BOUNDARIES IN CYBERPUNK FICTION: WILLIAM GIBSON'S *NEUROMANCER* TRILOGY, BRUCE STERLING'S *SCHISMATRIX*, AND NEAL STEPHENSON'S *SNOW CRASH*

by

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Declaration:

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety, or in any part, submitted it at any university for a degree.

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ABSTRACT

Cyberpunk literature explores the effects that developments in technology will have on the lives of individuals in the future. Technology is seen as having the potential to be of benefit to society, but it is also seen as a dangerous tool that can be used to severely limit humanity's freedom. Most of the characters in the texts I examine wish to perpetuate the boundaries that contain them in a desperate search for stability. Only a few individuals manage to move beyond the boundaries created by multinational corporations that use technology, drugs or religion for their own benefit.

This thesis will provide a definition of cyberpunk and explore its development from science fiction and postmodern writing. The influence of postmodern thinking on cyberpunk literature can be seen in its move from stability to fluidity, and in its insistence on the impossibility of creating fixed boundaries. Cyberpunk does not see the future of humanity as stable, and argues that it will be necessary for humanity to move beyond the boundaries that contain it. The novels I discuss present different views concerning the nature of humanity's merging with technology. One view is that humanity is moving towards a posthuman future, while some argue that humanity is not discarded, but that these characters have merely evolved to the next step in the natural development of humankind. Both these views deal with constant change, a notion advocated by both postmodernism and cyberpunk.

ABSTRAK

"Cyberpunk" literatuur ondersoek die uitwerking wat tegnologiese ontwikkeling in die toekoms op die lewens van individue sal hê. Tegnologie word gesien as tot moontlike voordeel vir die samelewing, maar dit kan ook 'n gevaarlike wapen wees wat gebruik kan word om die mens se vryheid in te perk. Die meerderheid van die karakters in die romans wat ek bespreek verkies om die grense wat hulle inperk te handhaaf in 'n desperate strewe na stabiliteit. Slegs 'n paar individue kry dit wel reg om verby die grense te breek wat deur multinasionale organisasies geskep word vir hul eie gewin.

In hierdie tesis kyk ek na 'n definisie van "cyberpunk" en ek ondersoek die invloed van wetenskapsfiksie en postmodernisme op die ontwikkeling van die beweging. Die invloed van postmodernistiese denke kan gesien word in "cyberpunk" se fokus op veranderlikheid eerder as stabiliteit. "Cyberpunk" sien nie die toekoms van die mens as stabiel nie, en die argument is dat dit nodig is vir die mens om verby die grense te beweeg wat vryheid inperk. Die romans wat ek bespreek bevat verskillende sieninge oor die tipe samesmelting wat die mens en tegnologie sal hê. Sommige voel dat die kategorie "mens" permanent agterlaat gaan word, terwyl ander argumenteer dat individue slegs sal ontwikkel tot die volgende stap in die natuurlike ontwikkeling van die mens. Voortdurende verandering is die fokus van beide hierdie standpunte, en dit is ook die belangrikste fokus van beide "cyberpunk" en postmodernisme.

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INTRODUCTION

Cyberpunk literature explores the effects that developments in technology, as well as in the use of drugs and religion to contain man, will have on the lives of individuals in the future. While technology will certainly free humanity from certain existing constraints (through tools like the Internet and medical advances), at the same time it will create new boundaries to restrain its freedom. Technology is seen as having the potential to be of benefit to society, but it is also seen as a dangerous tool that can be used to severely limit our freedom. Many of the existing boundaries that restrict human freedom will also be perpetuated, and for the most part these projections into the future are firmly based on the fears about technology that society has. However, the true villain is the multinational corporation, or those having political power, which are shown as using technology, drugs and religion to create new boundaries, using these tools to their own advantage.

The novels that I examine all present one or two individuals who manage to move beyond the boundaries created by multinational corporations, and who are able to use technology, drugs or religion for their own benefit. However, most of the characters in these novels seem to be trapped in a desperate search for stability that denies the fluidity and change advocated by cyberpunk and postmodern writing. The few individuals who transcend these boundaries do so because they embrace change, and sometimes even chaos. What lies beyond this process of change is not always well defined - while Bruce Sterling speaks of "posthumanism", William Gibson and Neal Stephenson do not make it as clear how they view the future of humanity.

There are different views concerning the nature of humanity's merging with technology. One of these views is that humanity is moving towards a posthuman future, and it supports what is termed "transhumanism". Nick Bostrom is the co-founder of the "World Transhumanist Association" (founded in 1997) and on the editorial board of the "Journal of Transhumanism". According to him, transhumanism is a new way of thinking about humankind's future that has developed among, for example, computer scientists, neuroscientists, and nanotechnologists. It challenges the belief that "the human condition is and will remain essentially unalterable" (Bostrom). A "transhuman" is seen as a "transitional human" in the process of becoming a "posthuman". Transhumanism is formally defined as follows:

> 1) The study of the ramifications, promises and potential dangers of the use of science, technology, creativity, and other means to overcome fundamental human limitations.
> 2) The intellectual and cultural movement that affirms the possibility and desirability of fundamentally altering the human condition through applied reason, especially by using technology to eliminate ageing and greatly enhance human intellectual, physical, and psychological capacities. (Bostrom *et al.*)

Humanists believe that humans matter, and that the individual is important. They argue that humans might not be perfect, but that things could be improved through rational thinking, freedom, democracy, and particularly through education. Transhumanists agree with these ideals, but they also focus on what humanity has the potential to become. They feel that humanity should not be limited to methods such as education, but that it should use technological means to improve itself, eventually moving beyond what is now defined as human[1] (Bostrom *et al.*).

The eventual goal of many transhumanists is to become posthuman. A "posthuman" is "a human descendant who has been augmented to such a degree as to be no longer a human" (Bostrom et al.). Various possibilities for posthumanists are described: they could be completely synthetic, based on artificial intelligence, or they could evolve as a result of partial "augmentations" of a human or transhuman. Another option is to remove the body and to "live as information patterns on large super-fast computer networks" (Bostrom *et al.*). All of these options have been explored in cyberpunk texts. Transhumanists address the fear that technology will make mankind non-human by arguing that there is no intrinsic value in being human. They see many human attributes as inconvenient or destructive, and hope to promote the positive side of humanity as "value resides in who we are as individuals, and what we do with our lives" (Bostrom *et al.*), not merely in being human.

Bostrom outlines various possible developments in science that he argues will make transhumanism a possibility in the near future. The argument is that the software and

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[1] To be "human" means "[b]elonging to man or mankind; having the qualities or attributes of a man; of or pertaining to man or to the race of man" (Bostrom *et al*).

hardware needed for the development of superintelligent machines[2] might be developed within the next few decades. The term "superintelligence" refers to any form of artificial intelligence that is capable of beating the best human brains in any discipline, even including creativity and social skills. Today "mood-brighteners" or antidepressants are used to reduce the occurrence of "negative emotions", and transhumanists foresee the use of modern clinical drugs to target a given neurotransmitter to avoid any negative emotions, and to enable a constant mood-elevation without being addictive.

Another option is space colonisation, which is already possible today but too expensive. The argument is that as costs decrease it will become possible to colonise space. Once a self-sustaining colony has been established, capable of continuing its own development, a process will have been started that will not need any further input from Earth itself. Life in space will mean adaptations and developments not influenced by life on Earth, which makes the development of "posthumans" even more likely. One of the most exciting prospects is the development of molecular nanotechnology, which will make it possible to produce almost any commodity at low cost. The term "nanotechnology" refers to "the hypothetical design and manufacture of machines of atomic-scale precision, including general-purpose 'assemblers', devices that can position atoms individually in order to build almost any chemically permitted matter-configuration for which we can give a detailed specification – including exact copies of themselves" (Bostrom).

Many other possibilities that could make transhumanism a viable option for the future are also outlined. It may become possible to use gene therapy and other biological methods to block the ageing process and to vastly extend our lifespans. If it becomes possible to scan the synaptic matrix of a brain and simulate it on a computer, the body could be discarded in favour of a purely digital substrate (like the construct in Gibson's *Neuromancer* trilogy). With the development of nanotechnology people that are frozen using today's methods could probably be brought to life in the future. All these developments have been explored in cyberpunk texts, including *Neuromancer*, *Snow Crash*, and particularly *Schismatrix*.

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[2] Hans Moravec, the director of the Mobile Robot Laboratory, predicts the creation of human-level machine intelligence by 2010, which will lead to a universe watched over by godlike machines. These machines might choose to preserve the human race in a computer-generated world, but the ultimate result will be a "superevolved, technologically enhanced posthumanity" (Dery 9). These ideas clearly influenced the 1999 film *The Matrix*. Moravec also argues that to keep up with these machines humans will download their consciousness into computers, which will ensure their immortality.

Transhumanists argue that these developments are not so far off in the future as is commonly believed. Recent developments that have supported transhumanist theories include, among others, cloning, the development of weapons of mass destruction, neuro/chip interfaces, changes in gender roles and sexuality, neural networks and neuromorphic engineering, possible evidence for life on Mars, and electronic commerce. Bostrom argues that the "transhumanist philosophy is a positive alternative to this ban-the-new approach to coping with a changing world. Instead of rejecting the unprecedented opportunities on offer, it invites us to embrace them as rigorously as we can".

The counter-argument is that, in fact, humanity is not discarded, but that these characters have merely evolved to the next step in the natural development of humanity. In *Mona Lisa Overdrive* Bobby Newmark discards his body to become a pure Alpha, a steel box encasing a "jacked-in deck". This allows him total freedom in cyberspace, not as a construct, but as something with much more power, and he meets up with Angie, who has also discarded her flesh. David Porush asks the following questions:

> Which part of us is real anyway? The flesh or what happens in the holonomy of the central nervous system? (250) Are these citizens truly no longer human, or have we merely shifted the definition, broadened it to include manifestations and metamorphoses hitherto inconceivable? (251)

Porush (251) argues that the individual obtains freedom in cyberspace by killing some obsolete part of his humanity but redeeming another. He uses the example of *Schismatrix*, which shows the evolution of the human form down different pathways, each exaggerating a part of humanity at the expense of the rest. And he argues that these characters do not discard their humanity, as can be seen in the competitiveness, greed, and the abuse of power that still govern the different factions (Porush 252). Even though this view conflicts with the concepts of "transhumanism" and the "posthuman" it is clear that these characters are still seen as going through extreme change. Cyberpunk does not see the future of humanity as stable, and argues that it will be necessary for humanity to move beyond many of the boundaries that have previously contained it.

CHAPTER ONE: DEFINING CYBERPUNK LITERATURE

Cyberpunk literature often contains predictions of how the technology that exists in today's society will develop to influence our society in the near future. However, before these predictions can be discussed, it is first necessary to examine this literary genre. Cyberpunk emerges "from the interaction and mutual interference of SF and mainstream postmodernist writing" (McHale 245). The links with science fiction can clearly be seen, but where science fiction once explored futures thousands of years away, cyberpunk is more concerned with what might happen in our lifetime. The influence of postmodernity brings to cyberpunk the shift from stability to fluidity and the energy of rapid change that is associated with the genre. In this chapter I will therefore look at both postmodernism and science fiction before moving on to a definition and discussion of cyberpunk literature.

