

FLUID SUBJECTIVITY:
BODIES, MACHINES AND SCIENCE FICTIONS IN CYBERCULTURE

by

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Abstract

The crisis of the universal subject has been examined by many postmodern theoretical discourses, but this crisis also manifests in popular culture. In particular, science fiction offers us an insight into shifting modes of subjectivity that collide in the boundary between the human and the machine. William Gibson's *Neuromancer* is an example of a social text which offers us insight into a particular historical juncture which collapses modern and postmodern, identity and difference, mind and body. These boundary transgressions surface in Gibson's text, predominantly through the construction of characters' bodies. The body has historically been a pivotal site for the organization of difference in science, social science and culture, although it has rarely been acknowledged as an explicit subject of these discourses. The dissolution of the strict separation constructed between science and fiction has remarkable implications for subjectivity and identity. Science fiction itself emerges from this boundary, weaving science fact, social reality and imaginary worlds. How science fiction explores technoculture collides with postmodern debates about subject construction. If we come to understand that the body has historically been a tool categorized for the establishment of sameness and difference, the body in science fiction is a productive area of inquiry in relation to techno-subjectivity. Cyberspace and cyberculture do not always problematize traditional Cartesian dualisms relating to mind and body, but these spaces can offer hope about the re-organization of bodies and minds in terms of fluidity and multiplicity. The emergence of new forms of technology like cyberspace and virtual reality in *Neuromancer*, as well as in social reality, have deep rooted implications for the status of the body but also provide renewed potential for understanding subject construction.

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Introduction

Science Fiction and Popular Culture: Technologies of the body

As a child I imagined that the bodies of the future would somehow be different, evolved perhaps, but somehow better, stronger, faster. I believed in the future of technology - a form of modern magic called science. I was fed a steady diet of the *Six Million Dollar Man* and the *Bionic Woman*. These programs were on American and Canadian television in the late seventies and revolved around the adventures of Steve Austin and Jamie Somers, who were the six million dollar man and the bionic woman respectively. They were a new brand of superheroes - not from another planet like Superman - but humans who had been technologically enhanced by scientific knowledge about how to make the body better with hardware and electronics. Steve and Jamie were "stronger and faster" as the opening credits attested each week. These were cyborg bodies that can be situated in a larger history of fantastic bodies in science fiction but the advances of science in the latter part of the twentieth century made such bodies seem possible in the near future. These were also superheroes that captured the imagination of many young TV viewers and perhaps led them to believe that the body could use some improvement. Perhaps lodged somewhere in the cultural desire for technologically enhanced bodies lay the belief that bodies are machines that just haven't been kept up on the latest of scientific discoveries.

The bodies of the future, as Steve Austin and Jamie Somers clearly demonstrated, would be able to withstand time and space in new and bionic (or cyborg) ways. Perhaps these beliefs were a testament to an active imagination and a lot of media consumption; however, many comics and endless fantasy fictions about superheroes inevitably inspired such visions of the future,

technology and the human body. Simultaneously, these visions located the body as a site of power as well as the source of human limitations in our everyday world. The body is not only an oppositional being which either enhances our abilities or restricts them; the body speaks to us from a multiplicity of locations. Both popular and fringe cultures, science fiction included, recognize embodiment as a malleable vehicle to explore other issues. The body is a site of representation from which to explore, accelerate, and subvert the impact of technology on our social world.

Bodies have moved to the forefront of many fields of inquiry in the human sciences where it has been an "absent presence" (Shilling, 1992) for many years. As an area of inquiry, the body has been implicitly rather than explicitly addressed in social theory. In the last fifteen years however, a substantial interest in the body has taken place and scholarly work began to explore a previously marginalized area of inquiry. Feminism has triggered a re-reading of many philosophers seeking out the corporeal form and piecing together a history of our estrangement from our own materiality. However, feminism alone is not responsible for this current obsession with bodies. Our social world today faces real life dreams and nightmares that were only imagined in science fictions past, visions which include a technological restructuring which seeks to eliminate corporeal presence, new forms of biological and chemical warfare, and significant advances in artificial intelligence research and biotechnology. This search is not for the fortified body or the superhero, but instead it seems to be a desire to replace our flesh completely. This longing points toward a world where materiality is finally erased or where we may at least leave our body elsewhere. But this elsewhere points us to the question: who are we without our bodies, or rather, *are* we without our bodies?

Science fiction and fantasy genres explore all of these possibilities as well as the multiplicity of bodies that accompany worlds visited by disaster or blessed by utopian dreams. Dialectics of presence and absence are important to a culture which seeks to escape materiality, marking an obsession with the very corporeality from which it longs to be released. The technical realization of virtual reality is irrelevant to these discussions; the ongoing attempts at perfecting “virtual” reality is a sign of cultural desire. The desire to degrade or altogether escape materiality is not a new idea, but the connection to existing, practiced technology clearly indicates a change in our relationship to subjectivity. The new human subjectivities explored in this thesis are spawned by the intersection of two distinct areas. The first area is a rising theoretical engagement with what has been collectively titled (however generalizing) postmodernism. The second area is the development and/or realization of technologies (and their artifacts) which make the possibilities of escaping organic existence appear realizable in the near future. The intersection of these areas is the subject of this thesis, one which I will explore through an attempt to locate the body (discursively and materially) as a pivotal site of meaning in the discourse between science fiction, science fact and social theory. It is not the technology of science fiction or science fact that is at stake in these discussions of the body, rather they both offer us stories about the subject as it emerges from an interaction with technology. “[I]t is not technology per se that characterizes the operations of science fiction, but the interface of technology with the human subject.” (McCaffrey in Bukatman, 1993a, p. 8) The body is a pivotal site of meaning in this interrogation of interfaces and subjectivity; it is often constructed as the interface itself. The dream to escape embodiment may perhaps become a real consideration and possibility, but thus far no one has managed to remain alive without their trusty body. Indeed, if we define alive as

implicitly organic and requiring a corporeal component, do we also consider intelligence to be rooted in the flesh or is this just a hardware glitch? The division of mind and body will be explored in Chapter Two and this question surfaces within the context of embodiment in and through nature and culture.

Neuromancer (1984) by William Gibson treats the body as a technical object whether it is hard wired or pure “meat”. *Neuromancer*’s world display many different kinds of bodies. There are bionic type characters with their nervous systems “jacked up” as well as people who use mainly software implants for their enhancements. While Gibson offers many different representations of bodies, feelings of disembodiment and dislocation pervasively mark the text. Bodies, however, do not surface as the primary discussion in *Neuromancer*. Rather, the focus of the novel revolves around the intersection of emergent technologies and memory. Memory has a striking relation to the struggle to create intelligent machines. Although biologists and psychologists still research the functioning and methodology of memory in the human brain, human memory remains more powerful today than a computer memory. This was one of the most prominent themes of Ridley Scott’s *Blade Runner* (1982), one of the films most often cited as part of the cyberpunk canon (if such a thing can be said to exist). *Blade Runner* explored the function of memory, personal history and autobiography as distinctly human traits; one’s memories were a testament to one’s humanness. The cyborg replicants which were always tested against human autobiographical standards - histories which these cyborgs do not have (a childhood, for example) and could not convincingly, or repeatedly, simulate. The failure of such tests meant certain termination of the replicant in the diagesis because human replicants had been outlawed on Earth.

