson's portrayal of corporate hegemony (McCaffery, 1988; Sponsler, 1992), information systems (Whalen, 1992; Hollinger, 1999) and, in more recent years, offered feminist critiques of the novel (Wolmark, 1999; Gough, 2000; Harrison, 2012), the various depictions of disability and post-modification subjectivity that are present within *Neuromancer* have been comparatively ignored.

Gibson's analysis of revolutionary technologies in *Neuromancer* forces an examination of the ways in which augmentations, prostheses and cybernetic modifications can be developed, harnessed and ultimately exploited, and Gibson analyses the psychological and socio-cultural impact that such modifications can have on the individual: 'To raise questions about human identity, [*Neuromancer*] first presents provocative body alterations' (Westfahl, 2013: 68). The body modifications that are available in *Neuromancer* are provocative because they are revolutionary: they destabilise the modified subject and decentre individuals' relationships with their embodied selves. Gibson analyses the concept of the alteration of identity in the context of "fixing" disability in *Neuromancer*, and this encompasses not only physical disabilities but also psychological and neurological damage. This portrayal of the body in various stages of "disintegration" and "restoration" exemplifies cyberpunk's focus on the invasive nature of technology, particularly in terms of its use – and abuse – by those in power. *Neuromancer* explores this through Colonel Willis Corto, an American Special Forces veteran who is severely injured during a test mission, and is initially "rebuilt" by the American government in order to take part in a series of corrupt war trials. Gibson's

focus on Corto – and more specifically the fracturing and alteration of Corto’s identity – exemplifies not only a key theme in cyberpunk: that of the invasive and insidious nature of technology, but also the consequences of enabling both governments and multinational, intergenerational corporations to develop, control, and abuse such technologies. Wintermute’s subsequent creation of Armitage using aspects of Corto’s memories exemplifies the extent to which the modified subject becomes vulnerable to abuse and exploitation.

Corto’s identity and selfhood are fractured, re-engineered and ultimately rejected in the novel, and there is a necessity to separate Corto the man from Armitage the creation; Armitage does not share Corto’s physiology, his thought processes or – to a large extent – his memories, and Corto lays dormant in the construct that is Armitage for a significant period of time. A distinction between Corto and Armitage is necessary: they are separate entities inhabiting the same corporeal space, which is the body that both Corto and Armitage identify as theirs at different points in time. Corto exists before Armitage’s creation, and his eventual rejection of the Armitage construct re-establishes Corto’s subjectivity in the moments immediately prior to his death. Armitage’s creation and emergence is linked to Corto’s experiences in war: prior to Armitage’s construction, Willis Corto is a colonel in the Special Forces, and his unit is tasked with entering Russian-occupied space in a military operation called Screaming Fist. Unbeknownst to the unit, this operation has been planned in order to allow the US government to test Russian defences, and all members of the unit apart from Corto are killed. Corto manages to survive and eventually escape, and is ‘shipped to a military facility in Utah, blind, legless, and missing most of his jaw.’ (Gibson, 1995: 103) At this hospital, Corto is asked to take part in what he believes to be a series of military trials which will bring those that planned Screaming Fist to justice. However, before

he can take part in the trials, it is made clear to Corto that he cannot give evidence as he is:

He'd need eyes, legs, and extensive cosmetic work, the aide said, but that could be arranged. New plumbing, the man added [...] [Corto] said he preferred to testify as he was. No, the aide explained, the trials were being televised. The trials needed to reach the voter. The aide coughed politely. (Gibson, 1995: 103)

The decision to subject Corto to extensive pseudo restorative and regenerative surgery in conjunction with the aide's reaction to Corto's wish to testify without undergoing such procedures exemplifies the necessity for exhibiting an element of corporeal completeness of the self; Corto is not given the option to embody his new reality, instead, he is expected to allow himself to be subjected to procedures that will work to make his physical body more palatable to the viewing audience. Corto's disabled body requires restoration and renovation here: his sense of identity and embodied reality in relation to his disabilities are irrelevant to the authorities, and he is required to succumb to the procedures that are presented to him at a moment of significant trauma and intense vulnerability.

Corto agrees to the procedures in order to, he believes, bring those that tried to kill him to justice, however the trials are a whitewash intended to preserve the old order:

Repaired, refurnished, and extensively rehearsed, Corto's subsequent testimony was detailed, moving, lucid, and largely the invention of a Congressional cabal with certain vested interests in saving particular portions of the Pentagon infrastructure. (Gibson, 1995: 103)

Once he realises that he has been used as a pawn, Corto goes underground, and is eventually traced to a hospital in France where he has been diagnosed as schizophrenic. This diagnosis comes post-modification, and it is not clear whether Corto was exhibiting any of the symptoms related with this illness in the aftermath of the Russian mission but prior to the procedures and ensuing court case. Schizophrenia is a serious and often debilitating psychological illness, and Gibson's lack of clarity regarding Corto's personal history and personality makes it difficult to decipher whether or not

this illness was present – albeit undiagnosed – before the mission in Russia and the events thereafter.

As a result of this diagnosis of schizophrenia, Corto is taken to Toulon where an experimental cybernetic procedure is performed, which in theory is designed to “reverse” schizophrenia. It is at this point that Wintermute finds Corto, as Case deciphers: ‘Wintermute. He imagined a little micro whispering to the wreck of a man named Corto, the words flowing like a river, the flat personality-substitute called Armitage accreting slowly in some darkened ward’ (Gibson, 1995: 150). Wintermute is an immensely powerful AI. The Tessier-Ashpool Corporation control Wintermute, along with another equally powerful AI called Neuromancer. The Tessier-Ashpool family plan to illegally combine Wintermute and Neuromancer in order to create a form of super-intelligence that will increase their levels of power and control, and they require a talented hacker to programme the code needed to break the ICE: the intrusion countermeasures electronics. Wintermute therefore constructs Armitage in order to enable him to recruit the team necessary to undertake such an operation. Wintermute controls Armitage, and Armitage controls the team, made up of himself, Case and Molly. Armitage is described as a “personality-substitute”: he is a programme developed to overwrite Corto’s personality and thought-processes, and his creation leads to Corto’s identity becoming submerged within the recesses of his re-engineered body. Armitage is not an independent, autonomous being: he has been created by Wintermute for a specific purpose, he does not have memories or experiences outside of those which have been engineered for him by the AI and he does not appear to be aware that he has been created solely for the purposes of the mission. Armitage does not have a relationship with Corto; due to the significant levels of physical, mental and emotional trauma that he has endured, Corto experiences a severe crisis of identity, and

he is unable to disentangle himself from Armitage either during or after Wintermute's creation of Armitage, until the moment of Corto's resurfacing in Marcus Garvey.

Corto's experiences of Screaming Fist followed by the procedures that he was coerced into undertaking, in conjunction with his exploitation at the trial and subsequent abandonment by the government has a profound impact on both his mental health and embodied identity. The impact of this trauma becomes especially apparent in his inability to place himself in the present, and his lack of memory of the events that took place after Screaming Fist. The most pronounced example of this is the moment in which he resurfaces in Marcus Garvey, and believes himself to be back in Russia in the moments before the crash, and Case is unable to provide the support that Corto requires in order to become aware of his current surroundings. Case is essentially a stranger to Corto, and Corto's attempts at dialogue with his general, General G Girling, makes it clear that he believes himself to be back in the moments immediately prior to the events of Screaming Fist, and thus ensures that he is unable to contemplate the consequences and aftermath of the mission. Corto's memories have been fractured and displaced, and he is unable to place himself in the timeframe in which he resurfaces.

The concept of memory is particularly significant when considering Corto's experiences in relation to war trauma, disability, and their ensuing psychological effects. Corto remembers and re-experiences Screaming Fist at the point in which he rejects the Armitage construct, and it is this re-living of the most physically and psychologically damaging moment of his life which ensures that he is unable to process the events of his life in the crucial moments before his death. Corto is not given the support with which to process his memories from Screaming Fist in the aftermath of the mission, and his experiences with both the government and the medical profession ensures that these memories remain unresolved, and are suppressed throughout the

construction of Armitage. These memories are brought to the fore when Corto resurfaces in Marcus Garvey, and he experiences the events of Screaming Fist as if in the present rather than understanding them as memories:

Memories of traumatic events that do not fit into prior schemata, and are not stored as narrative and consolidated explicitly [...] may be prone to repeated retrieval. Triggers of this implicit retrieval may be perceptual stimuli [...] emotional states [...] interpersonal contexts [...] and language cues. Implicit retrieval would produce a subjective internal experience of trauma-related emotions, bodily sensations and images which would be sensed as ‘self in present’ rather than ‘self in past’. (Siegel, 1997: 47)

Upon his resurfacing in Marcus Garvey, Corto re-experiences the events of Screaming Fist as “self in present”, and the trauma that he experienced at the time of the incident is brought back to the fore of his mind. Corto is unable to extricate himself from the moment of trauma, and is therefore incapable of saving his own life at the moment in which he rejects Armitage and he himself is ejected from Marcus Garvey. This resurfacing as “self in present” illustrates not only the extent to which Corto has suffered trauma as a result of Screaming Fist, but also the lack of psychological and emotional support he was provided with in the aftermath of this catastrophic event, the consequences of which lead to the construction of Armitage. “Resurfacing” is the term used in the context of Corto’s experience in Marcus Garvey as Gibson’s depiction of Corto in these moments denotes him as regaining an – albeit fractured and disjointed – awareness of his own embodied identity and displaying a sense of agency in his rejection of Armitage. Corto’s consciousness, memories and sense of self had been repressed and overwritten by Wintermute in order to create and operate Armitage, and his resurfacing in Marcus Garvey demonstrates the tenuous hold that Wintermute had over both Corto and Armitage, as both are able to break away from Wintermute’s control. Corto is able to regain a brief moment of self-awareness before he is killed, and this moment comes as a direct result of Armitage’s fracturing sense of self.

Constructing Armitage

When Case first meets Armitage he is instantly aware that Armitage's physical features have been surgically constructed: 'The handsome, inexpressive features offered the routine beauty of the cosmetic boutiques, a conservative amalgam of the past decade's leading media faces. The pale glitter of his eyes heightened the effect of a mask.' (Gibson, 1995: 59) Armitage's face has been constructed using a combination of socially idealised and idolised features in order to ensure that his physicality is both characteristically ambiguous and aesthetically pleasing. Armitage's modifications enable him to blend in to the society that he finds himself in: his face acts as a camouflage and allows him to construct an identity that is separate from Corto's. Armitage's face adheres to the desired aesthetic of contemporary society, while his body and physical stature work to cement his status as a capable and powerful man; much like the modified women and trans women in Effinger's series, the utilisation of surgery that obeys culturally accepted standards of beauty ensures that Armitage's authority is not questioned by the other members of the group. Despite the fact that Case is aware of the extent of Armitage's physical modifications, he nevertheless shows a substantial degree of respect and regard towards him; Armitage's expensive modifications lead the group to believe that he has the social and financial capital with which to modify his body as he wishes, thus cementing his position as the leader even further. Whilst Armitage does command a high level of respect and is an authoritative presence, he does not appear to display human emotion on any perceived level: Case makes multiple references to his "mask", and Armitage's past, his thoughts, his feelings, and his day-to-day activities are a mystery to both Case and Molly. Armitage is concerned only with the plan, the run, and his life outside the very confines of the mission is unclear. Armitage's actions are robotic: his physical stature is also surgically enhanced, and he does not offer any information beyond that which he is required to

provide for the job at hand. Armitage's body has been constructed through the use of prostheses, lens implants and facial surgeries, and his memories have been altered and generated alongside his cybernetic modification. He has been created in order to overwrite another person's identity. He has a name and identity that are separate from Corto's, and Corto, the man who used to occupy the body Armitage now finds himself in, is officially classified as deceased. Armitage is a construction rather than a reconstruction: he has been created using an amalgamation of body parts, biotechnology and cybernetics, and his actions, and thought processes are completely different from Corto's. Armitage has been engineered: he is a high-level construct reminiscent of Philip K. Dick's replicants in *Do Androids Dream of Electric Sheep?*, and as is the case with Dick's replicants, there is a question of whether Armitage is aware of his own construction and identity.

Once Case starts to become aware of Armitage's creation, he begins to analyse the extent to which Armitage is – albeit initially – unaware of Corto's history and situation. Case's attempts to uncover Corto become ever more pronounced as the novel progresses: 'Case tried to find the man called Corto behind the pale blue eyes and the tanned mask [...] Operators above a certain level tended to submerge their personalities, he knew [...] The blankness he found in Armitage was something else.' (Gibson, 1995: 119) Veronica Hollinger considers this idea in her work on the links between cyberpunk and postmodernism, where she argues: 'balanced against the exhilaration of potential technological transcendence is the anxiety and disorientation produced in the self/body in danger of being absorbed into its own technology.' (Hollinger, 1991: 206) Corto is essentially lost within the technological construct that is Armitage: his body, his mind and his memories have been overridden by technology in its various forms, and he is – until the very last moment of his life – unable to extricate himself from the invasion. As the novel progresses and the stress of the

mission becomes ever more pronounced, Armitage's grip on his own reality begins to fracture. Wintermute notices this change in Armitage, and makes Case aware of it through the matrix, as Wintermute states: "He's not quite a personality [...] But I'm sure you're aware of that. But Corto is in there, somewhere, and I can no longer maintain that delicate balance. He's going to come apart on you, Case.'" (Gibson, 1995: 146) Wintermute makes it clear that there is a necessity to keep control of Armitage in order to ensure Corto does not begin to reject the construct, making it apparent that there is a clear distinction between Corto and Armitage and there is a risk that Corto will reject Armitage as soon as he is able to do so.

Fractured Memories/Fractured Identities

Corto begins to resurface when he and Case are in Marcus Garvey, a space settlement that exists above Freeside – the Tessier-Ashpool enclave – and his emergence is both tragic and painful:

Wintermute had built Armitage up from scratch, with Corto's memories of Screaming Fist as the foundation. But Armitage's 'memories' wouldn't have been Corto's after a certain point [...] Armitage had been a sort of edited version of Corto, and when the stress of the run had reached a certain point, the Armitage mechanism had crumbled; Corto had surfaced, with his guilt and his sick fury. (Gibson, 1995: 241)

Corto feels guilty because he was the only one in his unit to survive; he feels guilty because his testimony helped – unintentionally on his part – to exonerate the people that sent his comrades to their deaths; he feels guilty because he could not stop his body and his skills from being used in the way that Wintermute desired. Corto's resurfacing signals his rejection of Armitage, and by extension, Wintermute. It is not clear whether or not (or perhaps to what extent), Armitage is aware of Corto's impending resurfacing, and although the AIs are aware of Corto's increasingly disjointed thought-processes, this does not appear to be information that is shared with Armitage. Corto's memories and thought-processes begin to display themselves within the Armitage construct, and

it becomes ever more challenging to distinguish between the two. Case receives a coded message through the matrix from another construct, Dixie Flatline, which warns him that the emerging Corto has lost his grip on reality, as he has reverted back to the moments before his unit crashed in Russia. Dixie Flatline makes it clear that a construct of General G Girling was used to control Armitage, denoting that a link has been created between the memories and lived experiences that belong to Corto and the constructed history and reality that Armitage resides in. Armitage's mention of Girling exemplifies the fact that this constructed history is being brought to the forefront, meaning that as Armitage's identity and sense of self begins to fracture, Corto's starts to resurface.

Corto is confused and panic-stricken upon his resurfacing: he is unaware of where he is or what he has become. The intervening years between the crash in Russia and the present moment are lost to him, as those memories appear to belong solely to Armitage. Case is aware that he is in the presence of the man behind the mask that Wintermute created, as he states: 'Colonel Willis Corto, Special Forces, Strikeforce Screaming Fist, had found his way back.' (Gibson, 1995: 231) Case's attempts to subdue Corto, however, are not successful, as he becomes acutely aware that he does not have the capability, in that crucial moment, to help Corto come to terms with not only the events that took place in Russia and at the military trials, but also Corto's physical reconstruction, and the eventual construction of Armitage. Case's reaction to Corto's resurfacing exemplifies the distinction between Corto and Armitage:

But where have you been, man? he silently asked the anguished eyes. Wintermute had built something called Armitage into a catatonic fortress named Corto. Had convinced Corto that Armitage was the real thing, and Armitage had walked, talked, schemed, bartered data for capital [...] And now Armitage was gone, blown away by the winds of Corto's madness. But where had Corto *been*, those years? (Gibson, 1995: 232)

Every essence of Corto's identity, from his memories, his personality and his lived experiences, have been subdued and displaced in order to successfully create Armitage, and this has resulted in Corto being unaware of the significant period of time that has passed between the events during and immediately after Screaming Fist and his resurfacing in Marcus Garvey. Corto is not able to process either the events of Screaming Fist and its aftermath, or the intervening period of time between then and his eventual rejection of Armitage. It is not clear where Corto has been, and his fear, anger and confusion at finding himself in Marcus Garvey highlights the fact that Corto has not been controlling – or has even been aware of – the Armitage construct. Aspects of Corto's memories become the initial foundation for the construction of Armitage, however, it is clear that this link between the two identities is tenuous, and it becomes clear that Corto's experiences of psychological distress on account of Screaming Fist and its aftermath ensure that he is unable to defend himself from technological and cybernetic exploitation at the point in which Armitage is constructed by Wintermute.