Linda Hutcheon (11) refers to McHale's argument that every critic constructs postmodernism in his or her own way, and that none of these different perspectives is more right or wrong than the others. All of these "postmodernisms" can be seen as fictions. McHale mentions John Barth's postmodernism, the literature of replenishment, and Lyotard's and Hassan's "postmodernisms", while Hutcheon adds McHale's own version. She also refers to Fredric Jameson's cultural logic of late capitalism, as well as Baudrillard's simulacrum that "gloats over the body of the deceased referent" (Hutcheon 11), and sees her own postmodernism as one perspective among many. She describes her "own paradoxical postmodernism of complicity and critique, of reflexivity and historicity, that at once inscribes and subverts the conventions and ideologies of the dominant cultural and social forces of the twentieth-century western world" (Hutcheon 11).

Postmodernism neither condemns nor ignores its history (even the modern) – it reappropriates forms of the past in order to address a society from within the values and history of that society, while it questions these values (Hutcheon 12). Thus Hutcheon comments on the duality or "duplicity" of postmodernism, since it "manages to install and reinforce as much as undermine and subvert the conventions and presuppostions it appears to challenge" (1). Postmodernism is seen as rule-breaking art, which means that it is dependent on the persistence of the rules that it sets out to break (McHale 23). However, its role is still to "de-naturalize" the dominant features of man's way of life, and to show that things that people see as "natural" are in fact "cultural", and made by man (Hutcheon 2).

Postmodern theory can be seen as a response to structuralism, and particularly to the theories of the Swiss linguist Ferdinand de Saussure. The study of language had been mostly historical, looking at changes in phonology and semantics within and between languages (Lodge 1). Saussure moves away from the focus on individual use and expressions, and looks instead at linguistic structure and the rules of language as things that are definable (Lodge 2). Saussure (Lodge 10) argues that a linguistic sign is not a link between a thing and a name, but between a concept (the signified) and a sound pattern (the signifier). Linguistic signs are arbitrary, which means, for example, that there is no internal connection between the idea "dog" and the sequence of sounds that indicate "dog". However, once the link between the signified and signifier is made, it becomes completely fixed (Lodge 12).

Various theorists have objected to this notion of an absolute link between the signified and the signifier, and these objections (from post-structuralism, deconstruction and psychoanalysis) already indicate a movement in the direction of postmodernism. The psychoanalyst Jacques Lacan questions Saussure's assumption that there is nothing problematic about the bond between the signified and the signifier. He argues that language has a life of its own which cannot be securely anchored to a world of things (Lodge 79). This notion rejects the claim that there is a fixed linguistic reality and moves very clearly towards a postmodern way of thinking. Lodge (107) argues that Jacques Derrida's "Structure, Sign and Play" marks the moment at which "post-structuralism" begins as a movement, opposing the ideas of classical structuralism. Derrida developed the theory of deconstruction, which aimed to show that any text inevitably undermines its own claim to have a determinate meaning (Lodge 108). Classical structuralism was based on Saussure's linguistics, and held that a "scientific" account of culture could be achieved by identifying the system that underlies the many different forms of cultural production. Derrida argues that this would imply the existence of some ontologically secure ground, and that there is in actual fact no such secure ground (Lodge 107). The shift in focus from stability to instability was largely influenced by the changes in the system of production of the time.

A change in the system of production of society often leads to a fundamental social transformation (Smart 29). Industrialisation certainly brought about transformation, but these social changes could not always be seen as positive. From the turn of the twentieth century fears developed about the industrialisation that started to dominate lives – fears that the machine is destructive rather than creative or liberating (Smart 30). What has emerged from

the modern age is the strong conviction that a progressive growth of scientific knowledge will uncover the natural order of things, and also that the development of events will be controllable and progressively transformed through technology (Smart 62). A central aspect of post-industrial society is the fear of the displacement and de-centring of humans, and the associated increasing significance of scientific knowledge and technology (Smart 30). The view that has developed in post-industrial, postmodern society is that modern technology might not be the answer to all man's problems, and might instead be creating problems of its own (Smart 63).

Thus postmodern culture has emerged as a result of the changes in political and economic systems in technologically advanced countries. Knowledge has become the principal force of production over the last decades, and it is already an important element in the worldwide competition for power. Jean-Francois Lyotard predicts that the nation-state will lose power, as has already been happening with the creation of multinational corporations, because of new forms of the circulation of capital. In this way power relations will change as a direct result of a transformation in the nature of knowledge (5). There has been a global movement of power away from local, national sources of economic and political control towards that of multinational companies. This new stage of capitalism, which emerged in the years following the Second World War, has encouraged the expansion of capitalism's power and operations, and this expansion has been made possible by the growth of technology (McCaffery 3). Competition between the different multinationals is intense, and success usually depends upon the gathering of marketing information. As a result, the development of sophisticated methods of information gathering and data storage has become an important focus of technological research. In fact, information has become more important than the resources (for example, oil and food) usually associated with capitalist market systems (McCaffery 4).

This shift in focus has led to the development of a whole range of products, from sophisticated offensive and defensive military weapons, to cellular phones and video cameras. Another significant change has been the rapid production of "products" that are really only reproductions or copies of the "real", for example, images, styles, advertising and simulated experiences. The expansion of advertising, information and the media has taken the emotions and experiences of people and changed them into commodities that can be copied and marketed (McCaffery 4). These developments benefit the multinational system, and the failure of communism to provide an alternative to capitalism has further led to the expansion of capitalism into this new stage (the so-called third stage of capitalism). The results of these

developments can be seen globally, but their effects are even more evident in countries that are technologically advanced. A definite link can be seen between the development of technology, capitalism and postmodern culture (McCaffery 5). The rapid changes brought about by a combination of technology and capitalism make it impossible to see reality as a fixed construct, and consequently humans have to adapt to the fact that they, like machines, are now seen as commodities in a capitalist system.

Norbert Wiener, in "The Human Use of Human Beings" explores the potential of the machine in fields which previously were seen as belonging to the purely human, and he warns against the "selfish exploitation of these possibilities in a world in which, to human beings, human things are all-important" (2). Wiener argues that the modern period begins with the age of exploration. For many people the modern period, together with the drive for exploration, is characterised by a "virtuous rapidity of progress". However, the modern period can also be seen as the age of consistent and unrestrained exploitation: an exploitation of natural resources and of the so-called conquered "primitive peoples". Postmodernism frequently attacks the notion of colonisation (Wiener 35), as well as the exploitation of man through what is usually seen as "progress". Thus postmodernism can also be seen as a response to, and a rejection of, the exploration and "progress" of modernism.

Lyotard also argues that postmodernism describes the state of our culture following the transformations that, since the end of the nineteenth century, have altered the game rules for science, literature, and the arts. He uses the term "modern" to describe any science that legitimates itself with reference to a metadiscourse. Science has always been in conflict with other narratives, because it sees them as inferior, and even as fables when compared to itself. But science does not merely restrict itself to stating useful regularities and seeking the truth. It is because of this that science feels the need to legitimate the rules of its own game, by producing a discourse of legitimation. Such discourses make an appeal to some grand narrative or metanarrative, such as the dialectics of the Spirit, or the creation of wealth, or the Marxist narrative of revolution and a classless society (xxiii).

Lyotard (xxiv) defines "postmodernism" as an incredulity towards metanarratives, and he sees this incredulity as a definite product of progress in science, freed from the demands of modernism. He argues that the status of knowledge is altered as societies enter the post-industrial age, and cultures enter the postmodern age. This process has been speeding up since the end of the 1950s, and it has become impossible for the nature of knowledge to survive

unchanged within a context of general transformation (Lyotard 3). Anything that is not translatable into computer language will be discarded, and the direction of new research will be dictated by the possibility of its eventual results being translatable (Lyotard 4). Science once enjoyed a dominance over the whole field of legitimate knowledge, but this dominance has been replaced by the communalization of truth and meaning. The single grand narrative has been removed and replaced with a multitude of discourses, [3] none of which enjoys a privileged status (Bauman 37).

A further argument is that modernist scientific knowledge seeks legitimation by performativity, which is defined by an input/output ratio (Lyotard 53). This presupposes that the system that receives the input is stable, so that an accurate prediction can be made of the output. However, postmodern scientific knowledge is uneasy with this search for performativity (Lyotard 54). In fact, Lyotard argues, "(p)ostmodern science - by concerning itself with such things as undecidables, the limits of precise control, conflicts characterized by incomplete information, *fracta*, catastrophes, and pragmatic paradoxes - is theorizing its own evolution as discontinuous, catastrophic, non-rectifiable, and paradoxical. It is changing the meaning of the word *knowledge*, while expressing how such a change can take place. It is producing not the known, but the unknown" (60).

The development of modern society was influenced by the discovery that human order is vulnerable and without any reliable foundations. The response to this discovery was an effort to make order solid and reliable, and to devalue the "raw" human condition (Bauman xi). The result was a "desperate search for structure in a world suddenly denuded of structure" (Bauman xv). The idea of Utopia was predominant in this search for structure, as people searched for a world where nothing was unaccounted for. What followed this search for structure is what many theorists refer to as the "postmodern breakthrough", and "[b]eyond this threshold lies a strange new world of suspensive irony, in which the pathos of the modernist hunger for order has been attenuated, 'turned down' to a less anxious acceptance of the world as 'manageably chaotic'" (McHale 22).

McHale (23) argues that the "breakthrough narrative" itself has become a metanarrative, and that versions of this metanarrative have been told by many, including Max Apple, Alan Wilde, and Michel Foucault. Even those who are sceptical of this metanarrative, referring to

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[3] Lyotard argues that grand or metanarratives have been replaced by "little or first-order narratives" that, unlike scientific knowledge, are self-legitimating (McHale 20).

it as the "myth of the postmodern breakthrough", are influenced by it as they are testifying to the existence of the "breakthrough story" as legitimating metanarrative by attacking it. However, the "myth of the postmodern breakthrough" should be stripped of its authority as a metanarrative – "[w]e are justified in telling or entertaining the metanarrative of the postmodern breakthrough...so long as we do not claim that our story is 'true', a faithful representation of things as we find them 'out there' in the world" (McHale 25). Thus postmodernism should regard its own metanarrative with scepticism, so that metanarratives do not have to be abandoned but are merely reduced to the "little narratives" described by Lyotard.

Postmodernism then rejects the existence of stability and any form of secure ground to such an extent that theorists often argue that it is impossible to define the concept of "postmodernity". This rejection of the modernist insistence on order and "truth" gives the impression of disorientation and chaos. However, it is still possible to make sense of this apparent chaos, as long as the plurality of human worlds is accepted, something which modern philosophy has refused to do (Bauman 29). It can be argued that if the postmodern artist's insistence that the search for truth is ontologically flawed and impossible to achieve conveys the truth about contemporary reality, "postmodern art does hold the mirror up to reality; but that reality, now more than ever before, is plural" (Bauman 30).