What is clearly demonstrated in *Blade Runner*, however, is not only differences in memory between the human and the non-human. The absence of memory in the replicants was also explored through the arena of sexual difference. This is not to say that the differences between the human and the replicants were equal to the differences between men and women; rather, it points to the organization of difference itself. (The binarisms that historically have delineated male and female through the ideology of sexual dimorphism will be elaborated in Chapter Two.) Extrapolating from the established binarisms of men and women and sex and gender, the new Other of the seventies and eighties was the alien and the machine, or the organic body invaded (or enhanced) by machinic components. However, the differences that surfaced between the human and the alien sometimes looked like the differences framed between binary sex. In the process of animating monsters and aliens, the boundary between the human and non-human became sexualized.

If there is increasingly less practical difference between men and women, there is more than enough difference between a human and an alien,...a human and a cyborg/replicant,...or a human from the present and one from the future.... In these films the question of sexual difference - a question whose answer is no longer "self-evident" - is displaced onto the more remarkable difference between the human and the other. That this questioning of the difference between human and other is sexual in nature, can also be seen in the way these films reactivate infantile sexual investigation. (Penley, 1991, p. 72).

The films Penley is referring to include *The Man Who Fell to Earth*, *Starman*, *Android*, *Blade Runner*, *The Terminator* - all of which were produced in the late seventies and early eighties and explore relationships between humans and non-human or cyborg others. The *Six Million Dollar Man* and the *Bionic Woman* also came from this time period and portrayed Steve and Jamie with superhuman abilities, when their hardware wasn't giving them trouble (as it often did).

Science fiction cinema in particular has been a fertile ground for psychoanalytic theory. These theories argue that film can be interpreted as an unconscious or repressed text. Psychoanalytic film theory of the past few decades claims that cinematic representations are meant to evoke a fantasy where the spectator is able to assume the identities of the characters. In this way the film acts as a mechanism of desire. The rediscovery of infantile sexual investigation in science fiction (from the quotation above) refers to the investigation of sex as a gender identity; in psychoanalytic theory these investigations shape the psyche. Penley argues that by the late seventies and eighties women's social and workforce roles were beginning to exhibit "little practical difference" from men's; if previous dramas of the cinema rested on making a distinction between men and women, this drama was displaced onto the human and non-human other. That cyborgs are never represented outside of categories of sex and/or gender is crucial to our constructions of technologies of gender, self and other - whether that "other" targets women, aliens, cyborgs, or artificial intelligence. This discussion will be further elaborated on in conjunction with the Turing test in the Conclusion (Chapter Four).

Negotiating the Bodies of Science Fiction

The nature of the link between popular culture and ideology has been a subject of ongoing debate in the social sciences. Horkheimer and Adorno are perhaps best known for their work on the culture industry as a means of mass deception (Horkheimer and Adorno, 1944). "Movies and radio need no longer pretend to be art. The truth that they are just business is made into an ideology in order to justify the rubbish they deliberately produce." (Horkheimer and Adorno, 1944, p. 120-121). Horkheimer and Adorno also comment that jazz may (at best) have a "new

style” but it is a style at the expense of culture or artistic content; jazz is “stylized barbarity” (Horkheimer and Adorno, 1944, p. 128). These criticisms are always posited in comparison to “serious” art (their description); Beethoven, for example, is frequently cited as a “serious” artist.

How do we understand popular films, novels or art in society? Are they merely reflective comments on our world, or do they interact with culture in a more complex and structured way? These debates usually posit the distinction between high culture and popular or mass culture (Jameson, 1988); mass culture is usually assumed to be a tool of the dominant ideology, and high culture provides authentic social commentary. While the distinction between pop and high culture is usually taken for granted, (for example, pop culture includes popular film, going to a club to see a band; high culture includes the opera and the ballet), when we inquire into these categories the distinctions become vague and hardly intrinsic to the event itself. The perception of mass culture as an ideological indoctrination machine is not yet a concept that is completely void of currency in social theory. This notion, however, has also been widely criticized and has recently given way to theories which reclaim mass culture for the purposes of cultural resistance resulting in the production of popular culture (Norton, 1993; Grossberg in Ross, 1988; Modleski, 1991). Popular culture is no longer understood (only) as a vehicle of ideology which presumes a passive and receptive subject; rather, popular film, art and literature propose imaginary possibilities which spectators or readers may negotiate. This negotiation reveals a larger shift within the construction of subjectivity in culture and social theory; it has also been heavily influenced by postmodern debates about the “death” of the subject.

Science fiction has always been situated within mass culture, although it has been marginalized by film and literary critics of the past (Kuhn, 1990, p. 4). Today, however, there is a

growing field of critical inquiry into science fiction and several feminists have taken up the issues that permeate the genre. These issues may vary, but often include themes of spatial and temporal displacement, a foregrounding of technology, and the construction of embodiment in diverse formats. The futures¹ of science fiction are not simply fantasies; they are constructions of temporally and spatially specific worlds which are culturally produced in the present. Science fiction is not outside of history or geography; indeed its very premise acknowledges the validity of history and the fragility of material survival in our real and imagined futures.

The recent developments in computer technology have presented people with new ways to think about all aspects of their lives. In the workplace, computers and other technologies have transformed the speed of production and the method in which we work. Our lives outside of the workplace are also permeated with the growing influence of computer culture. Computer culture has uncovered a desire to create alternate representations of the self.

Perhaps not since the Middle Ages has the fantasy of leaving the body behind been so widely dispersed through the population and never has it been so strongly linked to existing technologies.
(Hayles, 1993c, p. 173)

The strong link that Hayles refers to is the possibility of alternate representations of the body and the self through cyberspace and new forms of electronic culture. In our current manifestations of cyberspace, the body is not represented at all or it becomes an avatar or virtual body (as in virtual reality systems). Our lived embodiment is framed as an interface between technology and human consciousness.

¹ I am aware that not all science fiction constructs a future or a human world. Many of the spatial and temporal displacements that mark the genre are a rewriting of the past or posit an entirely alien world. However, I am more concerned with "futures" for the purposes of this thesis.

Science fiction has always been concerned with the issues surrounding technology and society. Technology, as I am using the term in this thesis, represents not only the material artifacts of technology - a computer, a hammer - but also a system of practiced social relations. I am thinking of technology in the sense that Ursula Franklin has written: "It entails far more than its material components. Technology involves organization, procedures, symbols, new words, equations, and most of all, a mindset." (Franklin, 1990, p. 12). Science fiction shows us that in the "future" technology will be different: whether this means the obliteration of current technologies or the acceleration of technological development, the impact of technology has always been a persistent theme of the science fiction genre. However, science fiction also shows us a critique of the present; while the technology may be different, social relationships are almost always extracted from our cultural present. The exploration of science fiction as a social text provides social scientists with access to a present day struggle with the relationships between subjects and technologies. The question of the subject in science fiction is often represented and interrogated through fantastic portrayals of bodies. The construction of bodies in the genre posits "others" that social science does not usually recognize and explore. The "other" in science fiction can be aliens, artificial intelligence, intelligent machines, post-apocalypse survivors, mutated humans - bodies which are culturally produced in the present. The construction of the sexed/gendered and raced body is being deconstructed on several fronts, but the technologically mediated or constituted body has only recently become a popular focus for social theorists.