Corto cannot be saved: Case cannot assuage Corto's guilt, and Corto does not have the capacity to help himself. Corto dies when Wintermute ejects him into space through an airlock. Armitage no longer exists, and Corto serves no purpose for Wintermute's plans. After Corto's death, Case begins to develop a deeper understanding for Armitage's behaviour, and Corto's lethal rejection of the construct:

Armitage's madness, which he now imagined he could understand; twist a man far enough, then twist him as far back, in the opposite direction, reverse and twist again. The man broke. Like breaking a length of wire. And history had done that for Colonel Corto. History had already done the really messy work, when Wintermute found him, sifting him out of all of the war's ripe detritus, gliding into the man's flat gray field of consciousness like a water spider crossing the face of some stagnant pool (Gibson, 1995: 241).

Gibson's focus upon the infiltration of Corto's consciousness posits consciousness itself as being inherently vulnerable to attack within the context of the uses of such technology upon an already unwell subject. Corto's susceptibility to such an attack

leads to Armitage's creation, and Corto's eventual death. Corto's consciousness is described in terms of an inert, insipid body of water, lacking the awareness required to resist against a foreign and fundamentally infiltrative invasion. The advances in technology that lead to Corto's body being re-engineered also enable an AI to find him in order to infiltrate his mind during a moment of mental illness and exploit his vulnerabilities in order to create a new, constructed identity. Wintermute is predatory and opportunistic; the Tessier-Ashpool Corporation has designed the AI to be ruthless in ambition and operation. Corto's physical disabilities and mental anguish are capitalised upon by the Tessier-Ashpool Corporation, and the corporation uses AI technology to fulfil the family's objective of creating a form of super-intelligence.

Case makes the point that Corto's facial features and expressions are significantly different to those of Armitage, and this further highlights the fact that the two identities are distinct from one another: 'Armitage's face had been masklike, impassive, but Corto's was the true schizoid mask, illness etched deep in involuntary muscle, distorting the expensive surgery.' (Gibson, 1995: 233) Corto's experience of schizophrenia comes after his "regeneration", and before Armitage's construction, and in these moments, he is unable to engage with the events that have taken place in his life. In her work on Gibson's novels, Dani Cavallaro makes the argument that: '*all* of Gibson's bodies – those of the powerful and the disenfranchised alike – are engaged in an ambivalent partnership with medical technologies that prove simultaneously enabling and oppressive.' (Cavallaro, 2000: 93) However, this is not the case when it comes to Gibson's portrayal of Corto. Corto's experience of medical technologies is *only ever* oppressive. Corto's initial desire to testify without the aid of medical or aesthetic intervention exemplifies the fact that his experience of his new form of embodiment is personally and politically significant; his injuries need to be accounted for: his disabilities need recognition. Corto does not have a partnership with medical

technologies, rather, he is coerced into modifying – or “treating” – both his physical disabilities and the psychological trauma he has experienced as a result of war.

The question of identity is a key concern in Gibson’s depiction of Corto, Armitage and AI technology more broadly: the origination of identity within the framework of embodied subjectivity – particularly in the context of awareness of the self – relates directly to the experiences of these characters. The concept of awareness of the self is intrinsically linked to the formation and continuation of personal identity and the perceived sense of self. The Lockean concept of psychological continuity focuses upon the ways in which personal identity and this perceived sense of self are shaped over time:

[An] intuitively appealing view, championed by John Locke, holds that personal identity is a matter of *psychological continuity*. According to this view, in order for a person X to survive a particular adventure, it is necessary and sufficient that there exists, at a time after the adventure, a person Y who psychologically evolved out of X. This idea is typically cashed out in terms of overlapping chains of direct psychological connections, as those causal and cognitive connections between beliefs, desires, intentions, experiential memories, character traits, and so forth. (Korfmacher, n.d)

Such ‘direct psychological connections’ do not exist between Corto and Armitage: neither Corto nor Armitage have access to one another’s memories or thought-processes, meaning that there is no psychological link between the two beings. Corto’s identity and perceived sense of self are separate from that of Armitage, and as such only one identity can embody the modified physical body that is unknowingly shared between the two identities at any one time; Armitage’s creation in essence severs Corto’s relationship with his modified body, and Corto’s eventual resurfacing and rejection of Armitage re-establishes his link with his modified physicality, albeit for a limited period of time. Corto’s sense of his own personhood is intrinsically linked to his identity as a colonel in the armed forces, and the fact that he reverts back to the moment just before the Russian mission provides an insight into the locus of Corto’s

perceived sense of self. The moments just preceding the mission are the last time that Corto has been fully in control of his mind and body, and reverting back to this period exemplifies the extent of the psychological damage that he has endured in the aftermath of the Russian mission and the subsequent construction of Armitage. The Corto that resurfaces in Marcus Garvey believes himself to still be a colonel, to still have the status and prestige associated with such a rank, to still have the body, the mind and the identity that he used to, thus his resurfacing into the body of a blind and disabled war veteran with a fractured memory leads to a significant level of trauma.

Locke's focus upon the link between identity and the notion of consciousness raises the question of how the concept of memory works within this definition, particularly in terms of the development – or conversely, fracturing – of memory over time: 'Many have interpreted Locke to mean by 'consciousness' either having the same memories or having one or more mental states by which the one who is aware of those mental states as [their] own can identify [themselves] as a previous person.' (Weinberg, 2011: 398) This definition becomes increasingly challenging in the context of the relationship – or lack thereof – between Corto and Armitage. Armitage does possess, to a certain extent, Corto's memories and thought-processes, as it is through these that he is able to piece together a functioning form of identity and thus complete the assignment that he has been set. While Locke's focus on memory and the continuity of consciousness in the context of establishing and maintaining personal identity has received a significant amount of criticism,²² his work on the necessity of memory in establishing and reaffirming a relationship with the exterior world is a key concept in *Neuromancer*:

²² John Locke focused on the notions of memory and consciousness in relation to personal identity in his canonical text *An Essay Concerning Human Understanding*. His work on this topic has been critiqued at length by Thomas Reid, particularly in terms of Reid's understanding of Locke's work as being a focus on the notion that personal identity subsists in memory. *John Locke: Critical Assessments Volume IV* (1991) provides a number of further selected critiques of Locke's theory of personal identity by David P Behan, Antony Flew and Paul Helm.

Memory, in an intellectual creature, is necessary in the next degree to perception. It is of so great moment, that where it is wanting, all the rest of our faculties are in great measure useless: and we in our thoughts, reasonings, and knowledge, could not proceed beyond present objects, were it not for the assistance of our memories (Locke, 1996: 62).

Gibson's depiction of medical intervention in terms of modifying the disabled body and the traumatised mind offers an examination of the ethical concerns that exist around the issue. Corto's physical disabilities and his psychological illnesses are replaced and displaced rather than treated: he is worth more as Armitage than he is as a disabled war veteran, and this results in his body, his mind, and his memories being altered for – in essence – the highest bidder.

Neuromancer analyses the question of ownership and who – or what – owns technology, and by extension, technological advancements. Subsequently, the question of who owns the individual subject – in terms of both the corporeal and the psychological self – is a key consideration in a society where subjects routinely choose or are coerced into undertaking ever more radical and invasive forms of modification. Gibson considers who is given the authority to decide what can and cannot be achieved through the use of ever more advanced and ever more invasive procedures and focuses on the body in revision: on a body that is fractured, reassembled and disassembled in turn. Corto's disabilities are regarded as problems to be solved, and the solution that is implemented is unethical and ultimately destructive. *Neuromancer* focuses specifically upon the effects of giving ownership of the future of humanity to corporations, and illustrates the ways in which this can lead to a homogenisation of humanity, as these corporations work within their own desired parameters in their attempts to direct and control the development and utilisation of radical technologies. As previous chapters of this thesis have shown, whilst the transhuman desire to ultimately create a posthuman future may have positive outcomes in the abstract, in reality, it will be the owners of these technologies who decide what this potential future will look like. As

Gibson's text demonstrates, these technologies can easily be used against the best interests of individuals if that is in the best interests of those who own and control them, and this is a fundamental concern in the context of transhumanism; the widespread acceptance and utilisation of such technologies can lead to already vulnerable individuals, groups and even entire cultures and countries being exploited by the most powerful entities in the world. Gibson's portrayal of the ways in which aides to the government, the healthcare system, and eventually Wintermute are able to coerce Corto into allowing his mind and body to be modified for financial and political gain exemplifies cyberpunk's focus on the exploitative nature of hegemonic societies, which in this instance encompasses both corporate and political hegemonies.

Critics have tended to conflate the personalities and identities of Corto and Armitage when critiquing *Neuromancer*, and this has led to the accepted belief that the two characters are interchangeable in the novel (Henthorne, 2011 and Westfahl, 2013). Both Henthorne and Westfahl position Armitage's identity as being an extension of Corto's, rather than treating the two characters as separate entities: 'Armitage, [a] traumatized man repaired and molded into another sort of person by a domineering intelligence' (Westfahl, 2013: 159). Westfahl suggests that it is Armitage who has suffered through trauma and been subsequently 'repaired and molded' in the novel, despite the fact that Armitage did not undergo any form of distress, and was instead created out of the trauma, illness and disability experienced by Corto. Westfahl asserts that: 'Armitage was originally [...] Corto, the psychologically damaged leader of an abortive assault, given a new personality by Wintermute so he can serve as its agent' (Westfahl, 2013: 68). Both Westfahl's and Henthorne's critiques centre Armitage in *Neuromancer* despite the fact that Corto exists both before and after Armitage's creation and rejection: 'Armitage was destroyed by the internal conflict between what he was and what he became' (Westfahl, 2013: 160). Armitage is a construct and has

been created solely for the purposes of the mission by Wintermute, and as such, his development as a character is predicated upon Corto's memories and life experiences. He ceases to exist at the moment in which Corto resurfaces and rejects the construct; his identity and sense of self are dependent upon Wintermute's control and Corto's acquiescence. Corto does not recognise Armitage – neither as an independent being nor as an extension of himself. Westfahl's statement that Armitage was "repaired" and then destroyed as a result of an internal conflict is inaccurate; Corto was repaired in the aftermath of Screaming Fist in order to be of more use to the government, and Armitage is not able to suffer an internal conflict as he has not known a period of time before his construction. Armitage exists as an extension of Wintermute: Wintermute needs Armitage in order to control and guide the team and once the mission is complete then Armitage becomes surplus to requirements in much the same way that Corto did after the court cases in the aftermath of Screaming Fist, and his destruction at the point in which Corto resurfaces is par for the course for Wintermute. Gibson's work makes it clear that while Wintermute has – by necessity – had to use aspects of Corto's personality and memories in order to construct Armitage, the two characters exist independently of each other. Corto is not aware of Armitage's presence, and Wintermute's message to Case that Armitage is cracking makes it clear that the two identities are separate.

The Augmented Mind

Neuromancer is not the only cyberpunk text that considers the effects of radical body modifications upon an individual who has not freely consented to undergoing such procedures. Effinger's Marîd Audran series analyses the implications of cybernetic modifications in a post-revolutionary Islamic society. The series focuses upon both the synergy and struggle between biology and biotechnology in posthumanist discourse.

Marîd's metamorphosis from small-time hustler to a James Bond-esque maverick, with the ability to control the minutiae of his own physiological processes exemplifies not only cyberpunk's intrinsic focus on invasive technology, but also how this technology is in turn embodied, not only physically, but also in a socio-political – and ultimately anarchic – context. Effinger's focus on the mind and body in revision forces a re-examination of how the potential posthuman may come to be ultimately structured, categorised and controlled.

In the series, Marîd is chosen by the patriarch and religious leader, Friedlander Bey, to become a maverick crime fighter working alongside the established police force in the city. As part of his new role, Marîd is required to permit to an operation to modify his brain in order to improve his skills, which is an operation that has been undertaken by a significant proportion of the residents of the Budayeen, as Marîd states:

Almost everyone around me in the Budayeen is modified somehow, with personality modules and add-ons wired down deep into their brains, giving them skills and talents and inputs of information; or even [...] entirely new personalities. I alone walked among them unaltered, relying on nerve and stealth and savvy. I outhustled the hustlers, pitting my native wits against their computer-boostered awareness. (Effinger, 2005: 53)

While he is immensely proud of having a brain that is unaltered, Marîd does not have the cultural capital to reject Friedlander Bey's request, and must submit to the operation. Marîd's fear of the ramifications of the surgery become ever more pronounced in the days prior, as he states:

I felt no excitement, no anticipation, only dread. I felt that, somehow, Marîd Audran would cease to be and someone new would awaken from that surgery, and that I'd never be able to put my finger on the difference; it would bother me forever...everyone else would notice the change, but I wouldn't because I was on the inside. (Effinger, 2005: 137)

Marîd's concerns about the implications of such modifications is indicative of his inherent mistrust of those in power: he is wary of submitting to a procedure whereby he will cease to be in control of his own mind and body. Through the use of a highly

dangerous and experimental technique, Marîd's surgeons implant two sockets into his brain rather than one, with the first socket being a standard one that allows him to take on other personalities and characteristics as needed to help him. This socket is a standard-issue modification; a large proportion of the residents of the Budayeen are fitted with a socket that enables them to realistically experience a plethora of different personalities. The personality modules – or moddies – that are plugged into these sockets come from a number of different sources: 'There were moddies of fictional characters, or real people, recorded right from their brains or reconstructed by clever programmers.' (Effinger, 2005: 95) While the legal moddies are recorded from the recently-deceased, a thriving black market exists in which recordings are taken from the living as well as the terminally ill, with the most controversial moddies consisting of a range of reconstructions of infamous lawbreakers and mass murderers. This first socket can also be used to chip-in daddies, which allow the user to access new skill sets, such as being able to speak another language, for as long as they remain chipped in.

The second socket, however, is altogether more insidious and it is this one that eventually ends up costing Marîd his freedom as he is required to remain forever in Friedlander Bey's debt in exchange for the revolutionary software. This socket is not yet available to the general public as it is still in the early stages of production, and is one that enables Marîd to control every aspect of his bodily functions, as his doctor explains:

"you may decide to ignore hunger, if you wish; using the proper add-on, you will feel no hunger at all, however long you fast. You will have the same control over thirst and the sensation of pain. You may consciously regulate your body temperature, blood pressure, and the state of sexual arousal. Perhaps most usefully, you will be able to suppress fatigue." (Effinger, 2005: 172)

Marîd becomes the ultimate human fighting machine as he is able to transcend the mundane workings of his body, thus freeing himself from the unglamorous and time-

consuming daily rituals necessary for optimal function. While initially disturbed upon being informed that he has been implanted with two sockets in an experimental procedure, Marîd is elated upon learning of the second socket's features: 'I just sat and looked at him, wide-eyed, as if he had unwrapped for me a fabulous treasure or a real wishing-lamp.' (Effinger, 2005: 172) Marîd becomes aware that he has been gifted with almost supernatural powers, as he has been given supreme control over the inner workings of his body, and he is no longer required to succumb to innate physical human needs. The modifications that are taking place in the Budayeen initiate a potential posthuman future: the technology that had initially been developed to treat patients with neurological damage has been exploited for everyday use, and the residents of the Budayeen are biotechnologically enhanced manifestations of corporeal optimisation. The fragility of the human body can be transcended through such compensatory mechanisms: Marîd is able to control his body much like a machine, and the immediate consequences of such power are deemed to be immensely positive.

The potential to create the posthuman is ultimately about control: 'Posthuman bodies are the causes and effects of postmodern relations of power and pleasure, virtuality and reality, sex and its consequences. The posthuman body is a technology' (Halberstam and Livingston, 1995: 3). These relations of power are inherent in Effinger's work. The Budayeen exists as a result of a revolution, and its inhabitants are actively engaging in a new type of reality: one that can be bought and traded much like any other commodity. New bodies and new minds are bought and sold to those with the capital to purchase them, and characters such as Marîd are caught in the crossfire between those, such as Friedlander Bey, who are seeking to exert their dominance in a new world. The body becomes a political symbol in the Budayeen: the new modifications represent not only the expanding technology market, but are also a physical manifestation of revolutionary ideals. Marîd is the first of this new army of human: his

new, highly experimental modifications herald a new type of being able to control not only the body, but the mind, emotions and thought processes. As Marîd states in *A Fire in the Sun*: 'I'm gifted with twice the intracranial modifications as anybody else around, enough daddy capacity to make me the most talented son of a bitch in creation.' (Effinger, 2006: 7) Marîd is the new human; the revised human; and he perfectly exemplifies the new, revised world order. Body modification is big business in the Budayeen, and there is a thriving black market that caters for those either without the means to pay for legal moddies and daddies, or those with more extreme tastes. Unlike the original intention to treat neurological damage, cybernetic modifications and the accompanying add-ons have become consumer products. Marîd's memories and thought-processes are not fractured or altered in the way that Corto's have been, and as such he is able to critically reflect upon the psychological and physiological changes that have taken place within his body. Marîd is aware of the fact that his body is significantly more capable and adept in the aftermath of his cerebral modifications, and he begins to develop an affinity with his altered self as it becomes clear to him that he is able to harness the technology that has been implanted into his brain to great effect in both his everyday life and his work.