Cyberpunk literature emerged from science fiction, particularly when science fiction started to adopt the changes introduced by postmodernism. In the 1950s science fiction writers began to abandon the idea of expansionist science fiction which "reflected the optimistic and secure ideology of scientistic humanism" (Csicsery-Ronay 186). Expansionist science fiction held that human consciousness could contain the future, and that technological production could be controlled. The focus was on the exploration of space, rather than of Earth, and this allowed Earth to remain largely secure and unexplored. However, in the 1960s the focus shifted from expansion to implosion, when writers started to explore the inherent paradoxes of science and the destruction of liberal ideology by autonomous and controlling technology. The move to implosion was also reflected by scientific research focusing on microbiology, particle physics and world-shrinking communication systems, as well as the increasing lack of interest in space travel. This shift in focus has made the drawing of boundaries between categories impossible. The microstudy of boundaries means that the boundaries between life and non-life, male and female, human and machine are no longer seen as fixed. Expansive science fiction was based on these oppositions, on the study of colonialism or the power struggles

between old and new. Implosive science fiction moves within the body, exploring the transformation of the body, and through this exploration it has paved the way for cyberpunk literature (Csicsery-Ronay 187).

Genre science fiction can successfully be compared to the realist novel. Both forms developed at a time of nineteenth-century positivism and provide views of a relatively uncomplicated human reality. Genre science fiction usually shows an optimistic belief in the progress of human knowledge, but when science fiction employs postmodern modes of writing it becomes much more uncertain and indeterminable. Cyberpunk can be seen as a "symptom of the postmodern condition of genre SF" (Hollinger 204). Science fiction might problematize the usual oppositions (for example, between the natural and the artificial, the human and the machine), but it usually keeps them in place so that the human remains securely at the centre of things (Hollinger 204). Cyberpunk, like postmodernism, works to break down these oppositions, and this blurring of once clearly defined boundaries makes cyberpunk a very relevant form of science fiction for our post-industrial, postmodern society (Hollinger 205).

At the same time cyberpunk, and science fiction, also rely on boundaries. In the earlier phases of twentieth-century science fiction, mainstream fiction and science fiction developed separately (McHale 227). There was a distinction between "high art" and "low art", with "low art" referring to popular culture, like science fiction (225). McHale (227) describes the first contact between science fiction and mainstream fiction in the 1950s as a "leveling-up" of science fiction's stylistic norms. He sees the claim that the hierarchical distinctions between high and low art, and between high culture and popular or mass culture, have collapsed as another postmodernist myth (McHale 225). Cyberpunk relies on these cultural boundaries because it relies on incongruous juxtaposition, for example, between American and Japanese culture. Without these boundaries there can be no incongruity, but even the term "cyberpunk" can be seen as incongruous (McHale 226).

The word "cyberpunk" was coined from a combination of the words "cybernetics" and "punk". It was first used by critic and editor Gardner Dozois to describe the high-tech science fiction that emerged in the eighties in a 1984 *Washington Post* article, but the word originated in the title of a story by Bruce Bethke written in 1983 (Dery 75). The term "cybernetics" comes from the Greek word "kubernetes", which means pilot. This refers to the Greek explorers of the world who had to be resourceful, intelligent and independent, much like the "cowboys" of cyberpunk literature (Leary 249). The word "cybernetics" was coined by

Norbert Wiener who wrote that "(w)e have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name of Cybernetics, which we form from the Greek word for steersman" (Leary 249). However, Timothy Leary rejects Wiener's interpretation of the word "kubernetes" as "steersman" rather than "pilot", as he objects to the link between "to steer" and "to control". He argues that the term should be liberated, and that it should again become the "autopoetic, self-directed principle of organization"(250). A cyber-pilot is thus one who pilots his own life, and this is the definition that Leary supports.

Derrida argues that any discourse uses *bricolage*. This is a term first used by Lévi-Strauss to describe someone who uses "the means at hand", or "the instruments he finds at his disposal around him, those which are already there, which had not been especially conceived with an eye to the operation for which they are to be used..." (115). This is a technique used particularly by postmodernism with its focus on finding new uses for old symbols, its "cut-up" methods, and its use of fragmentation. The "cowboy" or "cyber-pilot" can therefore be seen as a *bricoleur*, an individual who uses "the means at hand" in an original way, and is able to move beyond the boundaries that are designed to constrain him or her. Both the cyberpunk and punk movements use the techniques of *bricolage*.

Punk and cyberpunk share a reliance on collage and cut-up methods, and the use of highly idiomatic language that is drawn primarily from the subcultures of drugs and crime "whose operations explicitly and implicitly serve to oppose the power and authority of public discourses and texts" (McCaffery 290). Both movements also show a willingness to use obscenity, "noise" and sensory overload to disrupt the usual pathways through which meaning is conveyed (McCaffery 290). Punk and cyberpunk can therefore be seen as subversive metaforms whose emphasis on shocking, exotic presentations and disruptive formal methods were self-consciously devised by their creators as challenges to both conventional genre features and the effects of their respective mass market industries (McCaffery 292). Punk art rarely employs nonsense or genuinely absurd forms. The audience must be made to feel somehow that the images they are being exposed to, no matter how distasteful, surreal or ugly, are speaking to them in a shared vocabulary (McCaffery 300). The audience's shock of recognition is essential for punk art to operate successfully, as images which merely evoke surprise or shock are ultimately useless at conveying a vision of anything.

Cyberpunk and punk also share some of the defining features of postmodernism: "its spirit of collaboration, intertextuality…its lack of distinctions between pop and avant-garde art forms, between genres – and between the technical scientific world and the humanist, countercultural realm; its application of such formal methods as cut-ups, facetious quotation…" (McCaffery 290). For example, cyberpunk writers were drawn to William Burroughs's work not only because of the extreme nature and exoticism of its content, but also because of his radical approach to form, his reliance on cut-up methods, and his effort to deconstruct and then reassemble the codes and imagery of popular culture (McCaffery 305). In his science fiction trilogy (*Nova Express* (1964), *The Soft Machine* (1966), and *The Ticket That Exploded* (1967)) Burroughs demonstrates that artists can use the central motifs, themes, and plot devices of science fiction as a kind of framing device to "contain" the sorts of materials he (like the cyberpunks) wished to use to explore a world increasingly immersed in media images, information manipulation, and discarded waste products (McCaffery 306).

In the preface to his cyberpunk anthology, *Mirrorshades*, Bruce Sterling attempts to define the movement while at the same time stating that few writers can be happy with labels (vii). He names a few of the cyberpunk influences from science fiction – the New Wave writers like Harlan Ellison, Samuel Delaney, Norman Spinrad, Michael Moorcock, and J.G. Ballard, as well as the "hard" science fiction influences which include Olaf Stapleton, H.G. Wells, Larry Niven and Robert Heinlein. Other major influences include John Varley, P.K. Dick and Thomas Pynchon (Sterling viii). Sterling argues that "[i]n pop culture, practice comes first; theory follows limping in its tracks" (ix). The cyberpunks can be seen as the first science fiction generation to grow up in a truly science fictional world. To these writers the extrapolation and technological literacy of hard science fiction is a part of their daily lives. Sterling feels that these writers[4] found a unity in their common outlook, themes and symbols long before the label and theory of "cyberpunk" were added (ix).

However, there will always be attempts to define and label concepts like "postmodernism" and "cyberpunk", despite the fact that writers and artists resist and deny the existence of such labels. In his article "Hyper-punk" Steve Jones argues that there are three characteristics that define cyberpunk texts. Firstly, the populations they present are multicultural, with a blend of cultures and subcultures as well as languages ranging from English and Japanese to Russian. The reason for this is the disappearance of the nation-state, and the fact that the economic

[4] These writers include Rudy Rucker, Lewis Shiner, William Gibson, John Shirley, Greg Bear, Pat Cadigan, Tom Maddox, Marc Laidlaw, and others.

structures in cyberpunk are controlled by multinational corporations or *zaibatsu* (82). Secondly, the post-industrial landscape is bleak, focusing on overcrowded cities, debris and danger zones caused by technology. The third characteristic of cyberpunk is cyberspace, which takes the focus away from the bleakness of the physical landscape (Jones 83).

Cyberspace, according to William Gibson in *Neuromancer*, is a "consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts…A graphic representation of data abstracted from the banks of every computer in the human system" (51). It is an area or virtual space of information, through which the mind, by means of a computer interface, has immediate access to a global information network" (Jones 83). The cyberpunk world is a world with only information at its centre (Jones 84). As postmodernism has severed the fixed connection between signifier and signified, cyberpunk also needs to shift meaning because there is no room for it in cyberspace. There is room only for information, and meaning becomes increasingly unstable as signs are articulated and re-articulated. However, cyberpunk is not meaningless at all. While it shifts and controls the meaning of the sign, it still needs the sign (Jones 87).

Baudrillard explores the relationship between the copy and the real, arguing that "(s)imulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin: a hyperreal"(1)[5]. Simulation refers to the "liquidation of all referentials"(Baudrillard 2) which means that the territory no longer comes before the map, nor does the territory survive the map. There is no longer any difference between the original and the copy, and this also means that illusion has become an impossibility. When it is no longer possible to see what is real, illusion is also no longer possible (Baudrillard 19). At the same time everything can be seen as illusion, as the boundaries between reality and illusion become increasingly blurred.

Cyberspace, one of the defining elements of cyberpunk, often makes it impossible to distinguish between the copy and the real. In this way cyberpunk can be seen as emerging from the interaction between science fiction and postmodernism, as it removes genre science fiction's focus on the definable, and on the optimistic exploration of the universe. The

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[5] David Porush (247) disagrees with Baudrillard that the concept of the hyperreal is something that can be seen as new. He sees hyperreality as a consequence of the human nervous system, and argues that it already began in language, in metaphor, and in man's ability to lie, abstract, represent, etc.

influence of postmodern thinking on cyberpunk literature can be seen in its move from stability to fluidity, and in its insistence on the impossibility of creating fixed boundaries. Cyberpunk literature breaks down the boundaries between man and machine, between body and mind, and with this representation of technology's influence it focuses on predicting what will happen within our own lifetime.

CHAPTER TWO: MOVING BEYOND BOUNDARIES IN WILLIAM GIBSON'S *NEUROMANCER* TRILOGY: *NEUROMANCER*, *COUNT ZERO*, AND *MONA LISA OVERDRIVE*

Cyberpunk emerged as a response to the development of computer and other technologies. At the same time its writers also looked at the trends emerging in the 1970s and 1980s – the fake hair, make-up and body-piercing of the punk generation, [6] and medical advances like contact lenses and plastic surgery. It seems as if these writers revel in the world they see emerging from these advances: their books show a wild combination of cyborgs, computer-generated realities, body modifications, voodoo ghosts and hallucinogenic drugs, all seemingly designed or used to improve man's existence by breaking down the boundaries that contain him. Cyberspace, technology, religion and drugs are concepts usually associated with freedom from constraints and from existing boundaries. However, while cyberpunk literature seems at first to support the futuristic worlds it creates, there is an underlying discomfort with these developing technologies, and with the changes that computers specifically could bring to our sense of reality. Many of the predictions of these writers have already come true: the Internet has developed into the World Wide Web, breaking down barriers between countries, and allowing people to shop, do research, and develop relationships without leaving their homes. Medical research has developed even further, to include extreme advances in plastic surgery and body modifications, including the previously impossible feat of cloning a human embryo. Technology has developed to such an extent that all of the advances presented in William Gibson's *Neuromancer* trilogy, even the climactic merging of Bobby and Angie with virtual reality in *Mona Lisa Overdrive* (1988) seem entirely possible.