Today, human interaction in everyday life is already technologically mediated. What happens to the self when bodies become interfaces between technology and consciousness? The notion of bodies as interfaces, however, is not a new conceptualization to feminists who have

explored the representations of women's bodies as mediations in the constructions of various social divisions and the traditional Cartesian lineage of mind/body dualism. Further to this question, can we speak of bodies or consciousness when the status of the subject in social theory has been questioned so radically? Do we reconstruct the mind/body dualism when we propose an interface between them? If the self is fragmentary, does that mean that several interfaces already exist? I am proposing that the notion of interface is not new; the form that interfaces assume in an information culture, however, differs substantially from its previous manifestations. Within these differences lie possibilities for understanding the construction of subjectivities and transforming subjectivity itself. The construction and representation of bodies is particularly revealing for an engagement with technology as it impacts the status of the subject. As spectators, consumers and social actors, we negotiate these constructions which are, after all, cultural productions.

In Chapter One, I will outline the importance of boundaries in social theory and how their dissolution impacts subjectivity and the current crisis of the subject. Boundaries are a key concept in this thesis. It is the collapse of boundaries that resurfaces consistently as the proliferation of new possibilities in terms of subjectivities and bodies. In Chapter Two, I will delineate a (selective) history of the body in social theory by elaborating on the importance of the corporeal and discussing the historical tendencies to impose rigid categories around the body (as a concept) and bodies (as subjects). Chapter Three will explore the collision of bodies and technology in *Neuromancer* by William Gibson. This is treated as one example of new subjectivities emerging from collapsed boundaries. In this case, the boundary which has imploded is nature and culture, implying many other subsequent collapses. Chapter Four (the Conclusion) takes up the fluidity of these new techno-social subjectivities more specifically in terms of sex/gender. The domino effect

at work with boundaries triggers productive connections for feminist theories working with subjectivity and identity construction.

Chapter One

The Subject of Science/ The Subject of Fiction: Spot the Difference

We tell children's stories; novels are written narratives; social science writes the researched social world. While the distinctions may appear obvious, they are not as apparent as we might first believe. Children's stories and novels are fiction. Social science is not fiction but is it true? Is it truth or is it a true story? Social science engages the facts, (social or otherwise) in order to understand the correspondence between the real and its production, reproduction and representation. The important distinction here is the correspondence of facts to the "real". By the real, I mean both the symbolic and manifest elements of the material world. I am not limiting the real to the physical only; I include symbols, structures and material constructs in this definition. Can we say, however, that fiction has no correspondence to the "real"? Literary studies would certainly argue otherwise, as would many in the human sciences. The historical conflation of truth and fact in the social sciences poses important epistemological questions for research today. It is this conflation and its relation to subjectivity that is the focus of this chapter.

This chapter will explore the interstices of the issues mentioned above with an eye towards understanding how these boundaries actually restrict (rather than enhance) our ability to establish truth and the real. The relationship of representation to the real is always a complicated matter, and I point to that difficulty through "Grandmother's Story" in the next section of this chapter. Although it is persistently boundary struggles that frame this chapter, I am primarily establishing the crisis of the subject as the significant border skirmish for this thesis. Narrative structures, postmodernity generally, science, history and truth are all intertwined in the performance of

subjectivity. These concepts are crucial to understanding the possibilities of new subjectivities emerging with current technologies that will be explored in Chapter Three.

Narratives and Stories: How do we know the difference between truth and facts?

"The truthfulness of the story, as we already know, does not limit itself to the realm of facts."
(Trinh, 1989, p.144).

Trinh T. Minh-ha repeats this phrase several times throughout the last chapter of her book *Woman Native Other: Writing Postcoloniality and Feminism* (1989). Trinh relates "Grandmother's Story"² to us, a story which does not end even with the death of its title character. Although several stories are woven together in this book, I will extract one of them for the clarity of my argument (even though I am unfaithful to the spirit of the text by doing so). This story is both told and written by Leslie Marmon Silko.³ It is about an old woman from a northern community who is the grandmother in this story. Grandmother seeks vengeance on a white storekeeper because he told her daughter and son-in-law that the water he gave them was safe to drink, but they die from it. To the grandmother, this is murder. She tells the story over and over to her granddaughter who tells and retells the story upon the grandmother's death. The story changes over time, partially because of who tells it, but also because of current events that impact the story. One day, the storekeeper chases the granddaughter out of his store and falls through the ice, where he dies. The granddaughter confesses to murder because both she and her grandmother

² This is the title of Chapter 5 in *Woman Native Other*.

³ The written work Trinh refers to here is: Leslie Marmon Silko (1981) *Storyteller*. New York: Seaver.

intended the storekeeper's death. The story understands to the grandmother and granddaughter as fluid identities which cannot be posed as discrete persons or categories bounded by their bodies.

What began with the grandmother (vengeance) is continued by the granddaughter (murder). The intent to bring about the death of the storekeeper is shared by them both. "As a storyteller, the woman (the granddaughter) does not directly kill; she decides when and where that storeman will find death, but she does not carry out a hand to hand fight and her murder of him is no murder in the common, *factual* sense of the term..." (Trinh, 1989, p. 144, my emphasis). The truth of the story is the intent, but the facts of legal discourses do not recognize this truth. When the case comes to trial, the lawyer insists that the granddaughter tell the truth. But her truth is that she murdered the storekeeper:

She knew that during her own lifetime the moment would come when she would be able to assume her responsibility and resume the grandmother's interrupted story-trajectory. She killed the one who lied to her people, who actively participated in the slow extinction of her race. She killed Him. She killed the white storeman in "her story" which is not "just a story": "I intended that he die. The story must be told as it is." To ask, like the white attorney, whether the story she tells makes any sense, whether it is factually possible, whether it is true or not is to cause confusion by an incorrect question (Trinh, 1989, p.149).

The truth of this story has correspondence with the real but its relation to the facts are more obscure. The world of the grandmother and granddaughter recognizes a reality that is not legitimated as "true" by the social structures of law. A fictional account may contain truth, but it is not necessarily factual as defined by legitimated scientific discourses.

As social science researchers we must engage this question: do we recognize the estrangement of truth and facts? Fact, fiction and truth are all negotiations of the real. These narratives are constructions of meaning which express the mediation of experience and/or the

imaginary with the world. Narratives are structurally diverse forms by which meaning is constructed:

...[T]he word narrative covers an enormous variety of genres which are themselves divided up between different subjects, as if any material were suitable for the composition of narrative: the narrative may incorporate articulate language, spoken or written; pictures, still or moving; gestures and the ordered arrangement of all the ingredients: it is present in myth, legend, fable, short story, epic, history, tragedy, comedy, pantomime, painting... stained glass windows, cinema, comic strips, journalism, conversation. In addition, under the most infinite number of forms, the narrative is present at all times, in all places, in all societies; the history of narrative begins with the history of mankind [sic]; there does not exist, and has never existed, a people without narratives. (Barthes in Polkinghorne, 1988, p.14).

Narrative forms, however, negotiate different realities from different subjective, temporal and spatial locations.⁴ Different people choose different narrative structures, structurally and stylistically, to construct stories. But this choice of narrative is not only operating on one level; indeed, the construction of subjectivities is also informed by the narrative form itself.