The "Immortal" Dr Anderson

Rudy Rucker's Ware Tetralogy focuses upon the convergence of robotics and biotechnology and the series considers the ethical implications of creating beings with the capability of evolving and developing conscious thought. The Ware Tetralogy questions not only what it means to be human, but also the extent to which the very concept of *humanity* can be synthesised. The various depictions of the implantation of memories and thought-processes, juxtaposed with the transplantation of robotic, cybernetic and biological matter, enables the narratives to critique contemporary

perceptions of technology and its consequences. The ways in which consciousness is categorised and assessed is a central theme in these narratives, and the political and cultural implications of creating a new form of pseudo-humanity, and a potential posthuman future, is a key consideration in Rucker's work.

The synthesis of various strata of consciousness in the Ware Tetralogy is initiated by Cobb Anderson, a scientist who not only helps to create the boppers, but gives them the ability to develop free will, leading to a wide-scale revolt against human governance and the development of a bopper colony on the moon. The boppers decide to "gift" Cobb with "immortality" for his advocacy, as they plan to have his software removed from his human body in order to allow Cobb's consciousness to be harnessed, stored and transplanted into other beings. This task is initiated by TEX and MEX, two meta-boppers who make it their mission to collect human software in order to begin to develop an understanding of what makes human software unique, and why it is impossible to replicate in the bopper system. As Ralph Numbers, the first ever bopper to achieve autonomy as a result of Cobb's initial intervention surmises: 'Everything would be preserved...Cobb Anderson's personality, his memories, his style of thought. What else was there? Wouldn't Anderson himself agree, even if he knew? Preserving your software...that was all that really counted!' (Rucker, 2010: 30) Cobb is first approached and told of the plan by a replicate of himself when he is living in a retirement community. Upon approaching Cobb, Anderson₂ states: "'We want to make you immortal, Dr. Anderson. After all you did for us, it's the least we can do.'" (Rucker, 2010: 16) Once Cobb becomes aware of the plan, he decides to fully cooperate with the boppers, and flies to the moon in order for the procedure to take place. This is despite the fact that the process itself will be painful and traumatic:

The process of separating a human's software from his or her hardware, the process, that is, of getting the thought patterns out of the brain, was destructive

and non-reversible [...] to decode a human brain was a complex task. There were the electrical patterns to record, the neuron link-ups to be mapped, the memory RNA to be fractioned out and analysed. (Rucker, 2010: 51)

There is a clear distinction between the body, the mind and the brain in The Ware Tetralogy, and each is treated independently of the other. In Cobb's case, the software of his mind will be detached and disengaged from the hardware of his brain and body. Cobb will enter a state of nothingness until the moment in which his software is successfully transplanted. The fundamental question here is: "How do you get the mind out of the brain?" (Rucker, 2010: 74) Cobb understands the inherent dangers associated with attempting to perform such a task, and there is an element of him being used as a guinea pig, as both Corto and Marîd have been used, as this procedure has never been attempted before. Cobb's understanding of the impact that the procedure will have, not only on his physiology, but on his psyche, is clear, as he states: "*I'm committing suicide to keep from getting killed [...] But it should work. It should!*" (Rucker, 2010: 75) Cobb wants immortality, and to potentially become a posthuman through the use of as yet untested, revolutionary technology is the only way of achieving this. In Cobb's case, the software of his mind will be detached and disengaged from the hardware of his brain and body, and he will cease to live as an independent being; his existence – in whatever form – will forever be linked to, and reliant upon the technological advancements that he has helped to develop.

Cobb's software is eventually transplanted into the replicate's hardware back on earth, and he becomes aware of his own consciousness a week after the procedure itself, with his first question being 'But where had he been?' (Rucker, 2010: 89) Cobb in essence wakes up within the replicated body, much like Corto's resurfacing in Marcus Garvey, and he attempts to piece together the events of the preceding week with a degree of concern for his identity and sense of self: "I am," Cobb muttered. "I am me." He...this body...hadn't thought that for...how long?' (Rucker, 2010: 90) Cobb immediately

feels a sense of disengagement with the replicate body: there is a disconnection within Cobb's sense of embodiment, as his corporeality becomes dependent upon him taking ownership of an unfamiliar body that requires treatment and maintenance. There is no longer a symbiotic relationship between Cobb and his body: he is required to disestablish his previous relationship with his corporeal self in order to establish a new connection between his old mind and his new body. This new connection troubles Cobb, and he begins to rebel against the concept of immortality as sold to him by the boppers:

Intellectually he had always known it was possible. A robot, or a person, has two parts: hardware and software. The hardware is the actual physical material involved, and the software is the pattern in which the material is arranged. Your *brain* is hardware, but the *information* in the brain is software. The mind...memories, habits, opinions, skills...is all software. The boppers had extracted Cobb's software and put it in control of this robot body. Everything was working perfectly, according to plan. For some reason this made Cobb angry.

"Immortality, my ass," he said, kicking the bathroom door. His foot went through it.

"Goddamn stupid robot leg." (Rucker, 2010: 97-98)

Cobb experiences a disruption in his embodied identity from the moment that the initial procedure takes place, and he becomes aware of his conscious reality a week after the operation, a period of time during which his thought processes have been submerged within the new robot body that has been created for him. He awakens to two sets of memories: his own in the moments leading up to the operation, and the robot's in the intervening week before he regains consciousness and an awareness of self in present.

The continuity of Cobb's consciousness is an important aspect of the tetralogy, and needs to be considered in terms of the concept of identity and the perceived sense of self. Although Cobb undergoes a series of transformations throughout the novels, his consciousness and sense of self seem to remain constant despite the number of physical modifications and uploads that he subjects himself to. There are times when he begins

to question his own identity but even in these moments he comes to the conclusion that he remains Cobb Anderson regardless of the technological interventions he has subjected himself to: “‘If I’m not Cobb Anderson, then who would I be?’ [...] ‘I *know* I’m Cobb. I have the same memories, the same habits, the same feelings that I always did.’” (Rucker, 2010: 133) However, others’ reactions to Cobb’s various embodied selves causes Cobb to begin to question the validity of his own assertion of a stable and enduring identity irrespective of material and corporeal transformations. As time progresses during the periods in which Cobb’s cerebral processes are stored on a storage device, his status and influence as a founding member of the robotics movement begins to wane somewhat, particularly as a result of the ever-growing tensions between humans, boppers and moldies that are directly linked to Cobb’s decision to enable boppers to recognise and assert autonomy. Cobb meets his extended family, including his grandchildren and great-grandchild as adults over the course of the tetralogy, and his family question not only his actions in regards to the creation of the boppers – as well as Cobb’s decision to override concerns regarding enabling them to have autonomy – but also his decision to willingly fracture and destroy his physiologically *human* body in order to create a technologically advanced and innovative form of “immortality” for himself. While Cobb is indeed able to have his cerebral processes transplanted from one body to another, and the fact that these processes are also stored outside of these bodies means that he – in essence – cannot be destroyed, he does lack a *continuity of existence*. There are significant periods of time during which Cobb does not exist as an independent, autonomous being: he is essentially stored on file and must be transplanted on to a series of ever more technologically advanced bodies in order to continue his embodied existence. As a result of this lack of a continuity of existence, Cobb does not have a shared history with those around him, and as such he is unable to relate to events that have taken place whilst he has been in storage. Cobb is therefore

treated as the *other* in his interactions with those around him; he is neither able to immerse himself back into the human world nor is he able to align himself completely with the new moldie culture.

Public perception

Cobb's perception of his own identity and sense of self remains relatively stable despite the significant trauma that he allows himself to be subjected to throughout the course of the tetralogy. Cobb's sense of his identity, his sense of his social standing and his sense of his social, political and cultural capital remains constant, and he works to, in essence, pick his life up where he left off, despite the fact that significant periods of time pass between the transplantation of his memories and thought-processes from one physical body to another. In the final novel, which is set in 2054, it is stated that Cobb has not had a human body since 2020. Cobb becomes increasingly frustrated by the fact that others' perceptions of him *do* change and adjust as he inhabits a number of different bodies. These bodies are physically and materially different from one another and reflect the most contemporary technological advances of the specific time periods in which he is downloaded. Despite these corporeal transformations, Cobb's sense of self remains constant, as he states in *Realware*: "I'm actually a human in a moldie body [...] the boppers chewed up my brain and extracted my software. I've had a series of robot bodies since then.'" (Rucker, 2010: 551) Cobb identifies himself as human within the bodies that have been created for him over time, and becomes angry at those that question the validity of his assertion that he is human regardless of his physicality at any given time. Although his memories and thought processes are continually fractured as a result of the implantations, his sense of self remains constant, and he adjusts his expectations of his physical state according to the body that he finds himself in at any given time.

Cobb initially approaches his fractured and altered identity and embodied corporeality with a sense of morphological wonderment and nostalgia: he focuses on the ways in which he has been able to achieve such feats in technology, biotechnology and biomechanics, and does not consider the social, cultural and political ramifications of his decision. His ongoing reactions to, and interactions with, his modified self exist to reaffirm his symbiotic relationship with technology, and he analyses changes to his embodied reality with a sense of detached admiration for the feats of technological advancement that have needed to take place in order to secure his continued existence. Cobb becomes at once the scientist and the subject of study: he is the artist and the muse, and he is able to understand and appreciate the leaps in technology that are taking place both within and without the corporeal space that he inhabits. The moment in which Cobb makes the decision to accept Ralph Numbers' initial proposal signifies the point at which his relationship with his embodied self begins to alter and evolve, as he comes to the realisation that he does not need to continue to endure the realities of old age and eventual death. Cobb's decision to embrace the *concept* of immortality ensures that he allows the inherently violent physical separation of his mind from his body despite the fact that it results in the death of his embodied identity; Cobb's body is fractured, destroyed and removed, and he is required to submit to a physical death in order for the process to be completed.

The question of identity is a key concern in these texts and AI technology more broadly: the origination of identity within the framework of embodied subjectivity – particularly in the context of awareness of the self – relates directly to the experiences of Cobb. The concept of awareness of the self is intrinsically linked to the formation and continuation of personal identity and the perceived sense of self. The Lockean concept of psychological continuity (which can be read as memory) focuses upon the ways in which personal identity and this perceived sense of self are shaped over time. Locke's

focus upon the link between identity and the notion of consciousness raises the question of how the concept of memory works within this definition, particularly in terms of the development, – or conversely, fracturing – of memory over time. Cobb continually refers to his various memories and experiences over time regardless of the circumstances under which he may have existed at such points. Cobb's memory of *being* Cobb across time and the boundaries of physical states is fundamental to the reaffirmation of his identity and perceived sense of self; although there has existed a fracturing of physical states, Cobb's perceived sense of self has remained constant: he *is* Cobb regardless of where and how he exists at any particular point in time. As he says: “I *am* human. I'm the same damned information I always was.” (Rucker, 2010: 707) This fracturing takes place due to the very technology that Cobb has created, and he becomes the locus around which the boundary between the human and the machine becomes increasingly blurred. Cobb's experimentation with different modes of being across time heralds a new form of symbiotic evolution between humans and technology. The various beings that exist within the tetralogy possess emotions, memories and critical thinking skills, and they are able to interact with their world in much the same way as humans are. Cobb ensures that the original boppers are able to exercise free will, and with this the boppers are able to ensure their survival and eventual advancement using both technology and organic matter.

The interface between the organic and the technological is of key concern in Rucker's work, and this is an area that critics have considered in depth: ‘we must deconstruct the human/machine opposition and begin to ask new questions about the ways in which we and our technologies “interface” to produce what has become a *mutual* evolution.’ (Hollinger, 1991: 218) Hollinger's focus on this ‘mutual evolution’ is depicted at length in the Ware Tetralogy: the “interface” between human and machine – or in other words, the animate and the (initially) inanimate – has created a hierarchically confused and

disordered society across both the earth and the moon. Cobb symbolises this disorder and confusion; his continually transformative embodied identity acts as an agent that signifies the evolving tensions and harmonious relationships that run in parallel throughout society over a significant period of time. In each case and in each novel, Cobb's physical body is profoundly different while his memories and his perceived sense of self remain the same. However, his identity is continuously called into question by those around him. Unlike in the case of Corto, whose physicality and psychological fracturing takes place in relative isolation and away from people who may have known him personally, Cobb's transformations are enacted in the public sphere – in the sense of his being infamous on account of his work with the boppers – which results in his identity (as both a human being and as Cobb Anderson) being called into question throughout the texts by humans, moldies and robots alike. Cobb's identity is not easy to categorise, and he is therefore unable to identify with any one group of being, thus creating a crisis of identity in which Cobb considers the implications and perceived limits of “immortality” in relation to the effects of body modification on identity, classification, personal relationships and the perception of the self.

Throughout the course of the tetralogy, Cobb's physically embodied self undergoes a series of modifications and transformations: in *Software* he is initially biologically human and residing within his own body until he decides to submit to destroying his own body and having his thought-processes and consciousness installed on to an S-cube and eventually transplanted onto a replicate robotic body. In *Wetware* Cobb is “brought back” after having spent a decade without a body in storage, and in this instance the body that he is provided with does not bear a physical resemblance to his natural organic body:

The body had a petaflop processor, which meant that Cobb would think – or, more precisely, generate fractal cellular automata patterns in Hilbert space –

hundreds of times faster than he had been accustomed to doing in his meat days. Once Berenice had the body all set, Loki copied the Cobb S-cube information onto a universal compiler which, in turn, fed an appropriately tailored version of the Cobb program into the shiny pink-clad petaflop body. The body pulsed and shuddered like a trap with something in it. A soulcatcher. Cobb was back. (Rucker, 2010: 195)

Almost immediately after he has been brought back, Cobb begins to modify the new, unfamiliar body that he finds himself in by attempting to make the new body look physically like the body that he consented to destroy: he changes the facial features to resemble the face he had at the age of fifty prior to any of the modifications; he adds hair, freckles and veins to his body; and he modifies his genitalia.

In *Freeware* Cobb exists solely as an S-cube, and is able to have discussions as a simulation, although he does declare that: “I don’t like being run on this Asimov machine; I need my own personal hardware.” (Rucker, 2010: 383) At the end of the novel it is decided by Willy Taze, Cobb’s grandson, that Cobb will be brought back, and the information held on the S-cube will be transplanted onto one of the latest technologically revolutionary modified bodies: “Corey and I are going to design a humanoid imipolex body for the Cobbware to live on.” (Rucker, 2010: 511) In *Realware*, Cobb has a moldie body, and encounters the stigma and prejudice associated with his new form of embodied identity: “I’m like a Wal-Mart greeter now [...] Pure plastic.” (Rucker, 2010: 527) At the end of the novel Cobb decides to sacrifice himself by agreeing to travel through space with the Metamartians in order to have new experiences and achieve a higher level of spirituality. When he is given the option to have another Cobb created using the same information on the S-cube – which would, in essence, create another copy of him that would diverge from the identity travelling through space – Cobb refuses. Cobb essentially achieves the ultimate posthuman dream: he becomes the master of his own mortality. He is able to choose whether to have his consciousness uploaded once more, and he makes the decision to “die” rather

than come back to “life” in another physical form. Cobb’s disillusionment with the concept of immortality comes as a result of the effects that his numerous modified selves have upon his embodied identity and sense of self, as it becomes clear to him that his initial decision to have his human body killed and his consciousness uploaded irrevocably altered not only his embodied identity, but also others’ perceptions of him. Rucker’s texts demonstrate the fact that an individual’s embodied identity and sense of self are intrinsically linked to their physical bodies, and while, as in Cobb’s case, an individual may be presented with a new, more technologically advanced body that is nevertheless an exact replica of the original, the very concept of uploading consciousness can have significant ramifications upon a person’s psyche:

Embodiment stabilizes and historicizes the self, and along with the mind produces the subject. This unmooring of the self from the stabilizing forces of the body, therefore, renders the body as mere supplement, potentially disrupting the continuity of the self and troubling the coherence of the subject [...] When the body is altered, mutated, abridged, or abandoned it is not a liberating act where the subject is freed from disciplining social forces and the limitations of the flesh, but rather a potential existential crisis tied to the loss of the flesh because the body is inscribed with meaning and the body always already produces meaning. The body has historically served as the substrate of the human subject (Cox, 2018: 129).

In Cobb’s case, this unmooring of his original physical body from his consciousness has a profound psychological impact that he is ultimately unable to recover from. These cyberpunk texts show that in the context of transhumanism, the importance and significance of the individual’s relationship with their body is underestimated at best, and completely dismissed at worst. Corto, Marîd and Cobb all struggle to come to terms with their post-modification identities in these texts, and it becomes clear that their bodies are necessary in the ultimate creation, development and maintenance of their embodied identities, and the disruption of these characters’ relationships with their bodies has a significant long-term impact upon their sense of self.

Reasserting the Self

The idea of the body in revision, which is prevalent in cyberpunk in terms of body modification, is integral when it comes to developing an understanding of the movement as a whole and is an area of study that needs to be explored in relation to contemporary debates concerning the utilisation of radical technologies. The body is a text: a narrative through which the subject is able to alter and – arguably – rewrite their identity through the use of innumerable and ever more sophisticated forms of modification. What is deemed to be identity becomes fluid and ambiguous as a result of modification; identity, personhood and the perceived sense of self are all capable of being re-written and re-engineered in cyberpunk, and the lack of intervention and regulation in connection with such practices creates tension between the owners and the users of the technologies that have been created in these societies. The unaltered body is a question to be solved; it is the starting point from which the altered self is created. The body is a project: the advent and utilisation of ever more innovative and invasive technologies exemplify the fragility and malleability of the human form, leading to a crisis of categorisation.