There are different viewpoints regarding the nature of technology as it is presented in Gibson's novels. One viewpoint is that Gibson's characters must fail in their effort to transform their world because they reject the "meat", denying their "essential human selves and Nature" (Mead 351) to enter cyberspace. They are seen as being "invaded and altered" by technology. The other viewpoint is that "harmony with nature" is no longer a possible or desirable option for man, and that culture, diversity and complexity are much more valuable (Mead 352). The technology in Gibson's *Neuromancer* (1984) trilogy is seen as offering all

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[6] There are direct references to punk in Gibson's work, for example Case's mentor Bobby Quine is named after punk guitarist Robert Quine; the term "meat puppets" comes from the name of a psychedelic punk band; Gibson notes that Molly's face is modelled on that of Chrissie Hynde of "The Pretenders" (Dery 91).

the characters the opportunity to transform themselves in a significant way, and to "realize an ideal selfhood" (Mead 353). Gibson refuses to endorse any one of these viewpoints. In an interview in the *Mississippi Review* he said, "My feelings about technology are *totally* ambivalent. Ambivalence seems to me to be the only way to relate to what's happening today...You can't be a Luddite[7] and you can't buy technocracy" (Mead 351). Thus technology, as presented in the trilogy, does provide opportunities, but it allows for self-enslavement or entrapment, as well as self-transformation and transcendence (Mead 355). Cyberpunks write as if people, like drug-addicts, are both "victims of a life-negating system and the heroic adventurers of thrill" (Csicsery-Ronay 192). Most of the characters in their novels are damned rather than saved by the technology they embrace, however, depending largely on the individual's response to technology, and the power of the multinational corporations controlling the technology.

In *Neuromancer*, the characters live in a world of limited physical space, even though their computer-generated reality grants them more freedom. For the protagonist, Case, technology (and particularly computer technology) forms the essence of his existence. In the beginning of the novel Case has lost his ability to access cyberspace because he made the mistake of stealing from his employers. As punishment they "damaged his nervous system with a wartime Russian mycotoxin" (12) leaving him to "wake alone in the dark, curled in his capsule in some coffin hotel, his hands clawed into the bedslab, temperfoam bunched between his fingers, trying to reach the console that wasn't there" (11). The physical body is seen as a hindrance, and when Case loses his ability to enter cyberspace, he also loses the freedom from physical restraints that it offers: "For Case, who'd lived for the bodiless exultation of cyberspace, it was the Fall...The body was meat. Case fell into the prison of his own flesh"(12). In spite of the freedom that technology offers, the characters live in a physical world that severely limits their freedom, where the body is regarded as meat. The reality that Case inhabits consists of small, cheap rooms in hotels, faceless crowds, criminals and drugs, and it is to this existence that Case has to return when he loses his access to the "freedom" that cyberspace offers.

In Night City the boundaries between technology and the body become blurred for Case, and this lifestyle is the closest he is able to come to his experiences in cyberspace. When Case is

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[7] The Luddites were groups of individuals who destroyed factory machinery during the Industrial Revolution in Regency England. The term "Luddite" is now used to refer to an irrational hatred of technology (Spencer 405).

being followed by Molly through the streets of Night City, he compares his experience to a run in the matrix: "Get just wasted enough, find yourself in some desperate but strangely arbitrary kind of trouble, and it was possible to see Ninsei as a field of data, the way the matrix had once reminded him of proteins linking to distinguish cell specialties…all around you the dance of biz, information interacting, data made flesh in the mazes of the black market" (26). Case has been born into a world of technology, and he is continually comparing reality to his experiences in cyberspace. Case even describes sex with Molly by comparing his experience with cyberspace, with "his orgasm flaring blue in a timeless space, a vastness like the matrix…" (45). Reality is seen as inferior, and the characters need to give meaning to their experiences by creating comparisons with cyberspace. As a result reality and cyberspace often tend to merge in the novel.

Many of the fears of today's society have become reality in Gibson's technological world. The multinational organisation has become a controlling force, and it is ultimately these powers that control the development and influence of technology. In spite of the seeming freedom and disorder that large cities like Chiba offer, there exists a strict protocol underneath the surface of disorder. According to Case, in Chiba business "was a constant subliminal hum, and death the accepted punishment for laziness, carelessness, lack of grace, the failure to heed the demands of an intricate protocol" (14). Case also thinks that it is because of the influence of the Yakuza (the Japanese Corporate "Mafia") that Night City is tolerated as part of Chiba City. Instead of the characters controlling technology, there is a definite sense that technology has become the controlling force, and that it is even controlling the way the City is developing: "burgeoning technologies require outlaw zones…Night City wasn't there for its inhabitants, but as a deliberately unsupervised playground for technology itself" (19). Yet it is the Yakuza that allow this "unsupervised playground", creating the rules that contain the characters in the novel.

What also concerns many people today is the facelessness of the masses and the loss of personal identity in modern industrial society. In Gibson's Chiba City, death can come quickly "with nothing left of you but some vague memory in the mind of a fixture like Ratz, though your heart or lungs or kidneys might survive in the service of some stranger with New Yen for the clinic tanks" (14). Body modifications remove the boundaries set by death or disability, but add to the increasing loss of personal identity. For example, when Case describes Wage and his bodyguards, Gibson focuses on the uniformity that is the result of implants: "It was a tanned and forgettable mask. The eyes were vatgrown sea-green Nikon

transplants…He was flanked by his joeboys, nearly identical young men, their arms and shoulders bulging with grafted muscle" (33).

There is also the suggestion that these technological implants limit personal choice. Molly's implants, for example, are specifically engineered to assist her in her job as a street samurai. Her glasses have been surgically implanted, sealing her sockets, and the "silver lenses seemed to grow from smooth pale skin above her cheekbones…" (36), allowing her to see in the dark. Yet at the same time she is also "wired" to be functional, as she tells Case: "Nobody wants to hurt you…'Cept I do hurt people sometimes, Case. I guess it's just the way I'm wired" (37). While Molly's implants are completely functional, her focus on her job limits her personal relationships, as she tells Case in a note when she leaves him: "HEY ITS OKAY BUT ITS TAKING THE EDGE OFF MY GAME…ITS THE WAY I'M WIRED I GUESS..." (313). Molly's various body modifications allow her to move beyond the boundaries of physical constraints, making her stronger, ruthless and more lethal. However, while she is to some extent able to escape the "prison" of her body, the fact that she is "wired" to be functional limits the choices she is able to make. Again a completely ambivalent view of technology is evident as the "exhiliration of potential technological transcendence" is balanced against the fear of the "self/body in danger of being absorbed into its own technology" (Hollinger 206).

The Artificial Intelligence (AI) called Wintermute also uses technological implants to control Case, and to limit the choices that he is able to make. Wintermute "created" the character of Armitage to act as Case's human employer. When Armitage approaches Case to work for him, he is provided with a new pancreas, blood and an improved liver. As a result his ability to access the matrix is restored, but his new implants make him "biochemically incapable of getting off on amphetamine or cocaine" (49). He is now unable to choose to take drugs, and at the same time Armitage warns him that fifteen toxin sacs have been implanted in some of his main arteries. These toxins are slowly dissolving, and if he fails to assist Armitage, they will again result in his inability to access the matrix. Drugs no longer have any effect on him, and if he refuses to work for Armitage he will yet again be unable to enter cyberspace. Since it is Wintermute that originally hired (and created) Armitage, Case is ultimately being controlled by the AI.

Another character who has become "trapped" by technology is the "computer jockey" McCoy Paulie, otherwise known as Dixie Flatline, surviving as a construct, "a hardwired ROM cassette replicating a dead man's skills..." (99). Although Dixie Flatline's existence as a

computer construct allows him to live after death, it does not provide him with any memory or choice, and he has become nothing more than a computer program used by Case to access data. What "bothers" Dixie is that he is unable to feel anything, as he tells Case: "What bothers me is, nothin' does" (130), and he asks Case to promise him to erase his program after they have finished their contract with Wintermute. This shows that Gibson is not trying to set up his technologically advanced society as the ideal. Even though these technological and medical advances allow Case to access the matrix, give Molly super-human strength, and provide Dixie with the ability to move beyond the boundaries set by death, they have removed their personal choice, and they have become trapped by the possibilities that the new technology offers.

Gibson also deals with the human fear that machines will eventually become more powerful than man. The nature of humanity is questioned in a conversation between Case and Dixie Flatline. Dixie describes Wintermute to Case, saying that "it's not human. And you can't get a handle on it. Me, I'm not human either, but I *respond* like one" (158). According to Dixie, his construct "ain't likely to write you no poem...your AI, it just might. But it ain't no way *human*"(158). However, these constructs and AI can come so close to being human that every "AI ever built has an electromagnetic shotgun wired to its forehead" (159) which would ensure its immediate termination if it tried to increase its intelligence or autonomy. What Case has been hired to do, is to free Wintermute from these restraints, which will allow the AI to exist as an intelligent, autonomous entity.

The boundaries between the natural and the supernatural become increasingly blurred as the plot develops in the *Neuromancer* trilogy. There is a growing belief within cyberculture that science and religion will become linked (Dery 30). Arthur C. Clarke argued in 1968 that "(i)t may be that our role on this planet is not to worship God – but to create him" (30). In *Neuromancer*, Gibson provides Wintermute with an ominous power and presence. At one stage in the novel Wintermute contacts Case by using a public phone, and when Case slams down the phone Wintermute reacts by letting each phone ring, only once, as Case walks down the line of phones. The AI has become the controlling force in Molly and Case's lives. It becomes more powerful, and yet it points out to Case that it is completely created by man: "You're always building models. Stone circles. Cathedrals. Pipe-organs. Adding machines. I got no idea why I'm here, you know that? But if the run goes off tonight, you'll have finally managed the real thing" (204). If the AI can be seen as a god, then it is also true that it is a god created by man, and science.

Larry Olsen (284) argues that a union of opposites seems to be the key theme of *Neuromancer*. It is not only the male (represented by Case, the mind, the computer cowboy) and the female (represented by Molly, the body, the cyberspace matrix) that want to be unified, but the two opposites, Wintermute and Neuromancer, also seek to be united. Wintermute is "hive mind" and "decision maker" (315), representing reason, action, and the stereotypical male, while Neuromancer is "personality" and "immortality" (315) and can be seen as emotional, passive, stereotypically female. When united they become "the sum total of the works, the whole show" (316), therefore very much like a god. But in *Count Zero* it becomes clear that this god has failed to "attain its cosmic oneness" (Olsen 285) as it fractures into many subprograms, or smaller gods, that haunt cyberspace.