Further to this assertion is the implication that particular narrative structures for social theory and research construct particular notions of identity and agency, both through the text itself, but also through the restricted choices of academically acceptable narratives. The postmodern "crisis of the subject" is related to these discussions, playing a prominent role in the

⁴ I am not employing a strict definition of narrative here because I believe that such a definition would eclipse the larger thesis of this paper. Taxonomies of narrative structure are not relevant to my discussion here. Dominant western narrative forms do posit a whole story with a beginning, a plot, an end, a temporal dimension (usually linear) which symbolically assign meaning through the organization of events and actions within this structure. (Polkinghorne, 1988, p. 18). Polkinghorne, however, does not recognize narrative forms in the same range of media or stylistic expression as Barthes did in the quotation above. As "Grandmother's story" clearly demonstrates, the narrative does not always posit a whole; even at the end of her life the story was not complete. I discuss narratives of science in conjunction with totality in the section "Narratives of Science: Is Knowledge Innocent?" (p. 20)

deconstruction of legitimized narrative forms. This "crisis" also uncovers the possibility that the construction of both narrative and subjects (and the interplay between the two) subverts the real itself; the real is exposed as a negotiation. The conflation of fact and fiction intersects directly with the postmodern debates about the subject. Can the subject be both social fact and social construction? Or, if we accept that the subject is constructed, does that mean that subjects become works of fiction?

I argue that the subject is both a social fact and a social construction. In addition to this designation of subjectivity however, I also posit that social construction is not unrelated to the imaginary: the subject is socially constructed through both fact and fiction. In order to develop this argument, I will touch on postmodern debates around totality which encompasses modern notions of science, narrative and the subject. These debates inform my argument and are relevant to my discussion as a background to a crisis in knowledge production. The role of narrative in science fiction can also be restrictive to an exploration of its subject(s). The popularity of cyberpunk as a new subgenre of science fiction inspired a renewed enthusiasm for debates about narrative form and modernity. If cyberpunk epitomized an instance of postmodern narratives in order to deal with the subjects of an increasingly fragmented and high-tech world, what did that mean for the status of the subject(s)?

Neuromancer is a pastiche of many modernist narrative styles including, but not limited to, the "hard-boiled detective" mystery novel, the western, new wave SF and hard SF ideas of big, shiny technology. This does not make Gibson's work clearly the territory of either modernist or postmodernist theoretical inquiry; rather, both operate simultaneously within his work. To argue that any work is only modern or only postmodern today poses a substantial epistemological

problem. Many investigations of cyberpunk reveal classical modernist narrative structures among the ranks of cited cyberpunk novels, films and other assorted media, despite claims seemingly to the contrary. Claire Sponsler (1992) argues that William Gibson, in particular *Neuromancer*, is a false prophet of new postmodern narrative. The traditional aspects of narrative that are deployed in cyberpunk are the source of much feminist criticism - one which can be directly linked to the present argument. The narrative form is a diagenetic limitation for particular subject constructions and positions, including the possibilities for agency. Cyberpunk as a literary movement was largely a phenomenon of the eighties, although it retrospectively incorporated many texts that stretch back into the sixties. Cyberpunk is an anti-humanist project in science fiction, a project claimed by postmodernism even though it sometimes retains aspects of modernist narrative and the associated problematic of a centred subject.

In its various deconstructions of the subject - carried out in terms of a cybernetic breakdown of the classic nature/culture opposition - cyberpunk can be read as one symptom of the postmodern condition of the genre science fiction. While science fiction frequently problematizes the oppositions between the natural and the artificial, the human and the machine, it generally sustains them in such a way that the human remains securely ensconced in its privileged place at the centre of things. Cyberpunk, however, is about the breakdown of these oppositions. (Hollinger, 1990, p. 30)

Fredric Jameson (1991) also believes that cyberpunk was one expression of the postmodern narrative and its correlate subject positions. Jameson, however, complicates Hollinger's reading by pointing to the elusivity of categorizing modern and postmodern. At the very time that our culture cries out that history is dead, we obsessively worship futures that never came to be and fashion trends of the past, obsessions that Jameson regards as "irredeemably historicist". (Jameson, 1991, p. 287). The purity of categorizations such as modern and postmodern are

arbitrary but their attempted delineation is important to lend clarity to the debates surrounding Gibson's narrative style and philosophical grounding.

What is Postmodernism?

The debate between modernity and its critics has its sources in the beginnings of modernity itself. Today, the increasing interest and popularity in the critiques that have been titled 'postmodernist' dominate these debates. This is not to say that the critiques defined as postmodernist are entirely new to the social sciences or politics. Indeed, they are not unfamiliar critiques, but these critiques are receiving more popular and academic attention now than they have in the past. Postmodernism is discussed alongside the "...end of ideology', 'the end of religion', 'the end of marxism', 'the end of scientificity' and 'the end of evolutionism'." (Heller and Fehér, 1988, p. 4). Heller and Fehér convincingly argue that it is the very discourses of modernity which have demanded totalities with "the end" after which we can only construct a "post".

What has ended and what has begun? When we try to answer the questions provoked by "the end" it becomes obvious that the philosophical musings referred to as modernity still exist at the same time as the rise of postmodernity:

...[P]ostmodernity may be understood as the private-collective time and space, within the wider time and space of modernity, delineated by those who have problems with and queries addressed to modernity, by those who want to take it to task, and by those who make an inventory of modernity's achievements as well as its unresolved dilemmas... [T]he very foundation of postmodernity consists of viewing the world as a plurality of heterogeneous spaces and temporalities. (Heller and Fehér, 1988, p.1).

Modernity and postmodernity are conceptual spaces constructed in our historical present as modern, (in the present) or postmodern, (after the present). The emphasis in any case is on the present, including its past and its future. In this context, postmodernity is many things: it develops many critiques (not all of them compatible); it proposes different approaches to theory (including its rejection); and it is diverse and heterogeneous in theory and practice. Modernity has been formulated in the philosophies that have developed since the rise of capitalism, and has its origins in the European Enlightenment expressions of rationality and universalism.

The debate between modernity and postmodernity often focuses on the "grand narrative." Is it necessary for social emancipation? Is it totalizing and therefore totalitarian? The grand narrative leads us into the related debates of postmodernity: critiques of science; critiques of theories of history; and critiques of the subject. Yet postmodernism is not only interested in critiques. Although postmodernism is a response to modernity, it is also an attempt at new ways of theorizing and new possibilities for politics.⁵

The construction of a general theory of humans in society is antithetical to the postmodern aesthetic. Postmodern narratives are local or national, historically situated and event centred (Seidman, 1992, p. 72). Universal ethical principles no longer can appeal to the epistemic authority of the past, and so moral appeals are transformed by cultural traditions and historically contextualized norms and social practices. Once social criticism becomes more local and event-centred, social theory can become relevant to a larger public outside of the academy. (The "public", however, can be critiqued as a fictional and totalizing concept.) These politics of

⁵ While not all postmodernists would agree with this statement, such is the nature of postmodernity. Postmodernism preaches heterogeneity and therefore it does not subscribe to a homogenous set of principles, practices or politics.

localism have been critiqued on the grounds that they are illequipped to challenge the institutionalized structures of power and inequality in modern society (Hunt, 1981, p. 83). We cannot assume, however, that local politics exist apart from the larger relations that constitute the state and our political institutions. If postmodernism intends to engage in local politics at the expense of a larger political understanding, it does not celebrate fragmentation and multiplicity but denies any understanding of the processes of our social world.

The critique of totality is a comprehensive argument that permeates all postmodern thought. It includes furthering arguments about subjectivity to critique truth and the subject. Heller discusses the subjectivity of 'Truth' and states that "...Truth is historical and...in our historical present there are many Truths" (Heller, 1993, p. 129). Truth becomes difficult to ascertain when the biases of reason and positivism have been so carefully exposed. Once the questioning and deconstruction of some of the conceptual practices of modernity begin to erode, modernity itself is eventually called into question.