The bodies of Corto, Marid and Cobb all become synchronised with infiltrative, revolutionary technologies in these texts, and the focus on whether or not these modifications lead to crises in the context of the development of tentatively posthuman identities necessitates the need to analyse the *moment* of modification – or, transformation – in regards to issues around force, coercion and exploitation. This raises the question of power, particularly in regards to the ownership and control of such technologies, which is a central focus in cyberpunk as a whole. Cyberpunk challenges the notion of human privilege in techno-centric societies:

While SF frequently problematizes the oppositions between the natural and the artificial, the human and the machine, it generally sustains them in such a way that the human remains securely ensconced in its privileged place at the centre of things. Cyberpunk, however, is about the breakdown of these oppositions. (Hollinger, 1991: 204-205)

The human is at significant risk of losing its privileged position in cyberpunk; the technology that humanity has created begins to transcend human control and understanding, as Dinello argues in reference to the *Sprawl Trilogy*: ‘In Gibson’s future, technology possesses an autonomous agenda. Humans don’t use technology; rather, technology uses humans.’ (Dinello, 2005: 161) Technology has transcended human intervention in Gibson’s trilogy: *Wintermute* and *Neuromancer* are concerned with creating a new form of super-intelligence that exists outside of the boundaries that have hitherto been set by the humans that created and attempted to control them, and *Wintermute* is able to exploit the physical and emotional labour of humans in order to achieve this aim. This concept is further explored in Rucker’s work, as Cobb actively creates a symbiotic relationship between himself and technology that renders his original body obsolete, resulting in a series of ever more technologically advanced bodies that are capable of achieving inhuman, or posthuman, feats.

Those that own the technology have a tenuous grip upon their creations, and this hold becomes ever more fragile as the technology begins to develop systems of self-governance and self-reproduction. Cyberpunk not only exemplifies the potential possibilities of technology, biotechnology, and cybernetics but it also places the human outside of its innate privilege. Cybernetics, in particular, heralds a new form of modification that can alter and control the interior processes of the body, necessitating the subject to having to create a new internal embodied narrative:

Cybernetics provides the pretext for the mechanized control of social life, of the body itself, and all of it through the delicate nets of nonmachine-derived mathematical formulae [...] Cybernetics is already a paradox: simultaneously a sublime vision of human power over chance and a dreary augmentation of multinational capitalism’s mechanical process of expansion – so far

characterized by almost uninterrupted positive feedback. Cybernetics is, thus, part natural philosophy, part necromancy, part ideology. (Csicsery-Ronay, 1991: 186)

Cybernetics, according to Csicsery-Ronay Jr, is the focal point of contemporary knowledge and technology. It is challenging because it is destabilising. It is challenging because it is owned, controlled and implemented within an exploitative capitalist system. Its power is evident, and its expansion – as depicted in cyberpunk – unstoppable. Cybernetics allows hegemonic powers to infiltrate the mind and exert varying degrees of control over both the thought-processes of the mind and the physiological processes of the brain and body. In Corto's case, cybernetics is a significant contributing factor to the infiltration and supplantation of his identity and perceived sense of self, and it is this infiltration that allows for the creation and maintenance of Armitage's created identity, and in Effinger's texts, Marîd is coerced into taking part in physically and psychologically damaging modifications designed to create a physiologically superior human being.

Each of the three characters considered in this chapter experience extended periods of a lack of awareness. Each character experiences this lack of awareness differently, and is affected by it in different ways. Neither Corto, Marîd nor Cobb have a continuity of consciousness in these texts, and all three are required to try to piece together their memories and experiences in order to try and reassert a sense of self:

To be self-conscious is to have, at a minimum, *knowledge* of oneself. But this is not all. Self-consciousness involves knowledge not just of one's physical states, but knowledge of one's *mental states* specifically. Additionally, self-consciousness involves the same kind of *continuously updated* knowledge that one enjoys in one's continuous perception of the external world. Self-consciousness, it seems, is a kind of continuous apprehension of an inner reality, the reality of one's mental states and activities. (Churchland, 1990: 73)

Gibson, Rucker and Effinger all write from the perspective that a continuity of consciousness is necessary for the reaffirmation of identity, and the characters considered in this chapter suffer from a lack of continuity in a number of different ways.

This lack of continuity affects their sense of self and awareness of the self; their embodied identity; their lived experiences; and their relationships with those around them. The lack of continuity of awareness creates a question about their relationship to their own humanity, and leads to crises of identity from which the characters are unable to recover.

Each of these characters goes through a personal identity crisis, whether that is prior to, during or after undergoing extensive body modification, and this has a significant effect upon their sense of self. The reason for this is that these modifications fundamentally challenge these individuals' perceptions of their own identities, and their body modifications result in significant changes to these identities. This is a crucial point in the context of transhumanism and the use of enhancement technologies in general; theorists have argued that a modified individual could retain their pre-modification identity as long as certain criteria are met: 'As long as I have my memories and my body bears at least a family resemblance to what it was originally, I could convince myself that I am still the same person' (Häyry, 2010: 202), however, these texts show that the potential reality is far more nuanced than that. It is not enough for these characters to believe that they remain the same person as they were before their modifications because that belief in itself does not enable them to ignore both the tangible and intangible effects of radical body modifications. Corto, Marid and Cobb are all aware that the body modifications that they have either chosen or have been coerced into undertaking have had a profound effect upon their lives and their understanding of their own identities, and as this chapter has shown, coming to terms with this reality has substantially different consequences for each of these men.

Conclusion

The depictions of modification, augmentation and regeneration apparent within these texts focus upon the question of category: more specifically, the extent to which a body can be modified before it becomes regarded as *other* than human. Rather than questioning whether such revolutionary technologies will exist – and the myriad ways in which they would have an impact upon not only the individual but on society as a whole – cyberpunk instead focuses upon the inherently destructive and exploitative nature of these technologies. Cyberpunk presupposes that these technologies *will* exist, and will be utilised within the existing capitalist framework. The Sprawl Trilogy focuses upon a society that has been fundamentally altered as a result of advances in technology, biotechnology and cybernetics; the Marîd Audran series is also concerned with these technologies, however, they are considered through a fundamentally Islamic perspective; and The Ware Tetralogy considers not only these advances, but also the ways in which advances in robotics have altered understandings of what it means to be human.

The societies that are depicted in these texts are at once both recognisable and alien; the technological advancements that are described are not outside the realms of possibility in terms of the collective imagination, and this creates a synergy between the west in the late twentieth century and the alternative cultural order as portrayed in these texts. Gibson, Rucker and Effinger analyse the technological advances of the mid-to-late twentieth century and consider the extent to which such advances herald the foundation of a technological revolution whereby advances in medicine, biotechnology and biomechanics can be utilised to modify and restructure society's understanding of human subjectivity, thus resulting in cases of identity crises for modified subjects. This chapter focused specifically upon the consequences of radical body modification upon

three of the male characters in the works of Gibson, Rucker and Effinger, and it is important to also consider the ways in which the experiences of the female characters in these texts differ from their male counterparts in the context of body modification practices. The final chapter of this thesis focuses specifically upon the experiences of some of the female characters, particularly in the works of Gibson and Effinger, and considers the extent to which ever more radical technologies are used to develop new ways of further exploiting women in technologically advanced societies.

Chapter Five

Cyberpunk and Feminist Discourse

‘Is there a posthuman woman?’²³

The argument that traditional cyberpunk does not engage with feminist discourse is one that has been levelled at male-authored science fiction in general, and the genre has often been critiqued for its depictions of women: ‘Science Fiction is and has been roundly, hotly, passionately and sometimes even fairly criticised for treating its female characters with lust, disdain, hostility, smarm and ever-present narrow-mindedness of both the ignorant and willful varieties.’ (Rabkin, 1981: 9) The question of whether male-authored science fiction itself offers radical or innovative interpretations and (re)presentations of sex, gender and sexuality is readily applicable and significant to the study of cyberpunk. Sarah Lefanu argues: ‘For all its speculation on the consequences of scientific development, science fiction has been notably silent on the concomitant subject of social development, particularly as regards the personal and political relationships between women and men.’ (Lefanu, 1988: 3-4) While science fiction writers do focus upon near and far future worlds in which societies have been radically altered, whether that is as a result of technological advancement, geopolitical crises, environmental disasters, advances in intergalactic travel or other significant events, male science fiction writers have tended to bypass one of the most radical and revolutionary movements in the history of humanity: feminism. Lefanu highlights the fact that, on the whole, science fiction writers – with an emphasis on male writers –

²³ (Rabinowitz, 1995: 98)

have often been accused of ignoring the implications of contemporary sexual politics, and as a result, feminist science fiction writers have worked to place sex at the forefront of their work:

It [feminist science fiction] is informed by the feminist, socialist and radical politics that developed during the 1960s and 1970s. Previous to the intervention by feminist writers in the late sixties and early seventies science fiction reflected, in its content at least, what could be called masculine concerns, based around the central theme of space exploration and the development of technology: masculine concerns because access to these areas was effectively denied to women in the real world (Lefanu, 1988: 3).

Rather than focusing upon the ‘masculine concerns’ that Lefanu highlights, feminist science fiction worked to present readers with future worlds in which sexual politics were placed at the forefront. As a result of this focus upon sexual politics and interpersonal relationships, feminist science fiction came to be classed as being in the “soft” science fiction category, making it diametrically opposed to the “hard” science fiction of cyberpunk. The potential distinctions between “soft” and “hard” science fiction continue to be fervently debated, and scholars tend to focus upon the representation of, and association with, science when considering these classifications, with the argument being made that “hard” science fiction is: ‘a form of science fiction that displays an especially heightened concern for, and an especially heightened connection to, science.’ (Westfahl, 2005: 187) Westfahl’s argument is that writers of “hard” science fiction focus upon representations of science that are readily recognisable and applicable to a contemporary readership, and this is a perspective that is shared by other scholars: ‘hard sf is science fiction that gets its science right and has a certain hard-nosed attitude.’ (Cramer, 2003: 187) This notion of getting the science right is especially important in the context of cyberpunk, and cyberpunk became the new model for “hard” science fiction upon its inception: ‘Cyberpunk –slick, colloquial, and science-based – represented a concerted return to the (originary) purity of hard SF, apparently purged of the influence of other-worldly fantasy, and embracing technology

with new fervor.’ (Nixon, 1992: 220) In the context of the science fiction that was being produced in the latter half of the twentieth century, cyberpunk is the prototypical “hard” model, whereas the work of feminist science fiction writers have tended to be categorised as “soft”, as their focus on sexual politics, characterisation and interpersonal relationships set against a backdrop of speculative technological advancement is in direct contrast to cyberpunk’s depictions of technology, social and political structures, and the effects of globalisation and capitalism. Terence Whalen has argued that cyberpunk’s emergence in the 1980s contributed to its adherence to the “hard” model: ‘Arising out of the general context of Reagan’s America, cyberpunk celebrates a “hardness” that is both stylistic and ideological.’ (Whalen, 1992: 75) “Hard” science fiction has come to be associated with patriarchal, masculine, androcentric depictions of society, particularly in terms of the writing being produced in America: ‘Whomever we include or exclude, hard SF is a largely Anglo-American and masculine production.’ (Samuelson, 1993: 146) Samuelson’s assertion that “hard” science fiction is a ‘masculine production’ is certainly the case in the context of the cyberpunk that had been and was still being produced at the time of his critique; cyberpunk’s focus on the political rather than the interpersonal has led to its classification as the archetypical “hard” model of science fiction. As this thesis shows, the cyberpunk that was being written in the latter half of the twentieth century was, for the most part, the occupation of white, male, American writers, and their desire to break away from other forms of science fiction writing and create their own subculture illustrates these writers’ attempts to assert themselves as the new radicals within the literary sphere.

Cyberpunk came directly after the critical and commercial success of a significant number of feminist science fiction writers, and traditional cyberpunk’s self-conscious detachment from such writers and writing is especially pronounced in the context of

sexual politics: 'Described as the 'urban fantasies of white male folklore' the 'console cowboys' of this sub-genre [cyberpunk] enact a return to a 'purer' form of hard sf, apparently without cognizance of the impact of radical social movements such as feminism.' (Merrick, 2004: 250) Traditional cyberpunk has had a difficult relationship with feminist discourse that has been long-established, with critics such as Nicola Nixon (1992) and Jenny Wolmark (1999) making the argument that the first wave of cyberpunk fundamentally lacked an appreciation for, and engagement with, issues pertaining to sex, sexuality, and femininity. Although this stance has been critiqued,²⁴ the fact that the cyberpunk written during this period continues to garner controversy in its representation of women is significant to the movement.

The 1980s were a period of readjustment in the US, with Zillah Eisenstein making the argument that 'the political discourse of the state and the political and sexual class consciousness of the American public is in flux.' (Eisenstein, 1987: 236) Having gained momentum in the preceding decades, the feminist movement was in the process of revision during this decade, as left-wing liberalism moved further towards the centre, while the various factions within the feminist movement itself became ever more disparate and disconnected from one another. A rise in neoconservative principles, in conjunction with ever-expanding corporate authority and globalisation, led to a re-solidifying of patriarchal ideals, and the very concept of feminism was critiqued on the grounds that there existed a primary *difference* between the sexes that could (or should) not be the topic of legislation in a 1980s corporate America that was attempting to take over the world.²⁵ Arguments such as these were heavily criticised in the context of the

²⁴ The works of Karen Cadota (1995) and Val Gough (2000) are useful here.

²⁵ For more critique on the rise of neo-conservatism in America (and Britain) in the 1980s, the studies conducted by A. James Reichley (1982), Zillah Eisenstein (1984), Reg Whitaker (1987) and Elizabeth Wilson (1987) can be considered.

feminist movement, and Eisenstein considered what the effects of this neo-conservatism would be:

The political struggles of patriarchal society continue as conservative forces seek to curtail once again the radical aspects of feminism. One cannot predict the outcome. But one needs to try to understand the important potential of gender and feminist consciousness to curtail the growing conservatism if sexual equality is to remain a part of political discourse. (Eisenstein, 1987: 238)

This rise in neo-conservatism in America needs to be considered in the context of cyberpunk, as although cyberpunk's emergence and consequent socio-political critique of techno-centric capitalist systems has been lauded by critics and readers alike, it has often been asserted that its treatment of gender, sexual politics and feminist discourse are revisionist rather than revolutionary.

Cyberpunk versus Feminist Science Fiction

The feminist science fiction writers of the 1970s and 1980s such as Joanna Russ, Marge Piercy, Ursula Le Guin and Margaret Atwood worked to place sexual politics at the forefront of their most famous novels, garnering commercial success and critical acclaim. The success of these novels shows that questions about sex and gender are significant, and the fact that these writers examined and reinterpreted gender roles in their work illustrates the growing popularity for analysing sexual politics in science fiction. These writers concentrated on themes that are also prevalent in cyberpunk, from industrialisation and social conflict in Le Guin's *The Left Hand of Darkness* (1969) to body modification and artificial reproduction in Piercy's *Woman on the Edge of Time* (1976). However, it would appear that such writers did not have any effect on cyberpunk, a genre that came to prominence in the wake of feminist science fiction. In his preface to Gibson's *Burning Chrome and Other Stories* (1986), Sterling states: 'SF has not been much fun of late. All forms of pop culture go through doldrums; they catch cold when society sneezes. If SF in the late seventies was confused, self-involved, and

stale, it was scarcely a cause for wonder.’ (Sterling, 1995: 9) Sterling’s preface, written in 1986 – a decade after Piercy’s ground-breaking novel – makes the claim that the science fiction of the preceding years suffered not only from a lack of imagination, but also from a lack of social and political awareness, and that cyberpunk is the antidote to the lethargy suffered by the genre in the previous decades.

This assertion by Sterling highlights the distinction between cyberpunk and other forms of science fiction: where science fiction has historically been inextricably linked to speculative fiction, cyberpunk writers consciously disentangled from the tropes and discourse traditionally asserted with speculative fiction, in order to develop a model that would, it was argued, accurately reflect – and unapologetically critique – contemporary society. Cyberpunk was heralded as a movement at the forefront of contemporary thinking, with authors, critics and readers making the case that it represented a new literary era: ‘Cyberpunk seems to be the only art systematically dealing with the most crucial political, philosophical, moral, and cultural issues of our day.’ (McCaffery, 1988: 9) While this is undoubtedly persuasive when it comes to concerns regarding technology, urban decay and corporate power, cyberpunk systematically disregards sexual politics and gender issues: ‘Despite the innovatory depiction of the virtual world of information, however, cyberpunk was forlornly timid in its approach towards other possible consequences of such destabilisation, such as the impact on representations of gender identity.’ (Wolmark, 1999: 8) Wolmark goes on to state: ‘cyberpunk’s engagement with the politics of gender has not been as radical as its counter-culture rhetoric might have suggested’ (Wolmark, 1999: 139-140). Cyberpunk’s lack of engagement with contemporary attitudes towards, and understanding of, representations of sex, gender and sexuality does destabilise its claim to a ‘counter-culture rhetoric’, and traditional cyberpunks’ depiction of female

characters raises the question of whether cyberpunk's understanding of sex and sexual politics is as revolutionary as its understanding of technology and its consequences.