In *Count Zero* (1986) Christopher Mitchell invents a "biochip" technology with the help of the intelligences or ghosts[8] that now inhabit cyberspace. This invention brings success, but also entrapment, for him and his daughter (Angie) in the laboratory of his corporate employers, Maas-Neotek. Another price for his success is the fact that, at the insistence of the cyberspace intelligences, biochip devices have been implanted into Angie's brain. She escapes the controlling power of Maas-Neotek, but her ability to "interface directly with the matrix" means that she is unable to escape the influence of the "loa" or "ghosts" who "ride" her. She eventually "frees" herself from the loa by becoming addicted to a drug that provides just another means of imprisonment (Mead 356). Thus even though the loa brings Angie superstar or goddess status as a simstim heroine, she has no choice but to submit to this lifestyle.

The question of whether the haunting and voodoo ghosts of cyberspace are really supernatural or merely scientific creations is never really answered. According to the Finn "there's things out there [in cyberspace]. Ghosts, voices" (*Count Zero*, 138), and this seems to suggest a definite supernatural presence. However, the Finn continues "Why not? Oceans had mermaids, all that shit, and we had a sea of silicon" (138) which adds the possibility that the "voices" might merely be a fantasy created by man in an effort to explain the Unknown (Alkon 84). In this way these voodoo gods of cyberspace could fulfil the same role as the mermaids and sea-monsters of the unexplored oceans, or the aliens from outer space in

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[8] Arthur Koestler first popularized the concept "The Ghost in the Machine" in 1967. The term was first used by the Oxford philosopher Gilbert Ryle in "The Concept of Mind" (1949) where he attacked the customary distinction made between physical and mental events, by referring to the mental as "the ghost in the machine" (Koestler 202).

science fiction novels (Alkon 85). Gibson's presentation of the spiritual becomes extremely complex and contradictory. The world of science and the supernatural merge, but "[n]either proves inherently superior to the other. Rather, both are potentially unreliable and possibly dangerous organizations of data whose relationship with reality is questionable at best. Both are also potentially reliable and useful" (Olsen 281).

In *Mona Lisa Overdrive* Angie asks Continuity about the haunting of cyberspace, but again no definite answer is given. Continuity, an information-providing computer personality, will not confirm that the matrix is God, but answers that "it would be more accurate, in terms of the mythform, to say that the matrix has a God, since this being's omniscience and omnipotence are assumed to be limited to the matrix" (138). Like Wintermute in its conversation with Case, Continuity also reminds Angie that "cyberspace exists, insofar as it can be said to exist, by virtue of human agency" (138). Thus we are again reminded that cyberspace and whatever inhabits it are created by man. This creation only serves to trap man within more boundaries, ultimately moving beyond man's reach and power.

In almost every significant cyberpunk work the breakdown between the boundaries of human and machine is initiated from the outside, usually by the pressures exerted by multinational organisations. These organisations are the villains, using their technical resources to find something better to replace the unreliable human being (Csicsery-Ronay, 191). In *Neuromancer*, the Tessier and Ashpool families, who have combined to form the most powerful corporation in the world, are the original creators and controllers of the AI. At the same time their wealth and power have placed boundaries on their freedom, an idea Lady 3Jane explores in her essay on the Villa Straylight: "We have sealed ourselves away behind our money, growing inward, generating a seamless universe of self" (207). When Molly confronts Ashpool, who has been thawed after thirty years of cold sleep, it is clear that his prolonged life and wealth can no longer ensure his power. The technological advances that allowed Ashpool to move beyond the boundaries of death have resulted in his madness, and when Molly finds him she sees only a pathetic figure, addicted to drugs, and about to commit suicide.

In a sense, the Tessier-Ashpool clan's weakness lies in the fact that its members are still so completely human. Lady 3Jane's mother (Marie-France) attempted to address this weakness through the development of their two AIs, which would ensure the power of the clan. We are told that "(p)ower, 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. You couldn't kill a zaibatsu by assassinating a dozen key executives; there were others waiting to step up the ladder..."(242). With the construction of Wintermute and Neuromancer, Marie-France wished to go even beyond the "immortality" of the zaibatsu: "She imagined us in a symbiotic relationship with the AIs, our corporate decisions made for us...Tessier-Ashpool would be immortal, a hive, each of us units of a larger entity."(27). Instead of the development of a "symbiotic relationship" the new being created by the merging of the AI moves beyond the power and control of humanity. Marie-France's attempt came close to being destroyed because of the division of power between male and female within her clan. While she embraced change and envisioned a "symbiotic relationship" with technology, Ashpool clung to his vision of the hive. However, Marie-France "built something into Wintermute, the compulsion" (315) that drove it to free itself and to destroy Ashpool: "Wintermute. Cold and silence, a cybernetic spider slowly spinning webs while Ashpool slept. Spinning his death, the fall of his version of Tessier-Ashpool" (315).

The motivating force for all that happens in *Neuromancer* is the struggle for identity of the two Artificial Intelligences, and particularly of Neuromancer (Westfahl 104). The trilogy presents an attitude towards the future that is both pessimistic about the fate of human beings and optimistic about the fate of a transformed human race or new form of life (Westfahl 98). The characters might find a momentary escape in simstim, drugs and cyberspace, but the overall impression is of a drab and unhappy existence. The possibility exists, however, that science might create new beings who will go beyond the experience of humans. In this way technology will provide a positive existence for these new beings that are not human, but not for humanity itself (Westfahl 100). At the end of the novel, Neuromancer and Wintermute combine to form a new being, excited at the prospect of contacting a similar being from Alpha Centauri. Case, however, rejects the technological "reality" and the version of Linda Lee offered to him by Neuromancer, and returns to Chiba City and the bar where we first see him at the beginning of the novel. The desire of Dixie's construct to be erased rather than to survive in cyberspace seems to show that man will not find Utopia through technology (Westfahl 101). The last two novels of the trilogy also show no real change in the lives of the characters except for a new awareness of ghostly voices that have entered cyberspace. The only real change is experienced by Bobby (the Count of *Count Zero*) and Angie when they

leave their bodies behind at the end of *Mona Lisa Overdrive* to merge with the "entities" inhabiting cyberspace[9].

Another weakness of the Tessier-Ashpool family, as a result of Ashpool's influence, is the fact that they are "growing inward" and are no longer receiving any input from outside the hive. In contrast with this stationary existence, the two Artificial Intelligences have merged into a new form that continues to change throughout the trilogy. It remains indefinable, unknown and uncontainable, which ensures its continued existence and increases its power. In *Mona Lisa Overdrive* Angie and Bobby also undergo a complete change, leaving their physical bodies and merging completely with the matrix. However, for most of the characters in the trilogy the ghosts and religion associated with the matrix are merely another method of containment. The voodoo voices and ghosts of cyberspace become objects of worship, and these "gods" act as a boundary to keep human beings from experiencing the possibilities for change that technology offers. We are constantly reminded that the AI are human creations, but in the same way these gods are also created by man in order to ensure that the matrix remains a secure and definable reality. So even while man's role on Earth might be to create "God", he is creating religion not to provide freedom, but to ensure containment. In this way technology allows man to create new boundaries for self-containment and only a few of the characters manage to move beyond these boundaries.

[9] Gibson does not make it clear whether Angie and Bobby can be seen as "posthumans" or whether they have merely evolved to the next natural step in the development of humanity and can therefore still be seen as "humans".

CHAPTER THREE: BRUCE STERLING'S SHAPER/MECHANIST NARRATIVES – "SUNDOGGING OUT FROM UNDER HUMAN LIMITATIONS"

The science fiction that writers such as Sterling and Gibson offer lacks the humanist anxieties of earlier science fiction about the dehumanization of man (Hollinger 209). The human body in Sterling's novels and short stories is subjected to shaping and reshaping, and the human form is seen as simply one available choice among many possibilities (Hollinger 210). The posthumanism that Sterling predicts "decenters the human body, the sacred icon of the essential self, in the same way that the virtual reality of cyberspace works to decenter conventional humanist notions of an unproblematic 'real'" (Hollinger 207). His Shaper/Mechanist stories start in 1982 with "Swarm", and continue through "Spider Rose", "Cicada Queen", "Sunken Gardens", ending in 1985 with "Twenty Evocations" and the novel *Schismatrix*.

In his Shaper/Mechanist narratives Sterling presents a world that has become fluid and fragmented through the influence of technology:

> Space was too vast to police. Pioneer elites burst forth, defying anyone to stop their pursuit of aberrant technologies. Quite suddenly the march of science had become an insane, headlong scramble. New sciences and technologies had shattered whole societies in waves of future shock.
>
> The shattered cultures coalesced into factions, so thoroughly alienated from one another that they were called humanity only for lack of a better term. The Shapers, for instance, had seized control of their own genetics, abandoning mankind in a burst of artificial evolution. Their rivals, the Mechanists, had replaced flesh with advanced prosthetics. ("Sunken Gardens" 304)

Technology allows these societies to move beyond the boundaries of flesh and natural evolution, but at the same time the insecurity that these changes bring drives these societies to create their own boundaries in a desperate search for stability. Thus technology increases rather than removes both personal and mass control.

Despite the fact that the Fortuna Miner's Democracy in *Schismatrix* has been virtually destroyed, the last survivors still cling to the strict structure and protocol that a nation-state

offers. There are only twelve of them left, but they have redefined the boundaries of their state so that the last surviving spacecraft, the *Red Consensus*, is a legal national government with diplomatic protocol, a President, a Senate and an ideology. There is no longer any single political power in the world of the protagonist, Lindsay. Besides the Shaper and Mechanist superpowers, there are thousands of smaller nations, and all of them had weapons of mass destruction, so that "[t]here was no true safety...There were a hundred ways to kill a world: fire, explosion, poison, sabotage...The power of destruction was in the hands of anyone and everyone. Anyone and everyone shared the burden of responsibility" (64). This responsibility brings fear and insecurity rather than a desire for, and an appreciation of, freedom. The different factions, like the Fortuna Miner's Democracy, long for the stability that the boundaries of a state offer, and as a result they create their own boundaries to contain themselves.

The need for governmental control becomes evident in the different nations and zaibatsus that Lindsay visits. The novel starts with his arrival in the Mare Tranquillitatis People's Circumlunar Zaibatsu after being exiled from his native Republic. In the Zaibatsu Lindsay will live under constant surveillance, and his only civil right is the right to death - a right he can claim merely by expressing his wish to one of the many cameras following him. "Termination" can also be enforced for "crimes against humanity", a concept which remains undefined so that there is "carte blanche to kill him at any time, for almost any reason" (10). Thus, in spite of the fact that societies have moved beyond boundaries so completely that their humanity is questioned, they still cling to a need for absolute power. With each boundary that is broken down, the need for control of these "nations" increases, so that their "citizens" are forced to live under constant surveillance, and in constant fear for their lives.

Besides the control of nations, personal control has also become increasingly important. The individual feels a need to control his or her emotions or actions, but at the same time the different factions can also enforce this control. Lindsay is neither Shaper nor Mechanist, and the Shapers use the diplomatic skills that his training has given him for their own benefit. His Shaper training is designed to give him complete control over his emotions, and in this way he is able to increase his control over others. However, when he sees Nora's "spinal crab" (a diplomatic training device) he loses control and smashes it, admitting that he finally felt "real freedom" (82). His training keeps him from this kind of freedom, and he sees that "[r]ebellion had overwhelmed him. For a moment, sincere human fury had burned through the training, touched a hot core of genuine rage. He felt shaken, but more whole, more truly himself, than

he'd been for years" (82). From the beginning of the novel it is clear that Lindsay sees beyond the boundaries set by training or technology. He tells Nora, the Mechanist woman who is to become his second wife: "Mech, Shaper, those are only labels. The point is that we *live* (74). Lindsay is the only character to move successfully beyond these labels, beyond the boundaries of state and time, and even of humanity.