Narratives of Science: is knowledge innocent?

In the social sciences, grand narratives are told by transcendent narrators who construct totalizing explanations of history which have a fixed point of origin and assume the centrality of the subject. These stories are divined by science and assume the progress of human history. To situate theory or politics outside of grand narratives is to reject, or at least challenge, these concepts. The critique of modern science, totality and the universal subject have figured prominently in these debates. These critiques are not new; such critiques have long figured in the background history of modernity itself (Collins, 1989, p. 114-115). The "crisis of marxism" has

produced innumerable critiques which could be seen as postmodern in substance and character, yet they have not abandoned marxism. Robert Antonio (1990) acknowledges that postmodern criticism has entered and transformed marxist discourses. Yet Antonio is not alone among the marxists who question the arrival of "post" since it indicates an "end" which is not thoroughly accepted among social theorists. Antonio is not convinced of the dangers of grand narratives; he is convinced of the value of historical holism.

Critiques of modernity, however, have been foregrounded today in a way which culminates a widespread acknowledgment of a crisis in epistemology and knowledge production more generally. Postmodernism in social theory arose partially out of the questioning of positivism and its dominance in the social sciences. The critique of positivism has been well established by critics embedded in modernity (Kuhn, 1970; Lukács, 1971), feminists (Harding, 1986; Haraway, 1991; Smart, 1989) as well as postmodernists (Lyotard, 1984). While this critique is not new, its character is still debated in the social sciences. An investigation of many of the critiques of modernity is rooted in the deconstruction and distrust of science itself. Once upon a time, science itself was the quintessential grand narrative: science seeks a total explanation; its history is one that delineates the progress of discovery and the correlate production of knowledge. Science is in the best interests of everyone (the subject is still universal), or so the story goes.

Feminists have argued that science has not operated in the best interests of everyone. Sandra Harding (1986) argues that the ideological and political identities of scientists affects scientific inquiry at every level of research and theory. Marginalized peoples have been systematically oppressed by the inaccessibility of education, institutionalized inequality and informal mechanisms which psychologically and socially subordinate people lacking social

privilege (Harding, 1986; Smith, 1987). In an oppressive social structure, researchers or scientists and the projects considered to be of merit are typically in service of the status quo, or the advancement of dominant ideology.⁶ Harding's critique explores the kinds of research questions which are posed, the practiced methodologies, and the categories by which data is measured: every area of science is permeated by the political.

While science was once constructed as a grand narrative, I am unsure whether we can continue to totalize the diverse scientific practices, beliefs and histories which exist today under the banner "science". Still, the continuation and development of scientific practice in positivist terms perseveres as a dominant paradigm. Today, however, many social science researchers and theorists recognize that the multiplicity of truth-claims complicates a reductionist understanding of positivism. The narrativization of science as it is instituted structurally in our social world does not always reflect the innumerable tensions within epistemological and scientific debates. The history of science is a more appropriate phrase here: how do we understand and attribute meaning to the development of knowledge production, past, present and future? (Agamben, 1993, p. 17-22)⁷ We construct stories which organize events and subjects and which plot the progression of reason. This is not the only story that could have been told; rather, it was the story that was

⁶ Scientific pursuits are not explored if they are not funded. Funding agencies are often interested in research for the purposes of marketing, public relations or profit. Any "pure" research is often conducted within universities and is increasingly coopted by private or outside agencies when a purpose for its findings is envisioned. The military are often well paying customers for university research that can be distorted into weaponry or other war-oriented pursuits. Another example is the large amount of cancer and now HIV and AIDS-related research that is funded by pharmaceutical companies. The search for a cure has now been historically shown to have taken a backseat to the generation and maintenance of an entire industry of research: "health"care and profit to be garnered from terminal illness.

⁷ The history of science is a large area which I will only touch on here. I recognize that the question of how we attribute meaning to an object/subject is the field of hermeneutics.

legitimized and rendered true. (Lyotard, 1984, p. 27-37) The story of science was constructed not only with the events and the subjects involved; it was situated in a matrix of power relations and historical, social, cultural and political structures. Events and subjects are not discrete categories which can be bracketed off from power relations and structures.

An engagement with these critiques can be disconcerting since they pose questions which destabilize scientific investments in both objectivity and reason.

Postmodernism calls into question the belief (or hope) that there is some form of innocent knowledge available... By innocent knowledge I mean the discovery of some sort of truth that can tell us how to act in the world in ways that benefit or are for the (at least ultimate) good of all. Those whose actions are grounded or informed by such a truth will also have their innocence guaranteed.... Conflicts between truth and power can be overcome by grounding claims to and the exercise of authority in reason. Reason both represents and embodies truth. (Flax, 1993, p. 133).

The embodiment of truth in scientific discourse becomes problematic in postmodern analyses because the privileging of reason itself becomes suspect. Whether it is feminists, marxists, Enlightenment philosophers or natural scientists, an overarching unity is proposed in grand narratives of science; this unity resides in the belief that reason⁸ will both lead us to truth and is itself truth. What has been missing from the debates about knowledge construction is the exploration of the relationship of science to the real (Flax, 1993, p. 135). The premise of epistemology today often rests on the qualification that if we could ascertain the truth of something, how would we do it?⁹ While epistemology and methodology approach the real with

⁸ Marx did not ground his theory in reason exactly, but rather in history. Nonetheless, history in marxism is often posited as a rational structure perceived as unitary and comprehensible by science and reason.

⁹ William Outhwaite (1987) comes to mind as one such example. His realist epistemology acknowledges the questionable relationship of science to the real through the kind of qualification I have pointed to in the text: "...the realist claim is not that any particular science, in its present configuration, has indeed captured objective structures

only a cursory mention of these issues, many postmodernists are intent on exposing the real as a shifting, negotiated terrain where truth operates as a discourse, not as a discovery.

If we approach truth as a discourse - unstable, heterogeneous and constructed - our understanding of history and historical explanation becomes fragmented. If truth is not a prepackaged discovery waiting to be exposed, but rather a construction based on innumerable historical, political and scientific investments, much of social science epistemology seeks mistakenly to *uncover* the real (a ready-made truth) when perhaps we need to deconstruct the *processes* by which we negotiate the real. In this context, the assumptions of modernity which are intent upon "the good" or emancipatory potential of science become an "innocent" inquiry into categories which may never have "really" existed. Indeed, this is the point of much postmodern criticism: social construction is operative in the social world, which includes our mediation of the so-called natural world as well.

When truth is understood as a discourse, paradigm shifts as outlined by Thomas Kuhn (1970) can also be understood to represent changing constructions of science and the real. If the buildup of anomalies in one scientific paradigm culminate in a revolution that institutes a new paradigm, perhaps we could think of these paradigms as discourses. Kuhn's point was that scientific knowledge is not progressively accumulated only in rational investigations of the real, as grand narratives of science might imply. Kuhn calls into question the construction of science itself

of natural or social reality, but merely that it is meaningful and pragmatically useful to posit the existence of such structures as possible objects of scientific description." (Outhwaite, 1987, p. 118) Instead of dealing with these issues, which admittedly is not the purpose of his book, he has proceeded to formulate theory which continues to privilege reason, as if such challenges to the grounding of science will not change the face (and substance) of knowledge production of science itself.