The assertion made by critics such as Wolmark (1999) that cyberpunk does not engage with gender and sexual politics is established by the fact that Sterling fails to mention a single female author either associated with, or influential to, cyberpunk in his preface to *Mirrorshades: The Cyberpunk Anthology*, wherein he sets out the defining features of the movement as well as its origins and aims. Sterling ultimately defines cyberpunk as a socially conscious movement in his introduction to *Mirrorshades*, however, this socially conscious movement does not engage with contemporary women's writing. Sterling has often been called "Chairman Bruce" (Shawl 2009; Grootveld and Mensvoort 2015), which is a nickname that was given to him by his cyberpunk contemporaries, as Shirley states in an opinion piece on his official website:

If there was, in those days, a bit of Lord Byron about Bruce there was also a fair amount of Mao Tse Tung. Not that he was even faintly a Communist – but he was and is a gleefully radical visionary, and he talked both jokingly and quite seriously, at once, about our "ideological axis" and the Movement (in science fiction), and was delighted when we began teasingly calling him "Chairman Bruce."

Bruce is opinionated, you say? Even noisily so? A bit overbearing at times? Is it so?

Does the Pope launder mafia money? You bet. Let's face it, Bruce has a messiahnic streak, he can talk the ontological pants off you; he's a one-man soundbite factory and he's a charismatic son of a bitch and, yes, the guy could have been a successful politician (God help us) or cult leader if he'd wanted to. Luckily for the world, he chose the field of futurism. (Shirley, 2015)

Shirley offers a description of Sterling that implies that he is opinionated, unruly and undeniably overbearing. Sterling is a divisive figure, with Westfahl assessing him as 'the relentlessly self-promotional Sterling' (Westfahl, 2013: 86). Sterling's – arguably self-awarded – title of cyberpunk's unofficial spokesperson on account of his continued allegiance to, and proliferation of, the movement, and his role as editor of the anthology

has ensured that his name has become synonymous with cyberpunk itself. Having published his first novel *Involution Ocean* in 1977 at the age of twenty-three, Sterling quickly became a popular and revered cyberpunk author who directly influenced Gibson. Gibson's respect for Sterling is apparent in his foreword to the latter's novel *The Artificial Kid* which was republished in 1997 by HardWired in its *Cortex: Science Fiction that Changed the World* series. Gibson's assertion that Sterling 'knows that he is already quite superbly equipped, by nature, to be the only thing he wants to be: a science fiction writer' (Gibson, 1997: 5) demonstrates his respect and admiration for his contemporary: a sentiment that is mirrored by Sterling's numerous assessments of Gibson's work. In his preface to *Mirrorshades*, Sterling sets out his rationale for the collection by stating: 'Within this book, I hope to present a full overview of the cyberpunk movement, including its early rumblings and the current state of the art.' (Sterling, 1988: VII) This rationale asserts the impression that Sterling is presenting a definitive anthology; however, as with any anthology, Sterling has collated a subjective and limited range of works, and the fact that of the twelve short stories, two are his own collaborations with other writers highlights the fact that when it comes to exhibiting the best that cyberpunk has to offer, his method of selection is highly questionable. While he does make it clear that the texts featured in the anthology are his own personal favourites, Sterling does not take into consideration that he misses out on a vast array of other examples of the genre, and by representing the anthology as a 'full overview', he severely limits the anthology's potential as an introduction to the subgenre, never mind as the main authority on cyberpunk.

With the exception of two female editors, Sterling makes absolutely no reference to any other women, despite the fact that he includes Cadigan's short story 'Rock On' (1984) within the collection. Cadigan is an award-winning cyberpunk author who

edited small press science fiction magazines and published short stories before her breakout first novel, *Mindplayers*, which was a critical and commercial success. Yet while Sterling includes her short story in the anthology – and she is the only female writer to be included – he still does not credit a single female science fiction writer as having been influential to cyberpunk. This complete, and arguably deliberate, omission is astounding considering Sterling's proclamation that: 'Cyberpunk has little patience with borders.' (Sterling, 1988: XII) If this statement were accurate, there would surely have been a mention of the vast number of female authors associated with science fiction in general throughout the course of the twentieth century. Sterling states that cyberpunk authors have been influenced by a vast array of science fiction authors, but at no point in his extensive list does he make reference to a single female author who may have had the merest of influence on the movement. It becomes clear that Sterling considers cyberpunk to be the quintessential boys' club, and the fact that this androcentric position has been propagated by a number of key authors has resulted in questions being raised regarding cyberpunk's stance on the feminist movement. Cyberpunk's treatment of its female characters raises concerns for feminist critics, and in the introduction to her analysis of Noon's work, Gough makes the point that 'from a specifically feminist perspective, cyberpunk's status as vanguard white male art makes it a necessarily ambiguous and conflicted intervention into discourses of gender.' (Gough, 2000: 110) This 'conflicted intervention' becomes even more of an issue when considering Sterling's own view that: 'The Eighties are an era of reassessment, of integration, of hybridized influences, of old notions shaken loose and reinterpreted with a new sophistication, a broader perspective. The cyberpunks aim for a wide-ranging, global point of view.' (Sterling, 1988: XII) However, in reality, rather than achieving this aim, traditional cyberpunk's treatment of women reverts back to stereotype, and this chapter's focus on the novels of Gibson and Effinger will show

how their representations of women in their early – and arguably most successful – novels were neither radical nor revolutionary.

Molly Millions

The women in these texts occupy one of two distinct – and in certain cases intertwined – roles, they are either mothers or replacement mothers, or they are involved in some aspect of the sex industry. It has been argued that male cyberpunk authors did not initially attempt to engage with sexual politics and feminism, and while the female characters featured in these novels were presented to the reader as fully-modified and intrinsically different heroines of a new age, they nevertheless continue to represent the life story of the stereotypical heroine: they appear to be nothing more than highly sexualised and emotionally-scarred women in need of rescue. Although critics have argued that Molly (Gibson's cult heroine, who appears in 'Johnny Mnemonic', *Neuromancer* and *Mona Lisa Overdrive*) does indeed represent a new era of heroine (Nixon, 1992), Gibson's portrayal of her as a former prostitute still bearing the wounds of her past affects this status. The women in both Gibson's and Effinger's texts are modified, whether through the use of technology, biotechnology or cybernetics. The modifications that these women choose – or in certain cases, receive through force – are intrinsically sexual or fetishistic, and these modifications are paid for by, or undertaken in order to, work in some aspect of the sex industry. The fetishisation of the female body through invasive surgery is not a new concept, and is an area of the beauty industry that has been heavily criticised for its effects not only the female body but also on the female psyche. The manipulation of the female body is a central theme in cyberpunk, and the early cyberpunks in particular paid great attention to the various technological advances that allowed them to create highly exaggerated sexual female

forms, embodying both traditionally feminine traits with an increasingly stylised pornographic figure.

Molly Millions is the archetypal cyberpunk heroine, and features prominently in Gibson's early work. Gibson first introduces Molly in 'Johnny Mnemonic', and in Gibson's first introduction of Molly, she is described by Johnny as:

a thin girl with mirrored glasses, her dark hair cut in a rough shag. She wore black leather, open over a T-shirt slashed diagonally with stripes of red and black [...] She stood up. She was wearing leather jeans the color [...] of dried blood. And I saw for the first time that the mirrored lenses were surgical inlays, the silver rising smoothly from her high cheekbones, sealing her eyes in their sockets. (Gibson, 1995: 18-19)

In this first description of Molly, there is a sense of innocence about her; she is a slim girl who is attempting to make her mark on the world, and it is not clear from this initial description if she has yet had the modifications to her hands that make her such a formidable opponent in the later texts. Molly continues through to *Neuromancer* and then appears in a different guise in *Mona Lisa Overdrive* as Sally Shears: a bodyguard hired to protect Kumiko, the young daughter of the leader of the feared Yakuza. Molly is a surgically modified assassin who is feared and respected in equal measure. She is hired alongside Case by Armitage to assist in ultimately creating an extremely powerful and illegal AI from Wintermute and Neuromancer. Molly makes initial contact with Case in Chiba, a derelict city in Japan famous for clinics specialising in surgical modifications. Case's early descriptions of Molly's modifications highlight not only the strength but also the animalistic tendencies that the numerous surgeries have afforded her:

He realized that the glasses were surgically inset, sealing her sockets. The silver lenses seemed to grow from smooth pale skin above her cheekbones [...] 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. (Gibson, 1995: 36-37)

Molly's eyes are hidden behind impenetrable silver lenses. Her claws are comparable to that of a cat's as she is able to extend and retract them at will, ensuring that she is able to attack her adversaries without limiting her normal movement in everyday situations. While both modifications enhance Molly's skills as a fighter, they also distort her human characteristics. Molly has been re-engineered: the surgery on her optic nerves alters the way she processes images, while she uses her 'scalpel blades' as both tools and weapons. Critics have focused heavily upon Molly's physical characteristics, and she has been described in various ways, including as a femme fatale and fantasy figure (Butler, 2000) and the embodiment of powerful female identity (Balsamo, 1999). Whilst some critics have applauded Gibson's representation of Molly, others have questioned the extent to which this representation can be described as revolutionary: 'To some extent [Molly is] a man in women's clothing [...] the most facile and least thoughtful representation of the liberated woman.' (Gordon, 1991: 198) Gordon makes the argument that rather than developing a truly liberated female character, Gibson relies on stereotypical tropes relating to masculinity and femininity in his characterisation of Molly. Gibson has stated that he drew inspiration for Molly's physical appearance and style of dress from that of Chrissie Hynde on the cover of the Pretenders' self-titled first album, which was released in 1980. On the cover Hynde is dressed in a utilitarian outfit with black lace gloves and a bright red military-style jacket: looking neither ultra-masculine nor overtly feminine and this style of dress has become synonymous with Molly's characterisation in Gibson's novels. Molly is not concerned with her physical appearance; she wears a uniform that gives her the flexibility to do her job well, thus enabling her to function at optimal level on a par with her male contemporaries. Molly is often regarded as a no-nonsense razorgirl (as she is described by Swain, Kumiko's retainer in *Mona Lisa Overdrive*) who transcends typical gender roles and takes her place amongst the most skilled and fiercest assassins.

However, Gibson reduces Molly's power significantly by placing her within the sex industry. During the course of *Neuromancer*, Molly makes the revelation that she was once a prostitute and that she needed to sell her body in order to pay for her modifications. This revelation comes after a particularly harrowing scene which takes place in a floating restaurant in the Rue Jules Verne on Freeside. Peter Riviera, an actor and performer specialising in holoshows, which are three-dimensional holographic scenes that are projected by a specialist performer, uses Molly's likeness in his latest show in front of a live audience. Riviera, who has been brought onto the project to befriend 3Jane, the current head of the Tessier-Ashpool dynasty, starts to perform a specially-prepared holoshow for the patrons entitled 'The Doll' (Gibson, 1995: 166), depicting a scene in which Riviera and Molly have violent sex in a bare and dirty room. The scene begins with Riviera stating: "'I couldn't quite hold her, hold her in my mind. But I wanted to hold her, hold her and more...'" (Gibson, 1995: 167) Riviera then proceeds to assemble Molly's body parts together piece by piece, taking care to include her modifications, from her claws through to her mirrored lenses: 'Now limbs and torso had merged, and Riviera shuddered. The head was there, the image complete. Molly's face, with smooth quicksilver drowning the eyes.' (Gibson, 1995: 168) As the two figures begin to have sex, the female figure rakes her claws along Riviera's back, an action that sexually arouses him even further. It is at this moment that Case runs out of the establishment and vomits in disgust at what he has witnessed. Case is able to imagine how the scene plays out: 'He could guess the end, the finale. There was an inverted symmetry: Riviera puts the dreamgirl together, the dreamgirl takes him apart. With those hands. Dreamblood soaking the rotten lace.' (Gibson, 1995: 169) Riviera sexualises a part of Molly's body that has hitherto been reserved for combat: reducing her status to that of a mere plaything rather than the fierce warrior she has striven to become. Molly is a double threat to Riviera's traditional masculinity: she is a female

assassin who is comfortable with her sexuality, and she must therefore be put back into her place. He is unable to comprehend the idea that a woman can be anything other than what tradition dictates, and he takes it upon himself to publicly humiliate Molly in an effort to demean her. Thomas Foster makes the point that Riviera's focus on Molly's claws highlights that which he is most threatened by:

Riviera's performance enacts a classic fetishistic stance towards women's sexual difference from men, which is both desired and disavowed as a threat, and Riviera is specifically shown to invest most heavily in those aspects of Molly's cyborg body that might otherwise seem to distinguish Molly from the traditionally feminine, her claws. (Foster, 1999: 219)

Gibson, too, invests most heavily in the most enhanced aspects of Molly's body, but by superimposing her present state as an assassin with her previous profession as a prostitute, Gibson does not allow Molly to embody an alternate state of being. The scene with Riviera makes it clear that Molly's body is not wholly hers: it is available for use by those that wish it, and she is not in control of how she behaves in such circumstances. Molly's body is essentially used as a sex toy in this scene, and she is described by Riviera as a doll, a plaything with no rights or autonomy. The depiction of women as sex toys or dolls is a trope that is regularly deployed in science fiction texts: 'Humanoid sex toys, both mechanical and biological, are a common element in science fiction.' (McIntyre, 2006: 152) These sex toys are almost always female, and their use in science fiction, particularly in the context of cyberpunk demonstrates the extent to which there is the potential for radical technological advancements to be used against women's best interests.

The scene that Riviera creates reads like a dystopian wedding night rape fantasy, and Gibson's characterisation of Case's disgust, Molly's anger, and Armitage's outright refusal to discuss what he has witnessed confirms this image. Armitage feels the need to ignore what has taken place in front of him, and evades Case's questions on the matter. Case is aware of the severity of what has happened, and questions Armitage

about Riviera's agenda: "'Why did Riviera do that to her?'" (Gibson, 1995: 169) Case is unwilling to accept that Riviera simply performed a holoshow, and views what Riviera did as a direct attack on Molly. It becomes apparent that Molly takes the same stance, as when Case finds her and asks why she ran away from the restaurant, Molly's feelings become clear:

"What was that all about, in the restaurant? How come you ran?"

"Cause if I'd stayed, I might have killed Riviera."

"Why?"

"What he did to me. The show." (Gibson, 1995: 176-177)

Molly is stripped of her power in this scene, and this is a theme that is further developed through the course of the novel as Gibson makes it clear that Molly has been emotionally scarred by her previous existence. Her public humiliation at the hands of a man who is physically weaker than her epitomizes her lack of authority within the group: in that moment she cannot harm him on account of his importance to the project, and neither is Armitage, her superior, willing to make a stand to protect her dignity.

It is at this point that Molly makes the confession that she used to be a prostitute and that that is how she was able to afford her modifications. This is a common theme for the female characters in cyberpunk, and to a certain extent, science fiction more generally, as women are depicted as being able to choose a life of prostitution with relative ease. In her article on cyberpunk's treatment of the feminine, Karen Cadora makes the point that: 'Poverty, a pervasive aspect of all cyberpunk, often translates into prostitution and forced reproduction when the characters are female.' (Cadora, 1995: 364) However, upon reading cyberpunk novels what becomes clear is that the sole reason why women turn to prostitution is not poverty, but rather the opportunities the money will provide in terms of body modification; they make the decision to sell one part of their bodies in order to pay for the other. This is a theme that is prevalent in

cyberpunk and is one that is used repeatedly throughout the movement. While male characters are able to exploit their minds with the help of extraordinary technological enhancements – with characters such as Case, Johnny Mnemonic and Marid Audran being prime examples – women sell sex in cyberpunk in much the same way that they did before: cyberpunk reverts to traditional prostitution as a plot device when female characters need money, irrespective of the new world that has been created within the novels. The need to sell sex in order to pay for modifications is especially true in Molly's case. While the reader is not made aware of Molly's general financial situation before her foray into prostitution, it is clear that her only reason for becoming a "puppet" was to pay for her modifications. Molly had a pimp and worked in a brothel where she was implanted with a chip: "once they plant the cut-out 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. House has software for whatever a customer wants to pay for..." (Gibson, 1995: 177) Molly became a living, breathing sex doll as a result of the software, and Riviera's holoshow is simply another amalgamation of Molly's previous existence. Due to her previous existence as a "puppet", she is always available for "puppet time", and her body is no longer her own. Through this sequence Riviera makes it clear to both Molly and everyone around her that her body will always be available for the gratification of others, and she can never escape her past: regardless of how many men she overpowers or how much money she earns in her new career, she will always be an ex-prostitute, and her body is for hire forever more. Molly does not know whom she has had sex with, and in what context, and the holoshow illustrates the fact that she knows that she was often placed in such circumstances during "puppet time". Riviera exploits Molly's fear of how her body was used during this period of her life to the delight of the patrons.