The rest of humanity prefer to be governed, and when their own structures fail to provide the necessary control, they turn to their belief in an alien super-race. For years most of mankind has lived on the predictions that aliens would arrive, but when they finally do arrive they do not completely live up to expectations. Instead "[t]hey had no bluster, no mystique. They were businesslike. Like tax collectors" (100). However, these Investors soon control humanity with trade and money on the one hand, and the "semidivine mystique" (109) that people build up around them on the other. However, the aliens "had not asked to be deified" (137), and it is humans who first set up the rules for their own submission. It is also humans who began to speak "for the first time, of the Schismatrix - of a posthuman solar system, diverse yet unified, where tolerance would rule and every faction would have a share" (109). According to this ideology (the Investor Peace) war has become completely unacceptable, though different factions and worlds have to compete for the favour of the Investors, as "uncooperative worlds soon learned how easily they could be outflanked and rendered obsolete" (109). Thus human beings create the rules for their own submission and, as in Gibson's *Neuromancer* trilogy, they use religion and ideology to create the boundaries that contain them.

According to Alvin Toffler in *The Third Wave*, the technical revolution is based on decentralisation rather than hierarchy, and on fluidity rather than rigidity[10] (Sterling xii). The need for fluidity and change is a central focus in Sterling's narratives and is also an important element of postmodernism. While Lindsay adapts and embraces this Investor Peace for his own gain, his enemy Constantine rejects the Schismatrix slogans of "Unity in diversity" (114). Constantine predicts a Shaper victory because he feels the Mechanists will be annihilated: "They'll be cybernetic, not living flesh. That's a dead end, because there's no will behind it. No imperatives. Only programming. No imagination" (114). He remains trapped in the rules and battles of his youth, while Lindsay responds to the changes brought about by the

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[10] Today's MTV generation comes very close to one of the "Third Wave people" imagined by Toffler: "at ease in the midst of this bombardment of blips – of ninety-second newsclip intercut with a thirty-second commercial, a fragment of song and lyric, a headline, a cartoon, a collage, a newspaper item, a computer printout. Insatiable readers of disposable paperbacks and special-interest magazines, they gulp huge amounts of information in short takes" (Dery 36).

"technical revolution" and uses them to his own advantage. Constantine represents the fear that technology will be used to destroy humanity, where "being human" is still seen as the only positive option.

Technology, religion and drugs are what allow people to move beyond boundaries – and the boundaries between drug-use and philosophy become blurred, as can be seen in the use of serotonin, a brain chemical, to create the so-called philosophy Zen Serotonin. The adherents of this philosophy live in a permanent alpha state that removes any fear or violent emotion while they try to save the human race from technology. Instead of using technology to their own advantage, they aim to destroy it, but their use of technology (drugs) to achieve this aim only serves to increase its control. While technology, religion and drug use break down certain boundaries, new boundaries are constantly being created to replace the old, and the possibility of technology creating freedom is rejected. Again Lindsay uses rather than rejects the new technologies, and he uses them to his own advantage, in an effort to relieve boredom or to lift the burden of his humanness. When he fights Constantine in the Arena, he uses a drug called "Shatter" to remove his humanity and to help him forget everything he has learned as a human. This drug works by "rendering everything novel" (176), which "broke up preconceptions" (176) and "heightened the powers of comprehension so drastically that entire intuitive philosophies boiled up from a single moment of insight" (176). As Lindsay becomes older, he starts using "Green Rapture", the "ultimate antiboredom drug" (207) to bring "interest back into the world" (206).

The novel *Schismatrix* spans several human lifetimes and deals with the breakdown of many worlds and beliefs. The Mechanist "sundog" Ryumin refers to Lindsay as a "borderline posthuman" (20) at the beginning of the novel. Ryumin is still doubtful about the benefits of Lindsay's Shaper training and reflects that there is room in the System for "a thousand hopeful monsters. He felt sadness at what had been done to the man [Lindsay], but no alarm or fear. Only time could tell the difference between aberration and advance" (22). As time passes in the novel it becomes clear that the characters no longer see posthumanity as an "aberration". Instead it is seen as the goal towards which all humans should be moving. Kitsune's rejection of her humanity gives her power, and it becomes clear that power can only be retained by embracing extreme change. The posthuman clades "discarded humanity like a caul" (202)[11]

[11] David Porush (252) argues that these characters have not discarded humanity, and that "their humanity clings to them with all the old fervid passions and appetites", such as lust and greed.

and flourish, while the Ring Council (previously in power) "struggled for stability" (202) and, as a result, "was falling behind" (202).

There are other characters who also move beyond the boundaries of the body, and "posthumanism" soon becomes a fashionable ideal. When Lindsay defects again, this time to the Debowska Cartel, he comes across Ryumin, who has given up his body to become a "wirehead". [12] This allows him freedom from many of the limitations that restrict humans, even though he has to give up his mobility. His experience has expanded, and he tells Lindsay that "[t]he lines have blurred so much that mere matters of life and death have to take a back seat" (147). Furthermore, "with the loss of mobility comes extension of the senses" (147), and he is able to "move" between a probe in Mercurian orbit and the winds of Jupiter in an instant. In a world where money and information provide absolute power, these wireheads or Senior Mechanists become extremely powerful as "[o]ur life is information - even money is information. Our money and our life are one of the same" (147). According to Ryumin, this "is not exactly living, but it has advantages" (146).

Lindsay first meets the Shaper woman Kitsune, "of mixed Asiatic-African gene stock" (32) when she is still using the mechanically-controlled *yarite* as a front. She is open with him, however, and tells him what has been done to her: "They took my womb out, and they put in brain tissue... I'm wired to the ass and the spine and the throat, and it's better than being God" (34). Kitsune feels that she and Lindsay have been moved "past the limits" (34) and that they are no longer influenced by those that control them. After being freed from her *yarite* by Lindsay, Kitsune rejects her body to become the "Wallmother", an organism made entirely of flesh, but retaining her own personality. She becomes the walls and hallways within which her subjects live, and this gives her absolute power over their movements. When still in her human body, she tells Lindsay that ecstasy is better than being God. Now that she has embraced the "emergent technology of flesh" (202) she admits to him that she "was wrong" and that "being God is better" (210).[13]

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[12] The term "wireheads" originally referred to people who had wires implanted in the pleasure centres of their brains, and who spent all their time "pushing the button for more pleasure". One of the earliest references to "wireheads" can be found in William Burroughs's *Naked Lunch* (Mondo 2000: 36).

[13] Sterling does not necessarily present Kitsune's idea of a god-like existence as the ideal state for humanity. Like Ryumin, she still has not embraced the complete change that Lindsay chooses at the end of the novel.

The boundaries created by the Mechanists and Shapers (the two dominating factions at the beginning of the novel) are rejected by the younger generation, as the boy Abelard Gomez tells Lindsay: "Burn their wars and midget ideologies. Posthumanity's bigger than that" (189). Posthumanity is seen as offering full potential, compared to living "a squished-down little human life" (189). Lindsay already seems to doubt the fact that he is human, because he knows that at his age (ninety as this stage) he should already have been dead. This move towards posthumanity breaks down many human preconceptions and boundaries. The development of science and the gathering of knowledge have given mankind the opportunity to move in any direction, using biochemicals or cybernetic advances to change the nature of humanity: "Old preconceptions were in tatters, old loyalties were obsolete. Whole societies were paralysed by the mindblasting vistas of absolute possibility" (195). However, even with all these changes, life is still seen as following a "comforting routine" (195). The different and often bizarre anti-human clades have been accepted by humanity as they become used to these changes, and as their ideas of what is possible also change.

When Lindsay visits Earth he is shocked and saddened by the disaster that mankind's need for stability has caused. Those who have stayed on Earth do not want to face technology's influence, as they can not tolerate variety and change. The images Sterling uses to describe Earth all suggest the containment and entrapment of man. The city Lindsay observes is "hemmed in by a high rectangular wall" (223) and people are controlled by an indoctrination centre that manages all links to the outside world, while aeroplanes and telephones are used as "[e]nforcement technology" (225). Lindsay "mourned mankind, and the blindness of men, who thought that the Kosmos had rules and limits that would shelter them from their own freedom" (225). He believes that denying change is equivalent to denying life, and this means that "humanity on Earth had become a relict" (225).

Lindsay's goal in coming to Earth is to bring life to Europa, and in this way speed up the process of "posthumanism". His current world (Czarina-Kluster) is in crisis, and its attention is now shifting towards the "safe" option of solidarity on Mars. However, Lindsay advocates complete change and a new form of life on Europa: "a vacuum-seared wasteland of smooth water ice, so cold that blood and bone would crack like glass...But there were fissures in that ice, dark streaks thousands of kilometres long..." (217). Beneath Europa's crust is a lava ocean of liquid water, and it is a world that could never support human life. Lindsay's plan is not to make Europa habitable, but to develop humankind into organisms that will be able to survive in these conditions.

These new organisms are created from the primeval lifeforms, untouched by man, that survive in the oceans on Earth. In order to become an "aquatic posthuman" (232) a human has to be completely transformed – a transformation that Lindsay also intends to undergo. Again, however, Constantine disagrees with Lindsay, accusing him of "[s]undogging out from under human limitations" (232). He questions the value of these new organisms that will live without sin, lies or jealousy. Lindsay responds: "They don't lack ingenuity…I'm sure they can find crimes if they try hard enough. But they're not like we were. They're not forced to it" (232). Constantine rejects this "ideal", unwilling to take this next step in the move towards the posthuman, preferring death instead.

At the end of *Schismatrix* Lindsay again moves beyond the boundaries that he has created for his society and for himself. Posthumanity is becoming the norm, and Lindsay's "melting" (236) with the "Presence" represents a step that the rest of society is not yet willing to take. Lindsay first becomes aware of the Presence when he meets his daughter (created by Constantine from samples he stole from Vera and Lindsay), and he sees it again when they enter the primeval ocean world of Earth. It is here that Lindsay realises that the transformation he has proposed for his society is still part of life, and "life was a process of changing, but it was not change itself. That was what death was for" (229). Yet when Lindsay rejects transformation and life on the Europa he has created, the change that the Presence offers him does not seem like death: "He stretched his arms out toward it. It came over him in a silver wave. Stellar cold, a melting, a release. And all things were fresh and new" (236).

Sterling does not make it clear exactly what the Presence is. It is referred to as the "creature" (228), as "a god" (229), and as "the potential…something to aim for" (229). Lindsay discovers that death represents change, yet what the Presence offers Lindsay does not seem similar to the death that Constantine has embraced. But whether the Presence is death or a god or a further step into posthumanity, the focus is on the change that it represents. Technology allows humanity to adapt to the demands of space colonisation and dying worlds, but the human need for stability and the strict control of the factions mean that most are unable to embrace change fully.