Another example of this is found in Steven Shapin and Simon Schaffer (1985): "It will not escape our readers notice that this book is an exercise in the sociology of scientific knowledge. One can either debate the possibility of the sociology of knowledge, or one can get on with the job of doing the thing. We have chosen the latter option." (Shapin and Schaffer, 1985, p. 14). As if the two had nothing to do with one another.

and the conceptual paradigms which inform knowledge production. What Kuhn does not critically address is the question of science's relationship to the real. He argues that the construction of science is not only an enterprise of reason, but it is also socially mediated. Kuhn, however, does not pursue the construction of science far enough to define it as a construction of the real.

Although this particular conceptualization may not work on every level of his analysis or intent, such an extension of Kuhn's theory does demonstrate disputed truths and the instability of the real. I also caution against reading such an extension of Kuhn as a "new way" to understand a whole story about truth or science; my intent is merely to expose historically dominant constructions of science which can be seen as paradigms, or possibly discourses of truth. This does not make this story the only story; rather, it locates two stories and suggests that there are/could be more.

The history of science as expressed in grand narratives assimilates different discourses in its story. This narrative has been legitimized largely through its separation from the false or fictional, not its affirmative correspondence to the real. Kuhn's paradigm shifts were not brought on only by a "discovery" of new information (or facts); rather, the accumulation of anomalous data reconfigured the truth-claims of a scientific community. Indeed, it appears that much of our narratives in and about science revisit Popper's concept of falsification. It is in this context which Michel de Certeau (1986) discusses the construction of history as a scientific discourse:

... Historiography credits itself with having a special relationship to the "real" because its contrary [fiction] is posited as "false".... It involves a double displacement, which renders a concept plausible or true by pointing to an error and, at the same time, by enforcing belief in something real through a denunciation of the false.... Consequently fiction is deported to the land of the unreal, but the discourse that is armed with the technical "know-how" to discern errors is given the supplementary privilege of presenting something "real". (de Certeau, 1986, p. 201).

If we accept the postmodern claim that truth is a discourse, and that the history of science is established by its separation from the false or the fictive, science's correspondence to the real is no more privileged, or true than fiction's. I propose that this does not mean a dismissal of science or knowledge production; instead, the exposure of science to fictive processes reveals its social construction. This does not mean that science is not true; it means that fiction is also true and that both are constructed within the realm of the real.

The Status of the Subject

If the boundary between science and fiction blur, what then becomes of the subject in this discourse? Located in these discussions of science and history are the invisible subjects which both write/construct and live within these narratives. These subjects are both real and fictive: by this I mean subjects exist in a material world which is located in the realm of the real (and the factual); subjects are also social constructions which can be real and fictive at the same time. The postmodern critique of totality, science and history has profound implications and repercussions for the subject. The universal subject erected by modernity has also entered a crisis. This "crisis of the subject" refers to two related but distinct positions in postmodern theory. I will discuss each of these in turn as the "death of the subject" and the "decentred subject".¹⁰

What these positions hold in common is a belief that the universal subject is no longer applicable to theoretical and epistemological debates, or the material world. The death of the

¹⁰ Seyla Benhabib posits these positions as the strong and the weak version of the "crisis of the subject" (Benhabib, 1992, p. 214).

subject refers to the complete rejection of the universal subject. By the universal subject, I mean an essentialized, autonomous human subject (individual and collective) which posits an undifferentiated human ontological location. Universal standards for ethics and politics do not correspond to the material world where every subject has particular interests, biases and is historically and culturally situated. This position states that universalism itself was always a myth and the autonomous subjects constructed in the social theories of modernity, have never really existed (Jameson, 1988, p. 17). The position of the "decentred subject" concurs with the assertion that the autonomous human subject no longer exists, but it accepts history and believes that once upon a time, such a subject did exist (Mouffe, 1993, p. 13).

Seyla Benhabib (1992) is concerned by the postmodern crisis of the subject and the political implications of this migration of our epistemological and theoretical allegiances in social science. Importantly, she situates the crisis of the subject in postmodern theory within a larger epistemological shift:

... I see a transformation in the object as well as the medium of epistemological representation from consciousness to language, from claims about truth and reality to a more limited investigation of the conditions under which a community of inquirers can make warranted assertions about truth and the real... (Benhabib, 1992, p. 212).

The displacement of metaphysics figures prominently in both feminist and postmodern criticisms of subjectivity and epistemology. Once the universal subject is decentred, the transcendent consciousness of metaphysics becomes a fiction. Language and narrative, as the objects and media of epistemological representation, both represent and constitute subjects. This shift also implies the migration from epistemology to geneology: instead of a theory of methods to produce knowledge, geneology interrogates the processes by which knowledge is constructed.

Habermas also recognizes the displacement of theories of consciousness by the philosophy of language (Habermas, 1992, p. 6). Relations of subjects and objects in the world are overthrown by the relations of language to the world.¹¹

The neo-Kantian formulation of spatial-temporal transcendence, once used to affirm the complementarity of the natural order and human science, has been replaced by a new form of transcendence in the synthetic visions offered by metanarrative. (Knoespel, 1991, p. 101)

What becomes important in this formulation is that the neo-Kantian transcendence was/is still expressed in narrative terms; however, Knoespel shifts the position of the (transcendent) subject from metaphysics to language. Michel de Certeau (1986) also makes clear the distinction between the narratives of metaphysics and the scientific languages that order coherent stories to plot the progress of science and history (de Certeau, 1986, p. 201).

The intent of my discussion so far has been to establish an argument for social constructionism: totality, narrative, science, the subject(s), history, literature, truth, and the real are all constructions. If the universal subject has been historically situated in western narratives which construct totalities, could it have been different? My discussion of totality in the contexts of narrative, subjects, and the history of science indicates that a belief in a coherent totality is not limited to only one of these areas. Totality has been a dominant mode of construction for western social theory, and its meaning has been questioned by theorists including the western marxists and

¹¹ Habermas views this split as advantageous since it proposes a new way to theorize the individual outside of the old dichotomy of metaphysical and anti-metaphysical thinking (Habermas, 1992, p. 44) However, Habermas chooses to reformulate the unified subject in post-metaphysical terms to further the emancipatory project of modernity.

the postmodernists.¹² The connection between grand narratives and the universal subject can be interpreted as the desire for a coherent whole and its subsequent construction. Totality in the particular context of epistemological debates in the social sciences can be witnessed in the varied narrative practices of ethnography. This is also the case in autobiography, life histories, oral history and several other methods, particularly those methods classified as qualitative. The blurring of fact and fiction is most evident in social research that engages particular subjects and constructs these subjects as structurally knowable in a larger social context.

Social Construction: If everything is constructed, what is truth?

Bakhtin (1990) argued that we author an "other" in social reality in much the same way that people author a character in a novel. His concept of polyphony (1984) explored the expression of characters from their own position in the life of the novel. Each character speaks for him/herself; each character has independent consciousness. Polyphony, or multi-voicedness, expresses heterogeneity. Many ideological positions interact in polyphony without the monological intent of the author interfering in the dialogue: "...the artistic will of polyphony is a will to combine many wills, a will to the event" (Bakhtin, 1984, p. 21). Within the polyphonic novel, the author is an historically situated moral agent living in an unstable social and political world. Bakhtin argued that one of the variables which gave rise to the polyphonic novel was the instability of social norms; the dominant ideology was in question, revealing a lack of cultural

¹² One example can be found in Martin Jay's (1984) discussion of the theoretical concern for totality in the history of western marxism. Another discussion which indicates a more diverse theoretical engagement with notions of totality can be found in Nancy Fraser's and Cornel West's comments after Fredric Jameson's article (p. 358-360) in the anthology *Marxism and the Interpretation of Culture* (1988).

homogeneity. Subject positions in polyphony, as in postmodern culture, are not unitary. The dialogic, as Bakhtin discusses it, is not only discourse but the development of utterances. These utterances are the specific positions of subjects and make the dialogic relationship possible. "Once dialogism and polyphony are recognized as modes of textual production, monophonic authority is questioned, revealed to be a characteristic of a science that has claimed to *represent* cultures" (Intro. in Clifford and Marcus, 1986, p. 15; italics in the original).