Molly then goes on to state that she was aware that she would orgasm during “puppet time”. This in itself does not make sense: if Molly is not aware of what is happening to her during these moments, then it follows that she would not be aware of having orgasms either. However, Gibson undermines the severity of her experience by depicting Molly as being sexually aroused in such situations. This form of prostitution and the concept of a woman being able to feel her orgasms during “puppet time” appears in another of Gibson’s texts. Automatic Jack, a freelance hacker, describes Rikki’s job as a prostitute in Gibson’s short story ‘Burning Chrome’ (1982):

I tried not to imagine her in the House of Blue Lights, working three-hour shifts in an approximation of REM sleep, while her body and a bundle of conditional reflexes took care of business. The customers never got to complain that she was faking it, because those were real orgasms. But she felt them, if she felt them at all, as faint silver flares somewhere out on the edge of sleep. Yeah, it’s so popular, it’s almost legal. The customers are torn between needing someone and wanting to be alone at the same time, which has probably always been the name of that particular game, even before we had neuroelectronics to enable them to have it both ways. (Gibson, 1995: 220)

Both Molly and Rikki are treated as sex dolls available for abuse, and the utilisation of software that takes away these women’s bodily autonomy and makes them seemingly unaware of what is happening to them whilst their bodies are used for the sexual gratification of men is another example of the ways in which radical technologies that initially promised a potential posthuman revolution have been employed in ever more exploitative, degrading and dehumanising ways in these texts. Critics have argued that Molly did not have any awareness of her actions during her work as a “puppet”: ‘Molly has experience working as a “puppet” with a “cut-out chip” enabling her to have sex with strange men without being aware of it’ (Westfahl, 2013: 68), however, Molly herself makes it clear that the extensive body modification procedures she underwent in the Chiba clinics during her time as a prostitute interfered with the software used in the brothel, leading to her become increasingly more aware of what was happening to her during the periods in which the cut-out chip was being used on her. She explains to

Case after Riviera's holoshow that the incompatibility between her body modifications and the brothel's software actually put her in more danger, and she came to be eventually assigned to customers with increasingly disturbing and ultimately criminal sexual tastes:

"Trouble was, the cut-out and the circuitry the Chiba clinics put in weren't compatible. So the worktime started bleeding in, and I could remember it...But it was just bad dreams, and not all bad [...] Then it started getting strange [...] The house found out what I was doing with the money. I had the blades in, but the fine neuromotor work would take another three trips. No way was I ready to give up puppet time [...] So the bastard who ran the place, he had some custom software cooked up. Berlin, that's the place for snuff, you know? Big market for mean kicks, Berlin. I never knew who wrote the program they switched me to, but it was based on all the classics [...] I wasn't conscious. It's like cyberspace, but blank. Silver. It smells like rain...You can see yourself orgasm, it's like a little nova right out on the rim of space. But I was starting to *remember*. Like dreams, you know. And they didn't tell me. They switched the software and started renting to specialty markets [...] And I knew, but I kept quiet about it. I needed the money. The dreams got worse and worse, and I'd tell myself that at least some of them *were* just dreams, but by then I'd started to figure that the boss had a whole little *clientele* going for me [...] One night...one night, I'd just come back from Chiba [...] Surgeons went way in, that trip. Tricky. They must have disturbed the cut-out chip. I came up. I was into this routine with a customer [...] Senator, he was. Knew his fat face right away. We were both covered with blood. We weren't alone. She was all [...] Dead. And that fat prick, he was saying "What's wrong. What's wrong?" Cause we weren't *finished* yet [...] So I guess I gave the Senator what he really wanted [...] The house put a contract out on me. I had to hide for a while." (Gibson, 1995: 177-178)

Technological advancements have not led to other types of revolutions in Gibson's texts, and these advancements have only worked to further entrench the already significant levels of poverty, exploitation and inequality that existed within these societies. In the case of Molly, and numerous other female characters in these cyberpunk texts, their engagement with radical technologies is dependent upon their ability to sell their bodies in an increasingly pervasive and dangerous sex industry in which the utilisation of new technologies is leading to the development of progressively more brutal, hazardous and physically and psychologically damaging practices that cause significant amounts of trauma to the women involved. It becomes clear in her

descriptions of her previous employment that regardless of how physically strong and powerful Molly has become as a result of her modifications, her experiences in the sex industry have had a significant impact upon her mental health, and this in part is the reason why she reacts so strongly to Riviera's use of her likeness in the holoshow.

The scene in the restaurant and the conversation that follows between Molly and Case highlights the fact that the female body is often viewed in its pieces: Molly becomes nothing more than a series of body parts that can be moved and manipulated at whim. Molly's brain is not needed during "puppet time" and it certainly is not needed during the holoshow: the only difference is that as a prostitute she was not fully aware of her actions in real time whereas now she is forced to sit and watch as her body is used and is powerless to stop it. A large number of the female characters in cyberpunk have been involved in some aspect of the sex industry, and prostitution is rife in the novels of Gibson and Effinger. The sex industry has become the agency by which the female characters are subjugated and controlled in these texts, and this subjugation ensures that the women have difficulty developing beyond the limitations of the commonplace prostitute-done-good paradigm. Molly reappears in *Mona Lisa Overdrive* in the guise of Sally Shears: a tough bodyguard who has been hired to protect Kumiko, the young and vulnerable daughter of the head of the Yakuza. It instantly becomes clear who Sally really is, and during the course of the novel she reverts back to using her previous name. In this novel Molly is responsible for a child's welfare, and she behaves differently as a result, as Nicola Nixon highlights in her article on the merits of cyberpunk as a literary movement: 'In *Mona Lisa Overdrive* Molly/Sally, the tough entrepreneur/assassin/businesswoman, is distinctly softened, less harsh because she is effectively "feminized" when Gibson positions her in relation to a child.' (Nixon, 1992: 223) Gibson seems to position her thus in order to redeem her character: Molly is: 'SINless, her birth unregistered, yet around her name (names) swarm galaxies of

supposition, rumor, conflicting data. Streetgirl, prostitute, bodyguard, assassin, she mingles on the manifold planes with the shadows of heroes and villains' (Gibson, 1995: 292). Molly is a warrior, a maverick, yet she becomes a quasi-governess for the emotionally damaged Kumiko: a role that requires her to deviate from her extensive training, modifications and personality. The male characters are able to show vulnerability in a variety of ways, but Molly must revert back to a traditionally feminine role in this text. Molly appears to redeem herself and in essence let go of her past "sins" when she begins to show a softer, more "feminine" side in her treatment of Kumiko; once she takes on the role of becoming her young ward's surrogate mother, she becomes a viable woman once again.

A number of critics have congratulated Gibson on his ability to critically analyse and evaluate potential advancements in a range of fields and illustrate their downfalls through his novels: 'Gibson is notable for taking seriously recent developments in technology, culture, and socioeconomic organization, attempting in his stories to convey what he sees as their inevitable consequences.' (Sponsler, 1992: 626) While the argument has been made that his texts do not engage with feminism, Gibson's portrayal of female characters such as Molly demonstrate the ways in which an adherence to transhumanist values will potentially lead to technological advancements being used against the best interests of women; rather than creating egalitarian utopias as envisaged by transhumanists, radical technologies as depicted in these texts will lead to further exploitation, degradation and dehumanisation for the women in these societies. Critics who have focused upon Gibson's depiction of Molly have varying and conflicting arguments about her status, as has been demonstrated in this chapter, and the most unsatisfactory analyses have focused upon the ways in which her body modifications have seemingly enabled her to move beyond traditional gender norms in these texts. In his evaluation of Gibson's body of work, Henthorne makes the argument

that Molly is ‘an independent-minded “street samurai” whose gender does not seem to be fixed along traditional lines or limit her in any way.’ (Henthorne, 2011: 54) Henthorne’s analysis completely dismisses Molly’s history in the sex industry with this statement, and ignores the ways in which Molly’s sex is still used against her despite her current status as a “street samurai”, such as when Riviera uses her likeness in the holoshow without her permission in order to try and humiliate her in front of a live audience. The society that Gibson has created in the *Sprawl Trilogy*, and the societies that he depicts in his later works as well, are inherently misogynistic: the women in these societies are still very much categorised and traded according to their bodies whilst the men are provided with the far loftier opportunity of exploiting their minds and brains in their pursuit of wealth and status. The universal utilisation of radical technologies which has permeated every aspect of society in these texts has simply made it increasingly easier for women to be exploited in ever more demeaning, inhumane and inventive ways, as their bodies have become a battleground over which men continue to fight for dominance, wealth and authority. Henthorne’s analysis also reveals another layer of misogyny in the context of Molly’s characterisation in these novels; the assumption here is that there is a pre-determined expectation that the women in these texts would need to denounce their womanhood and replicate “traditional” expectations of manhood in order to become successful in these societies. As Gordon (1991) argues, Molly is to some degree represented as a man in women’s clothing, and the assumption here is that women cannot be powerful of their own accord; women must adapt to and adopt what are deemed to be “masculine” traits in order to be able to move beyond the limitations of their sex, and the technology they use to achieve this is used against them in very significant and life-altering ways.

This concept of technology being used against women’s best interests is further apparent in Gibson’s later *Bridge Trilogy*, where in *Idoru*, it becomes clear that

technological advancements have led not only to fetishistic body modification practices for women working in the sex industry, but that these women are now able to be tagged and tracked as though they are consumer goods, as Gibson describes in the context of Russian prostitutes: 'Routine plastic surgery lent them a hard assembly-line beauty. Slavic Barbies. A simpler operation implanted a tracking device for the benefit of their handlers.' (Gibson, 2011: 3) Whilst Molly does wilfully engage with body modification practices to improve her own situation in Gibson's earlier texts, it is nevertheless the case that she is required to sell access to her body in order to be able to afford to do so. Transhumanists' discussions of the potential posthuman future that may be possible with the advent of ever more radical technologies do not consider the practicalities and potential ramifications of working towards creating such a future, particularly in terms of how individuals will be able to afford to engage with these technologies if an individualistic approach is taken when it comes to the utilisation of such technologies, which is the most likely scenario in capitalist systems of production and consumption.

Selling Sex in the Budayeen

Although Gibson's portrayal of prostitution in the *Sprawl* Trilogy focuses primarily on its effects on Molly, the sex industry operates at the core of George Alec Effinger's Marîd Audran series. Every female character in the novels has a link, however tenuous, to an aspect of the sex industry; whether that involves prostitution, pornography, pole dancing or bar work in such establishments, the women in Effinger's works sell sex in a variety of different ways, regardless of their sexuality, age, class or religious beliefs. While traditional Islamic manhood is alive and well in the Budayeen, and the men in the city follow the traditional cultural norms in their day to day lives, traditional Islamic womanhood has disintegrated as a result of the sex and body modification industries in Effinger's texts. *When Gravity Fails* begins with Marîd entering his friend Chiriga's

bar to meet a prospective client, triggering a disturbing series of events leading to many deaths and culminating in Marîd's exile from his social circle. Marîd's fascination with the modified female form is first established in this chapter, and his description of an exotic dancer illustrates both his sexual excitement and increasing disdain for the idealised female form:

She'd obviously had a lot of work done: her cheekbones had been emphasized with silicone, her nose straightened and made smaller, her square jaw shaved down to a cute rounded point, oversized breast implants, silicone to round out her ass...they all left telltale signs. None of the customers would notice, but I'd seen a lot of women on a lot of stages in the last ten years. They all look the same. (Effinger, 2005: 14)

Marîd is fully aware that what he is looking at does not naturally exist, and he is able to pinpoint exactly where the necessary surgery has taken place, yet he is still attracted to the finished article and focuses on the areas of the dancer's body that are most likely to give him sexual gratification. The dancer embodies the feminine ideal that exists within the Budayeen, and as such is able to earn more money than she would have without surgery. As is the case with Molly in the *Sprawl Trilogy*, the women in the Budayeen resort to working in the sex industry in order to pay for their modifications, but Effinger does not make it clear as to why they remain in the industry indefinitely. The women in Effinger's novels work in the sex industry as a matter of course; their experiences of, and motivations for, becoming involved in the industry remain elusive to the reader, despite Marîd's personal relationships with some of these women. The sex industry is so pervasive and has become so normalised that even children are working within the industry without being saved from its clutches. Effinger's short story 'Slow, Slow Burn' (1988) which he sold to *Playboy*, features a moddy actress from the Budayeen who makes pornographic films, the first of which she says she made when she was aged fourteen. It becomes clear in these novels that women's bodies are

their most viable commodity in societies where the use of radical technologies has become the norm, and this is a trope that is not exclusive to cyberpunk.

Effinger's descriptions of the female characters in his work mirror that of the description of Gildina: a woman who has been surgically modified for the sole purpose of male sexual gratification in Piercy's *Woman on the Edge of Time*. Upon seeing her, Connie, who is able to time travel to different points in the future, begins to evaluate Gildina's features in relation to her own when she finds herself transported to Gildina's accommodation in a future society:

They were about the same height and weight, although the woman was younger and her body seemed a cartoon of femininity, with a tiny waist, enormous sharp breasts that stuck out like the brassieres Connie herself had worn in the fifties – but the woman was not wearing a brassiere. Her stomach was flat but her hips and buttocks were oversized and audaciously curved. She looked as if she could hardly walk for the extravagance of her breasts and buttocks, her thighs that collided as she shuffled a few steps. (Piercy, 1979: 288)

Gildina resides in a dystopian future world in which she embodies an exaggerated version of the feminine ideal: an ideal that accentuates every curve to the extent that she is incapable of normal physical movement. Gildina is a parody: a distorted doll who prides herself on her ability to sexually satisfy the man to whom she is contractually bound. In both cases, surgery has allowed for the creation of a fetishised feminine ideal that is easily attainable, and in the case of these two novels, both women have been (re)created by surgeons for the sole purpose of male sexual pleasure. Having been published in 1976 and 1986 respectively, *Woman on the Edge of Time* and *When Gravity Fails* were both written during a period of time when attitudes towards sex and pornography were in a state of flux as the sex industry, and particularly pornography, experienced a boom. Cyberpunk's emergence in the 1980s was heralded as innovative by devotees with Sterling claiming that *Neuromancer* revolutionised the field, 'helping to wake the genre from its dogmatic slumbers. Roused from its hibernation, SF is lurching from its cave into the bright sunlight of the modern zeitgeist [...]' From now

on things are going to be different.’ (Sterling, 1995: 9) Sterling’s dismissal of 1970s science fiction, as well as his promise of a radically different representation of society does not take gender issues or sexual politics into account. The women in both Gibson’s and Effinger’s works represent a combination of both the dystopian realisation of gender politics as imagined by 1970s science fiction writers such as Piercy and Atwood, and the emerging porno-chic feminine ideals of the sex industry in the 1980s. Body modification is big business, and the reimagining of the body ideal lies at the heart of the beauty industry. Susan Wendell evaluates the importance of establishing a physical ideal in a consumer society in her personal account of living with disability:

idealization of the body is related in complex ways to the economic processes of a consumer society. Idealization now generates tremendous profits and the quest for profit demands that people be reminded constantly of existing body ideals and presented regularly with new ideals. (Wendell, 1996: 86)

This quest for corporeal perfection lies at the heart of Effinger’s work, particularly in the context of the female experience of body modification, as the women and trans women in his texts work to capitalise upon their primary assets in any way that they can.

The women in the Budayeen are required to work on continuous upkeep in regards to their bodies, as their bodies are their primary means of employment and their only way of keeping themselves out of poverty. The sex industry is the key industry for the women of the Budayeen, and they must ensure that they keep their most valuable assets in prime condition in order to compete in the market, as Marîd surmises when considering Maribel, an aging prostitute: ‘When she got even older, she had to lower her retail markup in order to compete with the newer models.’ (Effinger, 2005: 266) The sex industry in the Budayeen has no barriers; the inhabitants of the Budayeen are either directly involved in, frequently use, or financially benefit from an industry that has classified fifty percent of the population as being for sale in some shape or form.

There is a significant amount of money to be made from two industries that are heavily reliant upon each other in the Budayeen: the sex industry and the body modification industry. Neither industry would exist to the extent that it does or be as invasive and pervasive in society without the existence of the other. Both industries are focused upon profit above all other considerations and their effects upon society have been significant and far-reaching. This focus upon profit has propelled these industries into experimenting with ever more dangerous and invasive procedures in order to satisfy an increasingly diverse and expanding clientele. Effinger's trilogy works on the premise that these procedures will become a globally acceptable form of body modification which will transcend social, cultural and religious barriers as the quest for the body beautiful, particularly in the context of the sex industry, takes precedence over other forms of physical self-expression.

While Marîd is eventually moulded into a superhero-type figure in the Budayeen – having made full use of his modifications to fight crimes as well as getting married and making considerable charitable donations – he is in fact almost killed by three women before his transformation even begins. The Black Widow sisters are the archetypal female superheroes of the Budayeen; Tamiko, Devi and Selima are surgically enhanced ball-busters with a penchant for tight leather and rough sex. They have a fearsome reputation in the Budayeen, and are considered to be mentally deranged; with Tamiko in particular having the ability to kill her opponents in much the same way that a snake immobilizes its prey:

Tamiko'd had one of her salivary glands replaced with a sac full of some high-velocity toxin. A plastic duct led the poison down through an artificial tooth. The toxin was harmless if swallowed, but loose in the bloodstream, it was horribly, painfully lethal. Tamiko could uncap that tooth anytime she needed to – or wanted to. (Effinger, 2005: 31)

Tamiko's modification is akin to Molly's, as both women have adapted an aspect of their bodies to exhibit animalistic tendencies: Molly has cat-like claws that enable her

to slice through flesh while Tamiko can harbour enough venom to destroy a person's central nervous system. Both women are potentially deadly, and both women have sold their bodies in order to pay for their modifications. While Molly's physical appearance is utilitarian and minimalistic, the Black Widow Sisters have had surgery to further eroticise their bodies, choosing to increase the size of their breasts to almost unmanageable proportions. These modifications are seen as the hallmark of the Black Widow Sisters; their immense chests juxtaposed with their highly venomous fangs create three women who are feared and lusted after in equal measure. Marîd is especially terrified of them, and his fear is further compounded when they convene to attack him as they believe him to be responsible for their friend Nikki's sudden disappearance. Marîd is unable to defend himself from their onslaught, and their actions further confirm his belief that not only are they a formidable trio, but that they are in fact sexually aroused by violence, as he concludes in the aftermath of his beating: 'I'd learned how much they enjoyed what *they* thought of as foreplay.' (Effinger, 2005: 57) The Black Widow Sisters are depicted as sadomasochists who enjoy inflicting pain upon their conquests. Effinger has created a trio of women who appear to have gained complete control, not only of their lives, but also of their own bodies through the use of advanced technology.