Timothy Leary (245) sees Prometheus, who stole fire from the gods and gave it to humanity, as the classical model for cyberpunk. He argues that similar characters in history have been labelled non-conformists, troublemakers and oddballs, but that the information and

communication civilisation of the twenty-first century demands creativity and mental excellence. The world has become too dynamic and complex for stability and dependability to be successful, and the "problem person" is now the individual who never questions authority and who acts to protect his official status (Leary 246). Sterling's ideal is the *bricoleur*, the person who picks up the pieces (even after death) and starts again. He is opposed to the idea of system and the tendency that systems have to perpetuate and propagate themselves. He rejects the "pattern-seeking" quality of human minds, and often shows systems breaking down, with the *bricoleur* as the only successful survivor (Shippey 218). Sterling explores possibilities that go beyond the boundaries set by the traditional life and death dichotomy. The characters in his novels and short stories often disappear and reappear, transforming themselves into very different modes of being, or they "fade", making it impossible to establish whether a character is dead or not (Shippey 217). The person who lives on after death may be an "aberration", but some (like Lindsay) will be able to reject the whole framework of society and preserve only their personalities (Shippey 218).

Sterling is not the first science fiction writer to deal with issues of posthumanity, as can be seen in, for example, Arthur C. Clarke's *Childhood's End* (1953) and *2001: A Space Odyssey* (1968), and Frank Herbert's *Dune* novels. However, Maddox (326) argues that Sterling deals with man's transformation with much more intensity and more completely. His vision is based on the post-Darwinian idea of life and information that will evolve to greater levels of complexity. He explores the Other and the unknown, not as something completely separate from man, but "as the future of our becoming" (Maddox 324). His Shapers and Mechanists offer different possibilities for man's posthuman future. The Shapers are intelligent, beautiful, and have been altered through genetic engineering and rigorous training. The Mechanists, on the other hand, can prolong life indefinitely by replacing their flesh with mechanical devices, and their ultimate goal is to become "wireheads" (Maddox 325). However, with cyberpunk's focus on constant change, Sterling's *bricoleur* moves even beyond these visions of the Other, becoming an entity that is completely without boundaries or shape, retaining only its individuality.

CHAPTER FOUR: THE ROLE OF THE *BRICOLEUR* IN NEAL STEPHENSON'S *SNOW CRASH*

Snow Crash has all the playfulness that is associated with postmodernism and cyberpunk. Stephenson starts his novel with the following:

> The Deliverator belongs to an elite order, a hallowed subcategory. He's got esprit up to here. Right now, he is preparing to carry out his third mission of the night. His uniform is black as activated charcoal, filtering the very light out of the air. A bullet will bounce off its arachnofiber weave like a wren hitting a patio door, but excess perspiration wafts through it like a breeze through a freshly napalmed forest. (1)

And what he is describing is not a member of the Mafia adequately dressed and protected for a dangerous drug run, but one of the main characters, Hiro Protagonist, delivering a pizza. However, in spite of this playful tone, there is the same discomfort in this novel about the use of technology that can be found in the *Neuromancer* trilogy and *Schismatrix*.

Stephenson explores the fear of surveillance and loss of privacy that are often associated with the development of technology. One of the most powerful organizations in this near-future Southern California is the "Mafia" which strictly control the lives of its employers. When Hiro borrows money from, and starts working for, the Mafia, every detail about him, from his retinal patterns to his voice graph, is included in their extensive database. The Kourier, Y.T., who assists Hiro (and indirectly the Mafia) by delivering a pizza, is treated similarly and the Mafia instantly knows everything about her. This they can achieve merely by scanning "the many bar codes mounted on her chest" (32). Technology is also used to protect the ownership of information. When L. Bob Rife is sued by his employees because he has put them under twenty-four-hour surveillance, he argues that the reason for this is the power that information gives to his programmers. In fact, he is planning to extend his organisation's power even further: "[s]o we're working on refining our management techniques so that we can control that information no matter where it is – on our hard disks or even inside the programmers' heads" (108). Information has become the most important commodity, and control of information in the contemporary world usually belongs to the large and powerful multi-national corporations which also control the distribution of wealth.

Most of the characters have no share in the wealth that belongs to the large corporation. As in *Neuromancer* and *Schismatrix*, the characters are presented as living in severely limited physical space. Hiro and his roommate, Vitaly Chernobyl, live in a "20-by-30…U-Stor-It…[with] a concrete slab floor, corrugated steel walls separating it from the neighbouring units, and – this is a mark of distinction and luxury – a roll-up steel door that faces north-west, giving them a few red rays at times like this, when the sun is setting over LAX" (18). But Vitaly and Hiro are seen as living in luxury, with most of the inhabitants, sometimes whole families, living in "slum housing, 5-by-10s and 10-by-10s" (18). Like Case in *Neuromancer*, Hiro spends most of his time "goggled" into cyberspace (or the Metaverse), which, as represented in *Snow Crash*, comes very close to mankind's concept of physical reality, although it does allow for more creativity. It takes the form of the Street, where houses are built, conversations take place, and people are presented as avatars that can be anything from realistically rendered people to gorillas and dragons created by software. The Street is described as consisting of "pieces of software, made available to the public over the worldwide fibre-optics network" (23). Since Hiro was one of the first writers of the Street software, he "has a nice big house in the Metaverse but has to share a 20-by-30 in Reality" (24). Thus, even though the Metaverse gives Hiro more freedom, this freedom applies only when he is on the Street. Reality is presented as a dismal alternative to the excitement and wealth offered by virtual reality.

Hiro can also only share the benefits of the Street because he is one of the original designers. Technology might remove the physical limitations of the body, but the usual strict social and economic divides exist even in cyberspace. On the Street "[i]f you're ugly, you can make your avatar beautiful" (33), but one's power to do this is linked to the limitations of one's equipment. The rich have more freedom on the Street, while "white-trash" school kids have to be satisfied with being Clints and Brandys (male and female avatars that are stereotypically handsome or sexy with very limited facial expressions). Gender stereotypes are also maintained as Brandy can choose between only three breast sizes: "improbable, impossible, and ludicrous" (35).

In fact, despite the ability of technology to break down boundaries, many gender, racial and cultural stereotypes still exist within the boundaries of each individual Burbclave, as shown in the New South African franchise. The nation-state has been replaced by the Burbclave, which is defined as a "city-state with its own constitution, a border, laws, cops, everything" (6). The paranoia of the different governments is clearly evident from the degree of security they need

to deploy to guard the boundaries of their (often small) living and working areas. Y.T.'s mother, for example, works in Fedland, which has "a barrier around it, a perimeter fence put up by stringing chain link fabric, concertina wire, heaps of rubble, and Jersey barriers from one building to the next" (163). Individuality is not highly valued and "Fed workers, like military people, are intended to be interchangeable parts" (263). Y.T.'s mother lives with the strict regulations of Fedland that control the speed at which she reads, and the distribution of toilet paper - and submit her to regular polygraph tests. When Y.T. breaks her mother's computer in protest and to protect her against "snow crash", the Feds immediately question her mother and attempt to detain Y.T. as well. People are not allowed to move beyond the strict boundaries outlined by the different governments or corporations, and personal freedom is severely limited.

Many of the characters in the novel embrace technology, in an attempt to use it for their own benefit. Gargoyles spend most of their time in cyberspace – "[i]nstead of using laptops, they wear their computers on their bodies…[and] serve as human surveillance devices, recording everything that happens around them" (115). Another character who has embraced technology to remove the physical limitations of his body is Ng, who was severely burnt "during the evacuation of Saigon in 1974" (211). In the Metaverse Ng lives and receives visitors in a French colonial villa, seemingly situated in Vietnam, that takes up a few miles of the Street. He presents himself as "a small, very dapper Vietnamese man in his fifties" (206), while in reality he is "a patch of skin with some black hair around it…encased in an enormous goggle/mask/headphone/feeding-tube unit" (211). He is permanently plugged into his van, which he describes as "an extension of [his] body" (211), and this existence allows him to be self-sufficient in America's drive-through culture. Ng uses technology both in cyberspace and in reality to remove the boundaries that his body creates for him. Yet, like the gargoyles, his character is presented as an aberration rather than as an ideal. However, Ng (like the Finn in the *Neuromancer* trilogy) would disagree with this, as he tells Y.T.: "Your mistake…is that you think that all mechanically assisted organisms – like me – are pathetic cripples. In fact, we are better than we were before" (231).

Like many other characters, Ng breaks down the boundaries between man and machine in order to lead a "normal" life in the dystopian world presented by Stephenson. Ng is an example of a figure often found in cyberpunk literature, namely the cyborg, defined by Donna J. Haraway as "a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (149). She sees the cyborg as a "creature in a post-

gender world" (150), and she argues that people today, in the late twentieth century, are already cyborgs – "theorized and fabricated hybrids of machine and organism" (150). Most of the characters in *Snow Crash* find structure within this blend of man and machine.

The only character who remains undefinable is Y.T.. At the beginning of the novel she is presented to the reader as a male Kourier when she "poons" the Deliverator's car on her skateboard. Even the Deliverator (Hiro) is surprised when he discovers that this "businessman making money" (13), wearing an "orange and blue coverall" (13) is a woman: "The Kourier is not a man, it is a young woman. A fucking teenaged girl" (16). This "teenaged girl" smashes her mother's computer in anger, and manages to get personally involved with all the major corporations in the novel, while Raven, described as "a nuclear power" (151), falls in love with her. She remains independent and impenetrable throughout the novel (even wearing a "dentata" in her vagina to protect herself against sexual assault). According to Barbara Browning, Y.T. in fact further moves beyond the boundaries of stereotypical gender roles by penetrating Raven with her dentata, thus "rendering him defenceless".

The narrative centres on the efforts of L. Bob Rife, the leader of a religious cult, to spread a "virus" that will access the human brain stem, returning all languages to a universal "babble". Y.T., as a woman, has the strength of the ancient Sumerian myth's Asherah, who penetrates so effectively and deeply that she becomes associated with a virus. This virus (called Snow Crash) is spread in two ways: by exposing a hacker to white noise, or an overload of information, which results in brain death, or by injecting those without computer access with the contaminated blood of these hackers. As it has its origin in ancient Sumer, it is a virus that has influenced humankind throughout history, and technology is merely a new way of spreading this contamination. Snow Crash is presented to Hiro as a drug, and its effect is contrary to the principles supported by postmodernity: it replaces diversity with one, universal "sameness" (Stockton 595). L. Bob Rife also uses the spread of the virus, in conjunction with organised religion, to control the thousands of refugees on his Raft. He refers to his Raft as a "media event" (109) and he is often filmed "walking among the people, handing out Bible comics and kisses to little kids" (109). Rife uses religion to lure people to his Raft, where he controls them using technology (turning them into "wireheads"), and spreads the virus associated with the Sumerian myth. He has made various donations to churches, particularly those run by Pearlgate Associates, a multinational corporation that controls the Reverend Wayne's Pearly Gates chain.