The impossibility of absolute representation has plagued science and epistemology; the theories and methods of social science are not immune to these hauntings. The narratives of sociology have traditionally been constructed with explanatory purpose and power grounded by the model of science. (This is applicable to both qualitative and quantitative approaches to research.) In the resulting textual production of knowledge from research or theoretical inquiry, as in Bakhtinian philosophies of the novel, the subjects of discussion are not only the "others" but the self as well. The interaction between unstable subject positions and polyphonic narratives reveals a different textual product than a narrative which is univocal and produces a unitary subject. If we say that culture is constructed, is it truth or fact or neither?

Bakhtin (1990) posits agency in a subject who is not unitary but constituted through polyphonic dialogism. In this sense, construction is a truth which posits the possibilities of many different/other truths. Judith Butler (1990) extends an understanding of the social construction of identity to look at the variable and simultaneous possibilities of subject positions. She argues that social construction does not render us powerless as fragmentary subjects; instead, the fact/fiction boundary of construction is a site of power available to us as subjects who are capable of re-constructing our identities. The fear that a fragmentary subject abolishes agency has long been a

concern of those who perceive this form of social construction as a descent into relativism and political nihilism (Benhabib, 1992, p.214-218). If we look at identity construction as both a factual and a fictive process which negotiates the real, truth is not compromised - truth takes on multiple possibilities.

Construction is not opposed to agency; it is the necessary scene of agency, the very terms in which agency is articulated and becomes culturally intelligible. The critical task... is not to establish a point of view outside of constructed identities; that conceit is the construction of an epistemological model that would disavow its own cultural location and, hence, promote itself as a global subject... The critical task is, rather, to locate strategies of subversive repetition enabled by those constructions, to affirm the local possibilities of intervention through participating in precisely those practices that constitute identity and, therefore, present the immanent possibility of contesting them. (Butler, 1990, p. 147)

The destabilized subject is the source of new narrative and political possibilities. Agency is not dependent on universals; instead, universals restrict the dialogic potential of agents. In the context of ethnography, for example, processual identity recontextualizes both the ethnographer and her/his subjects. The actual form and content of experimental ethnography emerges from the dialogic relationship between subjects. "The structure [of a narrative] is therefore not something given, entirely external to the person who structures, but a projection of that person's way of handling realities, here narratives" (Trinh, 1989, p. 141). A writer produces a particular kind of text and subject through narrative style and form. This context already decides the possibilities of the text even before the events and subjects are engaged. In science fiction as in social science, the possibilities of new narrative moments signify the possibilities of new forms of subjectivity.

Once we accept that the real is not a fixed location of meaning but a negotiation of both fact and fiction, Grandmother's story (related earlier in this Chapter) rings true. The stories we tell

children and the narratives of science fiction can be true stories, however unfactual they may be. Just as Grandmother's story is grounded in assumptions about the world and history, so too is science fiction. The truth of science fiction narratives may be very different from the truth of science narratives; perhaps because they interrogate technological culture from a different historical and social location - one which has been delegitimated in the real discourse of science.

We [science fiction writers] can play with Big Ideas because the garish motley of our pulp origins makes us seem harmless. ...Very few feel obliged to take us seriously, yet our ideas permeate culture, bubbling along invisibly, like background radiation.
(Sterling, 1986, p. ix)

The rise of cyberpunk presented both science and science fiction with a new subject, buried in a collage of modernist narrative traditions, riddled with in-jokes and subversive critiques of these multiple traditions. Gibson is adept as a bricoleur of incomprehensible spaces, the clutter of technologies, memories, histories (real and imagined), standard plot devices, philosophical challenges and tired stereotypes. I will discuss *Neuromancer* specifically in Chapter Three, but first I will explore a historical inquiry into the body and its relation to machines in sociological discourse.

Chapter Two

Selected Histories of Bodies and Machines

In the history of physics there is a well known story called the Ultraviolet Catastrophe.¹³ This is not a science fiction account, however catchy and 1960's new wave the title seems at first glance. About 100 years ago, or so the story goes, scientists believed that they had discovered all that could be discovered. Scientific knowledge of the universe was complete and everything was explained by theoretical dictums of the time. The universe was no longer a puzzle, but an example of the mastery of man's mind over the processes of nature. In a laboratory somewhere, a nagging experiment fermented discord, continually producing the wrong, and often inconsistent, results. Yet men continued to repeat this experiment, awaiting the time where it would perform correctly according to the laws already written in the completed canons of knowledge. One day a man had the idea that the experiment was not faulty, a speculation which led him to formulate a new way of thinking about light: could it behave as both waves and particles, contrary to the currently accepted knowledge? This was indeed a catastrophe which greatly unsettled the scientific community of the time, but led to the discovery of a new world of invisible particles, a world which Albert Einstein built upon some twenty odd years later. Today, some variation of the Ultraviolet catastrophe's experiments are performed in high school physics classes throughout the

¹³ This particular narrative was related to me in February 1997 by Gary Albach, a physicist (and friend) who lives and works in Vancouver. For a discussion of this crisis in physics, see Miller, 1996, p. 86-107.

world, confusing teenagers who are still otherwise led to believe that there is only one right answer to any scientific problem.

However, the lessons of this particular experiment did not break my teenaged belief that science was a one-way street to truth and knowledge. Within scientific history exists a multitude of such examples, instances where the truth is multiple and varied but our narratives have circumvented emphasis on the categorization of difference. Variable answers are rarely considered to hold their own truth in the grand narratives of scientific research; rather, they point to tainted experiments or failed hypotheses. To explore the so-called “wrong answers” in this context is most often considered a pointless pursuit. Could our bodies be both waves and particles, both flesh and spirit, or was the body really only the machine of blood and bone encasing the mind as Descartes proclaimed in the 17th Century?

Historical forays into the body in sociology are not empty inquiries, they reveal an engagement with different modalities of flesh and spirit that (most often) presumed that the body is a unitary phenomena. The body became a category and such categories had parameters - a process of normalization was sure to produce the ‘one right answer’ or the single rational Truth to this scientific problem. Mettrie, some 100 years after Descartes’ declaration of the mind/body dualism, took up some of the questions of the human body in his book *Man a Machine* (1751). His views were not popular at the time and this book was both banned and burned for the suggestion that the body may be nothing more than a machine, contrary to an already established Cartesian logic.

Sociological focus has tended to favour the role of consciousness and the mind over the body, implicitly accepting Cartesian dualisms. Philosophy has produced many outstanding and

fascinating accounts of the mind, consciousness and questions of ontology. In particular, Hegel's *Phenomenology of Spirit* (1807) was primarily a study in the development and evolution of consciousness, but its appropriation and development through the efforts of Feuerbach, and later Marx, grounded both mind and spirit in material concerns. Marxist materialism is not a stranger to the body; it continually reframes our analysis in terms of bodies, or actual living beings in the context of capital and social structures.