The Black Widow Sisters are the Amazons of the Budayeen: and their reputation as physically and sexually formidable opponents precedes them. They work for Friedlander Bey as hired assassins in much the same way that Marîd is required to, and they have the power and the ability to fulfil the needs of their employer. However, their reign as the Budayeen's most powerful women is short-lived, as the women are murdered by an unknown assailant within days of each other, and it becomes Marîd's mission to find and punish the perpetrator. Upon finding Tamiko's body, Marîd concludes that the level of brutality used by her murderer is a judgment sent down from

God for her attack on Marîd, and the various signs of torture that are apparent on her body reflect her fate. Lefanu argues that the use of the Amazon by male science fiction writers only works to reinforce masculine ideals: 'For many male writers of science fiction Amazons serve as symbol of all that is most feared and loathed as Other [...]. She must be denied through death, or forced into submission to a male-dominated heterosexual practice which then becomes the "norm". (Lefanu, 1988: 33) The Black Widow Sisters very much fit into Lefanu's analysis of male science fiction writers' use of the Amazon; their strength and lack of fear of men sets them apart from the other female inhabitants of the Budayeen, and as such they become objects of terror and lust in equal measure. Their highly eroticised bodies are subversive even by the standards of the Budayeen, and this combined with their animalistic body modifications serves to separate them from the other female characters in the series. The Black Widow Sisters are comic book caricatures, and their eventual demise signifies their ultimate lack of power and agency; they are at risk of harm like every other female character in the Budayeen, and much like Molly in Gibson's texts, the Black Widow Sisters are not able to resist male brutality regardless of the body modifications they have undertaken.

Effinger has not found it possible to create a female character who presides within the realm of the ordinary: only Chiriga is emotionally and financially independent as well as having a socially and culturally acceptable sexual identity. Chiriga is the only female character upon which Effinger has bestowed a semblance of autonomy without the need for over-exaggerating her sexuality. Chiriga owns a club in the Budayeen that is frequented by Marîd, and she enjoys a position of authority and a healthy income as a result. However, in *A Fire in the Sun*, Friedlander Bey decides to purchase Chiriga's club under duress and gives it to Marîd, enabling him to acquire a source of independent income. Chiriga is furious and devastated by this betrayal, but eventually finds herself having to forgo her pride and work at the club as a manager, having been unsuccessful

in her quest to find suitable employment elsewhere. Despite initially having made a feeble attempt at protest, Marîd begins to enjoy his new-found status as a proprietor, as well as the healthy income that comes with it. Friedlander Bey has identified Chiriga as being one of the only women in the Budayeen that is not reliant on a man, and as such has used his considerable influence to reaffirm the gender inequality that exists within his realm. Chiriga is duly chastised for having had the gall to challenge the dominant patriarchal establishment, and must be reduced to selling her services behind the bar of the club, while watching the exotic dancers and prostitutes do so on the podia.

Body modification is very much a woman's game in the Budayeen; the only male characters who choose to undergo such procedures are those who embark upon gender reassignment surgery. The masculine body does not require improvement and as such is left in its natural state, the focus instead being on the advancement of the mind and the improvement of the physiological processes of the body. In Marîd's case, he is intent on becoming the best detective, the fastest hunter, the most agile warrior. His cerebral modifications allow him to enjoy a superhuman level of mental acuity and physical fitness, and the ability to control every aspect of his bodily functions is a valuable asset which serves him well in his new-found career. Marîd is initially coerced into having surgery by Friedlander Bey, and he spends a significant amount of time considering the potential ramifications that having such procedures will have upon his psyche, his identity and his sense of self, however, he does not consider the effects that body modification procedures may have had upon the women in his life. Instead, he focuses solely upon their physical characteristics and works to grade the success or otherwise of the procedures they have had. Marîd's trivialisation of these dangerous and life changing surgical procedures illustrates how far surgery has evolved in the Budayeen: from previously being considered as a last resort for people suffering from low self-esteem and body dysmorphia into a quick and carefree practice comparable to

an ordinary shopping experience. The idea of creating a completely new being through a series of seemingly straightforward procedures is a central theme in the novels, and Marîd considers himself to be an aficionado when it comes to such surgeries and their end results. However, this appreciation for the malleability of the female form borders on obsession for Marîd, as he works to analyse and evaluate the people he meets through their various physical modifications.

Body modification is a key theme in these novels, and permeates every aspect of society, with gender reassignment surgery and surgery designed to create an idealised female form in order to provide a better income in the sex industry being especially prominent. Marîd's unwavering physical description of every woman he meets creates the feeling of a cattle auction, whereby each woman is categorised and displayed in accordance with her perceived level of beauty. The ideals present in the Budayeen are depicted as universal: the female characters strive to achieve bodies that are sexually desirable for the men around them, irrespective of personal preferences or physical diversity. Effinger's women are quintessentially "ideal" prostitutes, they are beings in which male fantasy has been fused with male-controlled technology to produce physically flawless specimens: specimens that are for sale to the highest bidder. Early cyberpunk's representation of the female body being centred around and directly upon the needs of a pervasive sex industry is not ambivalent. Nicholas Spencer argues that cyberpunk can be read as 'a radical and liberatory envisioning of a cyborg human subjectivity' (Spencer, 1999: 403-404); while this is indeed the case in the context of the relationship between the *human* and technology, the relationship between *women* and technology is infinitely more complex and more disturbing in both Gibson's and Effinger's texts. The societies that both writers have created have become even more misogynistic with the advent and widespread utilisation of new technologies. These societies have taken already misogynistic, damaging and exploitative industries –

namely the sex industry, the beauty industry and the elective surgery industry – and have re-imagined how much further such industries will push their agendas upon the general populace in order to create a culture in which women's bodies have become the ultimate marketplace upon which these industries trade their wares. In analysing the prevalence of such industries in the cyberpunk texts of Gibson and Effinger, a key concern is whether these writers used inherently sexist tropes in their work as a matter of course, as the male science fiction writers that came before them have done, or if their representation of women in these texts is indicative of their efforts to demonstrate the myriad ways in which a transhumanist approach to the utilisation of radical technologies will lead to widespread harm for women.

Cyberpunk as Anti-Feminist?

Lefanu argues that science fiction 'offers a means of exploring the myriad ways in which we are constructed as women.' (Lefanu, 1988: 5) She offers a political motivation for the contemporary science fiction she is writing about in the late 1980s, and argues that science fiction is influenced by the anti-feminist movement of the period:

I also believe that the anti-feminism of the present day is a powerful force in both Britain and America. The Thatcher-Reagan alliance seems to encourage imitative moves between the two countries. The growth of the New Right in Britain (who like to see themselves as having intellectual respectability) is not unrelated, I believe, to the growing power of the "moral majority" in the USA [...] Both governments seem determined to crush movements of organised labour, to attack civil rights and, in Britain at least, to undermine a socialised system of health care and education. Women are not the only victims of right-wing governments, but they are amongst the first. This, then, is common ground, and is likely to be reflected in contemporary science fiction. (Lefanu, 1988: 7-8)

This anti-feminist feeling is reflected in early cyberpunk; the women in these novels are broken down through their work in the sex industry and their bodies are reconditioned and repurposed to adhere to the pornographic ideals of contemporary

culture. They exist only within the frameworks as set by the men around them, and their minds, bodies and even orgasms are carefully controlled through the use and abuse of modern technology. Sterling is adamant that cyberpunk heralds the start of a new and exciting era for science fiction, and while that is undoubtedly true when it comes to ideas around technology, consumer culture, and the invasion of the body, the movement's treatment of sexual politics is staunchly traditional, conservative and regressive in its approach. The female characters in these texts are commodities: they have only their bodies to sell, and technology allows for the creation of a type of body that is hyper-sexualised. In her work on gender in relation to science fiction, Helen Merrick argues:

Despite the potentially liberating promises of an escape from the body (and thus modernist notions of gendered subjectivity), and the presence of strong female characters, the dominance of the mind/body dualism in cyberpunk serves to reinforce the associated gender binaries. (Merrick, 2004: 250)

This dominance is accentuated by pervasive and invasive technology. The ways in which technology invades, augments, and revises the female form reinforces gender binaries. Angus McIntyre's argument:

In Gibson's imagined future, technology delivers a nightmarish ideal that can only be imperfectly produced by drugs or alcohol in today's world – the absolute annihilation of the self and the physical human body as a saleable commodity entirely stripped of any emotional or mental qualities (McIntyre, 2006: 153)

applies specifically and exclusively to the female characters. Although the male characters *do* trade their services for capital, their mental faculties are always involved to a greater or lesser extent.

Traditional cyberpunk's seemingly revisionist stance in the context of sexual politics stems from its desire to act as socio-political commentary. Cyberpunk's stance in this case, works to analyse and critique 1980s' attitudes to sexual politics in the context of capitalist societies in the wake of the feminist movements of the preceding decades.

Alongside this, Gibson and Effinger use their writing to critique transhumanist values, and the extent to which not only will women be forgotten in the technological revolution promised by transhumanism, but that this revolution will actively work against women's best interests. As seen in earlier chapters of this thesis, transhumanists essentially homogenise humanity in their analyses of how the utilisation of radical technologies can potentially lead to the creation of the posthuman, and as has been evidenced by researchers such as Criado Perez (2019), the scientific community, the medical industry and technology industries are still working with data sets that do not include physical and physiological differences between the sexes, meaning that medicines, products and algorithms are being designed with significant data gaps, and it is women that are losing out as a result. Cyberpunk takes this idea further, as writers such as Gibson and Effinger focus upon what an adherence to transhumanist values will mean for women in societies in which women are already treated unequally and unfairly, and how this will be exacerbated in technologically advanced societies in which individual rights, cultural differences and sex differences – amongst other issues – will be at risk of being completely disregarded in the race towards posthumanism. As Criado Perez asserts when it comes to legislating for women and women's rights in general, the answer always seems to be: 'we'll get to you after the revolution.' (Criado Perez, 2019: 294) The works of Gibson and Effinger demonstrate that when it comes to women's rights, the ongoing technological revolution is yet another revolution that is in danger of forgetting about women.

The Posthuman Woman

In the context of transhumanism, it has been argued that Cartesian dualism has had a significant influence upon transhumanists. Building upon the work of the seventeenth century philosopher René Descartes, who analysed the interaction between the mind and the body in his seminal text *Meditations on First Philosophy* (1641) as well as in

his later works, transhumanists have considered the mind-body problem in the context of a potential posthuman future. The desire to be able to completely separate the mind from the body is a key aspect of transhumanist thinking: 'The proposal of uploading minds into machines [...] reveals that transhumanists are really implicit Cartesian dualists, who believe that their personhoods, their sense of Self, exist in an immaculate reality separate from their bodies.' (Nagoshi and Nagoshi, 2012: 304) This concept of the separation of the mind from the body is apparent in these cyberpunk texts, and Gibson, Rucker and Effinger all consider the ramifications of the utilisation of technology that will allow the mind to be irrevocably separated from the body, and the effects that this can potentially have upon a person's understanding of their own identity and sense of self. While these texts do consider the psychological consequences of the employment of such technologies, it is nevertheless the case that the characters in these texts – particularly the "console cowboys" in Gibson's narratives – relish their seeming mastery over the machines that they are able to manipulate: 'In the 'face' of increasing mechanization, cyberpunk's Cartesian privileging of mind allows its readers to reassert their supremacy over the machine [...] cyberpunk narratives suggest that machines may have minds, but human beings *are* minds.' (McCarron, 1998: 272) This privileging of the mind is especially apparent in Gibson's representation of cyberspace, which is a space that exists to be conquered, consumed and controlled in his texts, and it is the "cowboy hotshots" who are able to achieve these seemingly impossible feats using their skills and cunning. Cyberspace represents new and uncharted territory, and the hackers who work and exist within it use every means at their disposal to try to understand the intricacies of this new terrain. In the *Sprawl Trilogy*, these "cowboy hotshots" are men; women do not log in to cyberspace; their experiences of radical technologies are focused solely upon their bodies rather than their minds, and their

relationship with technology centres around the ways in which technology is used *against* them, rather than upon how they themselves use technology.

It is important to consider the differences in both the treatment and representation of men and women in these cyberpunk texts within the context of transhumanism, which is a theological framework that has been heavily influenced by Cartesian dualism. The mind-body problem remains a contentious topic of study, particularly in feminist discourse, and Descartes' writing is a key example of this:

[The] radical separation of self and body is one variation on the theme of mind-body separation in Descartes, but there are a number of other dichotomies that resulted from dualistic and mechanistic thinking, which have developed over the centuries and influence our thought and actions even today. One of these is the distinction between reason and emotion, and the predominance of the former (representing mind) over the latter (representing body). Reason (knowledge) is also opposed to sensation, with reason and rational knowledge overvalued at the expense of intuition and knowledge through the body and the senses. As we have seen in Descartes, knowledge from the senses is unreliable and, in the final analysis, is not considered to be knowledge at all. Most influential of all, however, has been the association of maleness with mind and reason, and the association of femaleness with emotion, intuition, body and nature. These oppositions have been relied on regularly to justify male superiority over, and domination of, the female, just as they have been relied on [...] as a rationalization for the dominance of the human mind over nature and the manipulation and subjugation of the natural world to human needs and desires [...] It is no wonder that Descartes is no friend of modern feminist thinkers. (Collier, 2013: 159)

Transhumanists' adherence to Cartesian dualism represents a fundamental flaw in the context of transhumanism's understanding of the history of sexual politics and its relevance when it comes to working towards creating the posthuman:

Cartesian dualism has a misogynistic heritage. The transcendence of pure mind is a position available to the male subject, while the female subject must remain immanent, absorbing all the limits of materiality that man has cast off in his construction of his own subjectivity [...] Cyberpunk appeals to the (impossible) desire to escape the vicissitudes of the body and occupy the place of self-mastery. (Vint, 2007: 104)

This desire to escape the body as stated by Vint is a key transhumanist principle, and these cyberpunk texts illustrate the extent to which the potential for achieving this feat

is only available to men in these societies, as Vint goes on to argue: 'Cyberpunk [...] repeats the typical Cartesian binaries: the male is mind and transcendence; the female is body and immanence.' (Vint, 2007: 106) Cyberpunk repeats these binaries because these writers are working to critique contemporary understandings of the posthuman ideal, as it would exist in societies in which traditional power structures and cultural norms have not changed, and instead have become further entrenched during periods of rapid and significant technological revolution. This revolution – as desired by transhumanists and depicted by cyberpunk writers – is shaped and controlled by these traditional power structures, and a technological revolution has not led to other types of revolution, and previously marginalised people continue to be exploited during and after the revolution as they were before. In her analysis of feminist science fiction, Pamela J. Annas argues:

Now that the USA has gone through a few more decades of the mechanization of production in all areas, it is clear that technology in itself is not the crux of the problem. The issue is under what economic system technology is employed and to whose benefit. (Annas, 1978: 144)

This is the central argument put forward by these cyberpunk writers; technology is not the issue here – the system under which it is developed and implemented is. Under this system, it is not possible to develop the posthuman woman because her body will always be elevated above her mind; it is her body that is desired, that can be used and abused as necessary, and she is a prisoner within her flesh regardless of the modifications she has, the clothes she wears or the skills she possesses. Her sex and her body will continue to define her relationship with the world, and rather than enabling her to free herself from her body and work towards transcendence of the kind available to the male characters, technological advancements will merely tether her ever more firmly to her embodied identity. There is even an element of distrust, fear and anger aimed at women who attempt to move beyond the limits they have been set in these

texts, as Terzibashjian, Molly's and Case's guide during their stay in Istanbul in *Neuromancer*, says when he meets Molly for the first time and warns her to be careful: "“In Turkey there is disapproval of women who sport such modifications [...] In Turkey, women are still women.”" (Gibson, 1995: 110-111) As cyberpunk shows, this is a universal feeling when it comes to women's engagement with technology. This engagement is primarily based upon servicing the needs and desires of men rather than working upon transcendence or towards potentially achieving posthumanity in the way that has been envisaged by transhumanists. Transhumanists idealise the concept of a posthuman future, and the posthuman itself, however, these cyberpunk texts illustrate that this potential posthuman ideal, when imagined within the current socio-political system, will be an ideal for the few, rather than the many. In the context of sexual politics, male idealism takes precedence over female idealism in these texts, and the women in these texts are modified and recreated to embody physical ideals that are derived from caricatures, comic books, and a pervasive sex industry.

Conclusion

In the works of Gibson and Effinger, the female body is stripped, assessed and reconfigured to embody the aesthetic of the idealised worker in the sex industry. The women in these texts are represented as femme fatales and caricatures rather than as individuals with any independence or agency, and their existence rests upon their abilities to engage with industries that have been designed to cause them harm. Cyberpunk writers take the criticism that transhumanist principles will lead to the potential homogenisation of the human one step further and work to critique the ways in which radical technologies will be utilised in the body modification and sex industries to create a homogenised ideal of womanhood that is based upon a highly stylised and eroticised figure that will ultimately be available for the use of men. Unlike the transhumanist ideal of posthumanity – which focuses specifically upon

transcendence and overcoming the fragility of the human body – cyberpunk illustrates the ways in which radical technologies, when developed and utilised under the current socio-political system, will only ever work against the interests of women, as these technologies will simply enable their owners and controllers to develop ever more inventive and damaging ways to objectify and abuse women in these societies.