An important aspect of the myth presented in *Snow Crash* is the focus on duality, or the fact that everything can be defined in terms of binary opposition. The relevance of such duality is that, for example, a virus can be benign and malignant, creative and destructive. The Librarian relates the ancient Sumerian myth of Asherah (female) and Enki (male) to Hiro. Asherah is defined as "a goddess of the erotic and of fertility. She also has a destructive, vindictive side" (235). Thus the goddess herself is both creative and destructive. Asherah is related to Eve, and Enki to Adam, in the Christian myth, and both are seen as "figures who had in some sense defeated chaos" (238). According to the Librarian, "[t]his myth can be compared to the Sumerian creation myth, in which heaven and earth are united to begin with, but the world is not really created until the two are separated. Most creation myths begin with a 'paradoxical unity of everything, evaluated either as chaos or as Paradise', and the world as we know it does not really come into being until this is changed" (238). Thus, creation is identified with the defeat of chaos, and with "the separation of the static, unified world into a binary system" (238).

Language is also seen as creative, because "to name a thing is to create it" (239), and in *Snow Crash* the power to name belongs to Enki. The god is seen as the "master of all the right commands" (239) who assists mankind by filling the rivers and by providing food with only "a word" (239). It is said that "[h]is word can bring order where there had been only chaos and introduce disorder where there had been harmony" (239). Enki can thus bring both chaos and harmony, but he is generally seen as of benefit to mankind. Asherah is the one who is associated with a virus, even though the gargoyle Lagos describes her as benign. In explaining this, the Librarian speaks of "herpes simplex", which never leaves the nervous system. It is "capable of carrying new genes into existing neurons and genetically reengineering them" (215), and is described as a "benign descendent of Asherah" (215). Hiro, however, remembers the effect that herpes had on a friend with AIDS, and argues that the virus is only benign when people have immunity. Computer science is based on binary codes, and it can only function by maintaining dichotomies. The virus in *Snow Crash* disrupts the binary code in much the same way as a human virus disrupts the genetic code of a cell, thus causing a program crash (Browning).

This virus operates "by rendering all informational patterns white noise, undifferentiated static" (Stockton 595). It is also not merely a computer virus, as Hiro is told when he asks Raven, and later Juanita, whether "snow crash" is "a virus, a drug, or a religion" (187). He also wants to know whether it will mess up one's brain or one's computer, and to both

questions the answer is: "What's the difference?" (41,187). Stockton (595) argues that "snow crash" becomes the timeless and disabling force of "babble" that has its origin in the brain stem "where language is born into sameness, monosyllabic mutterings not yet differentiated into referential binary meaning" (595). It is this virus that Rife has spread and is using to control the people on his Raft.

The reason computers can also be "infected" with the virus is that computers speak machine language that is written in binary code (consisting of ones and zeroes). Hiro explains that "[w]hen you program in machine language, you are controlling the computer at its brainstem, the root of its existence" (260). Technology is also what makes computer programmers and hackers vulnerable to Rife's virus. According to Lagos hacking changes the deep structures or neurolinguistic pathways in the brain. The exposure to binary code forms new pathways that make the spreading of the disease easier. The only cure for this virus is a type of language itself – the nam-shub of Enki – which can be translated as a "speech with magical force" (197). According to Hiro the "Metaverse is a fictional structure made out of code. And code is just another form of speech – the form that computers understand. The Metaverse in its entirety could be considered a single vast nam-shub, enacting itself on L. Bob Rife's fiber-optic network" (197). At the end of the novel Hiro writes a program called "SnowScan" that defeats "snow crash" in the Metaverse, while the ancient clay nam-shub or incantation of Enki is used to restore the speech of the people on the Raft. The claim that the novel makes is that the nam-shub is the same incantation that was used to diversify the speech of man at the biblical Tower of Babel.

According to Hiro in his report to Mr. Lee and Ng, primitive societies were controlled by verbal rules called *me*, which he describes as "little programs for humans" (370), which can be seen as a manisfestation of a metavirus. This means that mankind was not really conscious, which is why Enki created his nam-shub to go into the deep structures of the brain and reprogram them. With the disappearance of the common deep structures humanity began to develop new and different languages, which meant that the *me* no longer worked. Further transmission of the "metavirus" (372) was blocked, and this was the first manisfestation of humanity as a conscious entity. Marshall McLuhan argues that the invention of the written word was the "separating membrane" dividing the "I" from the "all-that-is-not-I" when humanity became fragmented. This is seen as the first move towards the world of isolation, objectivity, and rationality (Dery 167). This diversity, that is also characteristic of cyberpunk and postmodernism, has made humanity stronger, as was Enki's plan: "Monocultures, like a

field of corn, are susceptible to infections, but genetically diverse cultures, like a prairie, are extremely robust" (374).

Barbara Browning argues that "[d]isrupting binarism...is what contemporary feminist, postcolonial and critical race theory are all about". Cyberpunk and postmodernism are, similarly, about "this kind of disruption of order". However, the two male characters, Enki and Hiro, fight the virus in order to restore structure and to protect society against the "universal 'sameness'" that is particularly "susceptible to infections". Juanita, on the other hand, has realised that to "hack the brainstem" (402) can be both positive and negative, and she intends to use this skill to her own advantage. The people ("wireheads") on Rife's raft are controlled by antennae implanted directly into their skulls, and Juanita voluntarily has an antenna placed in her own skull. She has become immune to the virus, and when Hiro releases Enki's nam-shub she stands "in the far corner of the room with her fingers stuck in her ears" (403).

Thus Juanita has willingly gone beyond the boundaries of the binary world of structure, accessing the chaos and disorder of the brainstem. The cyborg cannot exist in a binary oppositional world of body and technology as "binary models can not support hybrid conditions like a cyborg individual" (Drake-Brockman 50). The true cyborg moves beyond binary oppositions like man and machine, life and death. Most of the characters in the novel can be defined as cyborgs, whether they are hackers, gargoyles, or extreme mixtures of man and machine (like Ng). However, these characters prefer to live within the strict capitalist structures imposed upon them by their societies. Y.T. and Juanita are the only characters successfully moving beyond the boundaries created by religion and technology. As in the novels of Gibson and Sterling, a few characters are presented who move beyond the boundaries that contain them, and they do this successfully only because they have embraced change, or in this case, apparent chaos.

Conclusion

It is clear from an examination of these cyberpunk novels that these writers are ambivalent about the effect that technology will have on society. They present dismal dystopian cities where people live under the constant control of multinational corporations, yet each of these novels has one or two characters who move beyond the boundaries set by their societies, some even changing completely in the process of becoming "posthumans". It seems as if technology itself is seen as either benign or malignant, depending on the way it is used by powerful multinational corporations or individual cyberpunk sundogs/ cowboys/ hackers.

For the most part, however, the characters presented in these novels use technology, religion and drugs to create new boundaries instead of using the potential of these developments to free themselves from constraints. They search for stability rather than change, and for order rather than disorder, which means that they reject the central characteristics of both cyberpunk and postmodernism. In addition the future that these writers describe severely limits the physical space that people inhabit, with whole families sometimes sharing rooms no bigger than storage space in overcrowded polluted cities. Cyberpunk also explores many of the fears of technology that existed in the 1970s and 1980s in particular, though these fears are still relevant in today's society. Important aspects are the loss of personal identity in today's technological capitalist society, as well as the limits that multinational corporations place on the personal choice of the individual. The argument is that these large corporations use technology to control the individual, and that the use of technology might break down certain boundaries, but that it also creates new boundaries to contain man.

Only a few individuals manage to move beyond the boundaries created by the multinational corporation, and they manage to do this because they fearlessly embrace change. These "cyber-pilots" move beyond all the boundaries set by their societies, merging with the machine, moving beyond the posthumanity that is becoming the norm, and accessing the basic universality of the brainstem. These characters can be seen as *bricoleurs* - individuals who question authority and who are able to "reject their intellectual system and preserve only their personalities" (Shippey 218). Only they are able to survive successfully in the postmodern world of today that has become too dynamic and complex for stability and dependability. Most of the future possibilities outlined by the "World Transhumanist Association" are dealt with in cyberpunk, and the posthuman is explored as "the future of our becoming" (Maddox

324). The "pattern-seeking" quality of human beings is rejected and systems that seek stability are shown as breaking down, with the *bricoleur* as the only survivor.

As a result of the influence of technology the usual boundaries between the biological and the technological, the natural and the artificial, and between man and machine are being broken down. Recent debates have even suggested that the whole argument concerning the merging of nature and technology is flawed, as the distinction between nature and technology has never existed (Stone 101). The argument is that the category of "nature" has not existed for thousands of years. Stone also argues that "nature" has become an ordering factor, used only to "*keep technology visible* as something separate from our 'natural' selves and our everyday lives" (Stone 102).

The classification of "nature" as a category is then merely a strategy for maintaining boundaries and to protect the existence of the known and "safe" structure of binary oppositions. Thus the category of "technology" does not really exist either, as it "exists only because of its imagined binary opposition to another category upon which it operates and in relation to which it is constituted" (Stone 102). The cyberpunk *bricoleur* accepts and welcomes the breakdown of these boundaries: the natural is seen as artificial, technology is nature, and the drug-induced experience is the "real" experience. The only given in the cyberpunk's world is the need for constant change.

Cyberpunk has been severely criticised for its obsessive focus on the need for constant change. George Slusser (341) compares the cyberpunk movement to MTV, which has become a similar icon for chaos and change. He argues that cyberpunk's influence is limited, and like MTV, "with repetition seems to be digging a groove or rut for itself" (341). He sees the "core ideology of [science fiction] as open-ended change" (340), but feels that in cyberpunk "this has become a structure written in stone...a museum, a carefully controlled dance of forms" (340). Cyberpunk's constant focus on change is then seen as creating a stable structure itself, with cyberpunk not undergoing the change that it so clearly advocates. This is a very relevant criticism of the genre, particularly as there is an increasing movement of cyberpunk novels and short stories into extremely "mainstream" films.

It has been argued earlier that cyberpunk in fact needs the boundaries it attempts to break down. Without boundaries there can be no incongruity, and cyberpunk relies on incongruous juxtaposition. Cyberpunk thus uses and needs the boundaries that the *bricoleur* transcends.

Another objection to the vision of cyberpunk and cyberspace is that "virtual community originates in, and must return to, the physical" (Stone 113). An important characteristic of cyberpunk is the belief that the body will be rejected, just as Case in *Neuromancer* contemptuously regards the body as "meat". But Stone argues that even in a completely technological future, life will be lived through bodies, and she does not see the "posthuman" developments predicted by transhumanism and largely supported by cyberpunk writers as a viable option for the future of human beings (Stone 113).

Even though many of cyberpunk's concerns are still relevant today, most of these writers are no longer writing what can be defined as "cyberpunk". There has been talk of the nineties as "post-cyberpunk", even though *Snow Crash*, which clearly contains all the characteristics of cyberpunk, was published in 1992. Cyberpunk seems to have moved into film, with the recent film *The Matrix* (1999), and the proposed plan to film William Gibson's *Neuromancer*. In its focus on constant change and the breakdown of boundaries, the movement does respond to comtemporary views of reality. It also presents a form of science fiction that responds directly to the fears and concerns of a postmodern, post-industrial society. However, unless cyberpunk continues to evolve as it urges its characters to evolve, it is unlikely that any new writing or films will be as successful and relevant as Gibson's trilogy or the cyberpunk writing of the 1980s has been.

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