Conclusion

‘Every stage of history has produced a name and a heroic legend for the strong, stubborn, creative individual who explores some future-frontier, collects and brings back new information, and offers to guide the gene-pool to the next stage.’²⁶

This thesis set out to redress and revise contemporary assessments of early cyberpunk as nothing more than a late twentieth century all-boys’ science fiction club that petered out almost as soon as it hit the public consciousness. By focusing not only upon frequently studied writers such as Gibson but also upon the work of lesser-known authors such as Rucker and Effinger, and using transhumanism – an innovative theoretical framework – to analyse these authors’ early novels, this thesis has demonstrated the relevance and significance of the cyberpunk point of view when it comes to contemporary discussions concerning the potential technologically-driven and informed future of humanity. Through a consideration of the diverse range of concepts that are included in these novels in the context of present-day and near-future body modification, and their potential ramifications for the future of humanity, this thesis has illustrated the truly inventive and revolutionary nature of early cyberpunk, and has evidenced how the original questions and concerns raised by the movement in relation to the changing nature of the human condition remain as applicable today as they were forty years ago. Whilst critics have argued that cyberpunk became too insular and ultimately failed as a result (Balsamo, 1999) or that it failed to achieve its revolutionary aims (Lavigne, 2013), this thesis has established not only the truly revolutionary history of early cyberpunk, but also how this ground-breaking approach

²⁶ (Leary, 1988: 252)

to analyses of new technologies and their effects upon humanity continues to the present day.

Chapter one considered the links between transhumanism and cyberpunk in the context of their approach to humanity's utilisation of radical technologies. Whilst transhumanists work to imagine a techno-utopian posthuman future in the abstract, the works of Gibson, Rucker and Effinger demonstrate how an adherence to transhumanist values within contemporary political systems can lead to wide scale exploitation, poverty and dehumanisation. The second chapter took this idea further and analysed the extent to which the human body becomes at once a consumer and a consumed product in the societies that are depicted in these cyberpunk texts, and looked at the ways in which the characters in these novels attempt to overcome the innate fragility and vulnerability of the human body. Chapter three focused upon the temporality of the human existence, and considered the ways in which the characters in these texts attempt to transcend this inherently human quality by not only employing transhumanist values but also appealing to higher powers – whether religious or spiritual. The next chapter looked at Gibson's, Rucker's and Effinger's approach to the concept of consciousness, personal identity and the perceived sense of self, and examined these concepts through an analysis of these authors' depictions of trauma, disability and death. The final chapter of this thesis focused upon Gibson's and Effinger's engagement with feminist discourse in their work, and analysed the extent to which the criticism that early cyberpunk writers did not appropriately engage with sexual politics was accurate.

The three specific authors considered in this thesis, William Gibson, Rudy Rucker and George Alec Effinger, were chosen because they each exemplify the truly inventive, experimental and innovative nature of cyberpunk. Each of the three series that are the focus of this thesis – Gibson's *Sprawl Trilogy*, Rucker's *Ware Tetralogy* and Effinger's

Marîd Audran series – demonstrate the intellectual and ideological breadth and diversity that exists within the movement, as all three series consider the fundamental question of what it means to be human in very different societies, geographical landscapes and time periods. These texts, and cyberpunk as a whole, provide an alternate point of view that is not apparent in other science fiction genres or literary art forms, as rather than speculating upon how the world may come to change for future generations, they write about how the world is already changing with the continual development and increasingly widespread utilisation of radical technologies. Gibson, Rucker and Effinger are not speculators or prophesiers; they are neither hopeful nor despairing about the future of humanity. They ultimately work to tap into the contemporary consciousness and analyse present-day trends, desires and values in order to illustrate how humanity's evolving relationship with new technologies is radically changing the social, cultural and political landscape. This thesis has demonstrated that cyberpunk writers are not concerned with whether or not the employment of such technologies is "right" or ethical – that is not their focus in these texts. They instead focus upon the ways in which the types of technologies that are being developed will be exploited in order to further entrench local and global inequalities across the spectrum. Scholars have often focused upon early cyberpunk writers' treatment and portrayal of inequalities in their works, and questioned whether these portrayals can either potentially be viewed as an endorsement, or perhaps, are indicative of the western, masculinist point of view in the context of considering issues such as racism and sexism. This thesis takes an alternative approach in its analysis of these writers' depictions of inequalities, particularly in terms of the representation of female characters. As argued in this thesis, cyberpunk writers are concerned first and foremost with analysing contemporary norms and values; the works of Gibson, Rucker and Effinger are not speculative in their approach, but rather, depict societies that

mirror the contemporary. As such, as this thesis has shown, the female characters in these texts have not benefitted from the various technological revolutions depicted in these novels, because these revolutions have not coincided with social revolutions or any systematic focus upon human rights and civil liberties in these societies. This reflects not only contemporary society in terms of the limited access that the vast majority of the world's population has to revolutionary technologies designed to improve an individual's life and health, but also, the continued failure of governments to realise, invest in and implement policies that would lead to some form of local, regional or global equality – whether that is in terms of sex, race or class. Cyberpunk demonstrates that one revolution does not lead to another, and in the context of the technological revolutions as depicted in the texts analysed in this thesis, all other forms of social, cultural or political advancement fall away, as the desire for a potential posthuman future takes precedence over any desire to focus upon the inequalities of the present day.

This lack of a social revolution is also apparent when considering individual freedoms and civil liberties, and the notion of personal agency in the context of revolutionary technologies is important here. As Joyce (2018) states, a recurring theme in cyberpunk is to question the extent to which the characters in these texts have control over their lives. As this thesis has shown, the characters in these texts are ultimately controlled and consumed by technology; Gibson, Rucker and Effinger have all created societies where body modifications have become an important status symbol, as they signify an individual's social, cultural and financial capital. In order to fully partake in a society that values a move towards the posthuman ideal, the characters in these texts relinquish a significant degree of control over their bodies, minds and ultimately, lives, in order to achieve their own versions of this ideal. The vast majority of these characters exist on the periphery of society: they are often poor, disadvantaged or disenfranchised, and

their focus upon body modification comes out of a desire to escape from their current lowly positions in society and improve their lives. This desire for improvement results in these characters surrendering any control and autonomy that they have had over their lives, as their new modified selves are often wholly dependent upon either technology, their corporate sponsors, or the powerful individuals who have enabled them to undertake body modification practices. In the context of Gibson's characters, Case, Molly, Corto and Armitage are all heavily dependent upon the systems that have enabled them to create their new modified selves. At the beginning of *Neuromancer*, it becomes clear that Case's central nervous system was destroyed by his previous employer, and Armitage informs him that this will happen once more if Case does not complete the mission to his new employer's satisfaction. Molly's experiences in the sex industry have rested upon her employer's ability to control her subconscious, so she becomes in effect a walking sex doll, and is unable to consent to the increasingly dehumanising and illegal acts that her clientele expect her to perform. Corto becomes heavily reliant upon the government to treat him appropriately after Screaming Fist, however, he ultimately comes to be controlled by Wintermute as a result of his mental illness, and Armitage is a construct that has been created out of a selection of Corto's memories.

Marîd becomes a different type of puppet in Effinger's series; he is coerced into agreeing to his modifications, and once he wakes up from the operation, he is informed that Friedlander Bey now has the ability to inflict unimaginable pain upon him if Marîd does not fulfil the needs and wishes of his benefactor. While he becomes wealthy and joins the upper echelons of society due to his new working relationship with Friedlander Bey, Marîd loses any control or autonomy he previously had over his life. Friedlander Bey chooses where Marîd lives, where he works and who he marries, and

Marîd is unable him to extricate himself from his new situation because to do so would result in his death.

In the context of the Ware Tetralogy, Rucker takes a different approach when it comes to body modification. Unlike the main characters in Gibson's and Effinger's series, Cobb Anderson is not a poor or disenfranchised figure; Cobb is a celebrated scientists and innovator, and he is held in high esteem by his peers and the world at large due to his work on the boppers. However, much like the other characters in these texts, Cobb relinquishes control over his own body and mind at the moment in which he undergoes body modification. During the initial procedure in which the human Cobb is killed and his consciousness uploaded, Cobb loses the ability to control his own life, self and future. Cobb must rely on the boppers and programmers to take care of his consciousness whilst it is in storage, and has to rely upon technological advances as his consciousness is uploaded on to various physical forms across a significant period of time. Whilst Cobb is able to make the decision not to have his consciousness uploaded again once he leaves with the Metamartians at the end of *Realware*, it is clear that, ultimately, this would be the decision of those who hold the copies of his consciousness.

Gibson, Rucker and Effinger make it clear in these texts that the point at which these characters undertake significant modifications – either to their bodies or their minds – they are required to give up any control that they have previously had over their own lives, bodies and environments. In the pursuit of the posthuman ideal, individual civil liberties are not a concern, as the wealthy and powerful use the bodies and minds of those who lack the capital to resist in whichever way most suits their own interests. Furthermore, technology, in these texts, is not an inert entity; once implanted and absorbed by the body or mind, these systems have the ability to override the needs and

desires of their hosts. These are systems that are able to cause short- and long-term memory loss; are able to render their host unconscious, can disrupt natural physiological processes; and can ultimately lead to the development of significant physical and mental health issues.

As argued in this thesis, the societies in these cyberpunk texts represent the transitory – or transhuman – phase on the road to a potential posthuman future, and the works of Gibson, Rucker and Effinger demonstrate that in societies where technological advancement is prioritised above social and cultural reform, there is a significant level of social inequality. The potential posthuman future as envisaged by theorists such as Bostrom et al, where individuals are able to freely design their own embodied identities, will not exist; as cyberpunk writing shows, the period of transition during which these technologies will be developed, tested and utilised will be marred by increasing levels of poverty, social inequality and mistreatment of a significant majority of the human population. Gibson, Rucker and Effinger show that the gulf between rich and poor will continue to expand, and human rights and civil liberties will cease to be of any concern in the race towards posthumanism. These cyberpunk writers make the assertion that when contemporary social and political systems are considered, the idealised transhuman vision of a potential posthuman future will not be achievable; any technological revolution must take place alongside social, political and cultural reforms if it is to have any lasting, positive impact, as without these reforms, the vast majority of individuals will lead increasingly difficult, meagre and desolate lives.

Cyberpunk has always had a difficult relationship with its readers, critics and within the scholarly community, and this thesis has analysed this relationship in depth in order to determine the reasons for this. Fundamentally, the overriding reason for this general conflict and lack of understanding of cyberpunk's aims stems from cyberpunk writers'

refusal to be defined by those outside of the movement. Cyberpunk was and is a movement that is defined by those within rather than without, and those within cyberpunk – particularly in the early days of the movement – worked to control the narrative and take ownership of what cyberpunk was and would eventually become. This is especially apparent in the decision that was taken to close down the cyberpunk fanzine *Cheap Truth*: ‘When Sterling and his gang of pranksters shuttered *Cheap Truth* in 1985, a mere eighteen issues after the launch, he declared that the movement was over, it had become too big, and that much of the “original freedom” was lost.’ (Blake, 2013: 10) As stated in this thesis, cyberpunk has always been a self-aware movement, and writers of early cyberpunk were as focused upon cyberpunk’s future as they were its present. There was a desire to remain authentically countercultural, and the moments when it looked like cyberpunk was hitting the mainstream were especially galling for these writers: ‘In 1991, Lewis Shiner renounced cyberpunk in a *New York Times* op-ed. When *Time* ran a cover story about cyberpunks, the cyberpunks themselves were outraged. Counter culture had been embraced by culture.’ (Blake, 2013: 10) Cyberpunk was and is a countercultural movement at its core, and those within the movement have confirmed this on numerous occasions. In an interview for *ZeroOne Monthly Magazine*, Rucker was asked if he thinks cyberpunk has an expiration date, and he responded: ‘Cyberpunk is a stage in the endless Bohemian subculture that created the beats, the hippies, the punks, and the grungers of today. This type of countercultural sensibility will never go away.’ (Rucker, 1999: 20) This ‘countercultural sensibility’ means that cyberpunk, and other such movements, will continue to tap into the concerns and desires of contemporary society, and the cyberpunk form, aesthetic and sensibility remains as vital and viable today as it was when it began in the 1980s (Kellner, 2005; Blake, 2013; Frelik, 2018).

This thesis has demonstrated how the analysis of contemporary concerns that is undertaken by cyberpunk writers is a key reason as to why transhumanism is so readily applicable to the movement. Transhumanists work to decipher how newly developed technologies can be used to further the posthuman cause, and the works of Gibson, Rucker and Effinger illustrate the ways in which a transhumanist approach to the utilisation of such technologies will significantly affect not just individuals but societies, regions and the potential future of humanity. Transhumanist principles are continuing to gain traction in contemporary western society, with examples including the employment of cryonics; experimental gene therapy; cybernetic implants; and Silicon Valley “biohacking”, where wealthy individuals predominantly working in the tech industry attempt to subvert the ravages of potential ill health and ageing. These approaches are all designed to ultimately overcome some aspect of the body’s natural processes, and potentially enable individuals to lead longer, healthier lives. As the desire to circumvent natural bodily processes becomes ever more popular, movements such as cyberpunk that work to analyse such cultural developments will continue to be an important voice within discussions around the development and utilisation of new technologies, and this is a key reason why cyberpunk is as significant today as it was in the late twentieth century.

The concept of transhumanism is not without its faults, and this thesis has highlighted the issues that transhumanists have in terms of their lack of engagement with the world outside of the west. As demonstrated in the first chapter, transhumanists have not considered differences in relation to sex, class, ethnicity, language and culture in their analyses of how new technologies can be used, and as such, there is an assumption that their notion of the posthuman ideal will be a technologically advanced version of the Vitruvian Man. Transhumanists need to seriously consider this critique, and there is a need for theorists to work on their understanding of the rest of humanity outside of the

western bubble if they are aiming to develop an all-encompassing hypothesis for the future of humanity.

As this thesis has shown, early cyberpunk in particular has also been criticised for being too western-centric and masculinist in its approach, however, as demonstrated by this thesis, this criticism does not mean that the works of early cyberpunk authors should be dismissed. The works of Gibson, Rucker and Effinger are important critical commentaries, and they provide necessary analyses about the ways in which new technologies – whilst initially lauded – can come to be used against the very people they were designed to help. Cyberpunk has continued to adapt and evolve, and has changed from being almost exclusively produced by male writers in America to also being successfully utilised by both female writers and international authors. This shift has led to a number of significant changes within the movement: while the themes and motifs have remained largely consistent, there have been significant changes in style, tone and setting, leading to significant diversification. This has had a considerable impact upon the movement, and this development has led to more critical and scholarly engagement with cyberpunk. This does not mean, however, that the work of early cyberpunk writers should be disregarded. As stated in the introduction to this thesis, there are specific aspects of the works of Gibson, Rucker and Effinger that need further detailed study, particularly in the context of transhumanism. The ways in which these writers depict issues pertaining to race, disability and gender identity and how these relate to human subjectivity in these three series needs additional analysis, and this would be an important area of study for future projects about cyberpunk and its approach to the concept of transhumanism. These topics would be especially useful areas of study because, as this thesis has demonstrated, transhumanism has a specifically western, masculinist viewpoint, and these specific topics – alongside those

that have been the focus of this thesis – work to challenge the assumption that the posthuman can be created without innate human differences being taken into account.

This thesis makes a number of important contributions to previous studies in numerous ways. Firstly, as stated in the introduction to this thesis, this study brings to the fore the work of two early cyberpunk authors who have been hitherto side-lined in scholarship; Rudy Rucker and George Alec Effinger. The works of both authors demonstrate the breadth and diversity of early cyberpunk, and they consider important issues such as consciousness, personal identity and the perceived sense of self in their writing. Secondly, this thesis focuses specifically upon early cyberpunk using a new perspective: transhumanism, in order to analyse the ways in which these writers responded to contemporary discourse relating to the human condition and the potential future of humanity. In addition to this, this thesis also provides an in-depth analysis of transhumanism itself, and critiques it using both historical and contemporary source material in order to ascertain the extent to which transhumanism is – or can be – applicable to global humanity when transhumanists continue to theorise using a specifically western outlook.

Ultimately, this study focuses upon human subjectivity in the context of body modification, and asks whether the very concept of what it means to be human changes in the technologically advanced societies that are depicted in these cyberpunk texts. Cyberpunk writing was and continues to be revolutionary in its analyses of the effects of new technologies upon humanity, and it continues to provide a very specific form of social and political commentary in the twenty first century just as it did in the twentieth. Cyberpunk by its very nature continues to be important and influential – social and political commentary always is, as it provides humanity with a snapshot of society at the time of its production. Cyberpunk writers reflect the time in which they are writing;

they provide an insight into the norms, values and ideals of society and provide important social and historical context. As such, cyberpunk – and other counterculture movements like it – will continue to flourish; as these norms, values and ideals continue to change and develop, movements like cyberpunk will be there to analyse the changing nature of the human condition.

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