In the 1980s many social theorists began to deconstruct the body as a sociological text, a text filled with assumptions left nearly untouched since the *philosophes*. Although materialism brought philosophy back to the realm of real lived experiences, it still kept consciousness and the mind at the forefront of its quest for ontological significance. At this particular historical juncture in the 1990's, Mettrie speaks from a distant historical galaxy about bodies, machines, animals and boundaries; I could not help but read him through the work of Donna Haraway (1991; 1997) who also studies such cyborgs, or the beings that live in these boundary spaces.

Mettrie explores the corporeal significance of human beings as animals, but also as distinct from animals through the gift of language and the virtues of education. However, he is not interested in who lives in such boundary locales; rather, Mettrie is concerned with the firm establishment of such boundaries, a project of some importance in the sixteenth and seventeenth centuries. However, Mettrie himself seems to be at odds with the mechanistic views he purports. In an effort to establish the body-machine of humans and animals, his project becomes convoluted. It is here that I am most taken with Mettrie's struggle to categorize the body: he fully embraces the metaphor of the body as a machine but he also takes seriously the problematic of rigid boundaries.

To be a machine, to feel, think, know good from evil like blue from yellow, in a word, to be born with intelligence and a sure instinct for morality, and yet to be only an animal, are things no more contradictory than to be an ape or a parrot and know how to find sexual pleasure. (Mettrie, 1748, p. 71)

While Mettrie struggles with the mechanisms of the body, this becomes an increasingly unsuitable arena to establish difference between human, animal and machine. These categories slide into each other and emerge with the statement that the body of humans and animals are machines, creating the correlate implication that the distinction between human and animal is not as clear as it might appear.

You will be persuaded that the imbecile and the nincompoop are beasts in human form, as an ape full of intelligence is just a little man in another form, and finally that everything depends absolutely on the diversity of organization, a well-put-together animal to whom one has taught astronomy can predict an eclipse... On the basis of these observations and truths, we can attribute the admirable property of thinking to matter even without being able to see the connection between the two, because the subject of that thinking is unknown to us. (Mettrie, 1748, p. 75)

Mettrie recognizes that these boundaries provide a mode of categorization or a lens to view the "nature of matter." The nature of matter, however, does not preclude the involvement of the mind. Mind is not something that is outside of the body, nor is the body outside of the mind. By the close of the book, the categorization of the mechanistic body is riddled with the problematic of categorization itself. "Let us, therefore, conclude boldly that man is a machine, and that the entire universe contains only one single diversely modified substance." (Mettrie, 1748, p. 76) The boundaries that Mettrie establishes are not rigid, but rather fluid. While such treatises on the mechanism of the body struggled with the separation of mind and body, Mettrie has given thoughtful insight into the implications of such boundaries.

Haraway's work also operates within this area, but a few centuries later the Cartesian trajectory has produced a struggle with the boundaries between mind and body, as well as machine, human and animal. She is more concerned by who lives in these boundaries, and such creatures are her "hopeful monsters". In the odd historical collage produced by this particular boundary adventure, Deleuze, Guattari, and Foucault also surface to interrupt with ideas on the "assemblages" of production and desire and histories of the "polymorphous techniques of power" (Foucault, 1978, p.11). Within and amongst the webs of narratives/ knowledges live the liminal creatures whose masquerades are always (at least) morphological: indeed, bodies are the liminal creatures of this discourse.

What is the body?

The body is a factual as well as a fictional category. The body is a very real tangible touchable being which coexists with a marked specificity and multiple subjectivities. The body is a discourse and it is also a living practice. However, none of these comments make it clear what exactly goes into a body. As the organic result of genetic programming, as well as a creature which interacts in an environment, the body is irreducible to the status of organism whether we are discussing the human body, the body of an animal (nonhuman and human) or the body of the Earth. The human body is a shifting terrain which emerges in the context of that which is not human. There are, of course, nonhuman bodies as well, which include nonhuman animals as well as machines or bodies manufactured by humans (Haraway, 1997).

In this chapter I will touch on the body as it has been constructed in western philosophy, that is, predominantly as a receptacle of consciousness. In this sense, the body operates as part of

a dualism in a universal story which precludes multiplicity. This dualism however, is not transformed only by a practice which seeks to shift the balance of value and power, as evidenced by early manifestations of feminist theory and practice. In the second section, I will look at feminist identity theories and practices which establish the body's value in theoretical discourse. The body in this context is the origin of knowledge rather than its repository. This shift, however, does not bring about a level playing field politically or socially. It does, however, further illuminate the need to carefully consider the effect of bodies on the organization of social practice (and vice versa) - not as the location of knowledge/value but rather as the locale of transgression. By this, I mean that bodies become more than a site to be mapped; they become an ever-present scene of process, a "becoming" which I refer to as a "liminal creature". These two concepts are borrowed from my readings of Deleuze and Guattari and Rosanne Allucquere Stone respectively.

In the final section of this chapter I will explore these conceptualizations of the body as it inter-relates and interproduces subjectivities. The body is a system of organization, if it has not already become apparent by the selected historical moments discussed above that grapple to understand what is at once a scientific fact of matter as well as an intangible supernatural phenomena. The concepts of "becoming" and "liminal creature" most clearly expound the body as a system of organization with a profound physical, psychical and social (inter)relationship to the self, subject formation and multiplicity at the level of identity and performance. This relationship is interactive and multi-dimensional, not to be confused with the body as a set of inscriptive surfaces. Although theories which organize the body as a set of surfaces are important to the conceptualization of "becoming", they also reduce the complexity of corporeal experiences.

Inscription points to an interactive relationship with self (and others) while maintaining the idea that the body is a locale to express an interiority.

All these different interpretive grapplings with the body reveal a familiar struggle: the struggle to represent. The claim to knowledge is, after all, a claim to represent a "real" picture. Representation has historically been a scopic articulation (at least in the west), even amidst the proliferation of discourse theories and deconstructions of postmodernity. Histories are, after all, narrative representations of time, space, subjectivities and materialities. Who represents whom is a contested terrain which has been explored by many critical theories, modern and postmodern.¹⁴ The nature of representation itself is not completely transformed by technology; indeed technology itself is a form of representation. It is no accident that technology as it has developed in western industrialized nations is expressed through increasingly sophisticated scopic regimes. The western medical approach to the body is based on a history of anatomical dissection which separates parts of the body from its correlate, the whole organism. This conceptualization of the body as a distinct organism has coincided with enlightenment beliefs about discovery and truth. Imaging technologies and plastic surgery are but a few examples of how the scopic has predominated in medical knowledge of the body (Balsamo, 1996).

The scopic also operates in overt ways through mass media representations of bodies, predominantly women's bodies: the ideal body is controllable and disciplined (in the most Foucauldian sense). In this sense then, the body as a category isolated from its environment is a wild demon to be tamed; its internalized and self-imposed subservience (achieved via the great organ, the mind) is paramount to the panoptic success of social order. *The body is implicitly*

¹⁴ Representation is the heart of epistemology, social theory and politics. On some level, all claims to knowledge are representations of a "real".

viewed as a tool to shape the mind. Here, again, surfaces assumptions about the categorization of the body and its *function*, which gains relevance only in relation to the mind. Technology has been produced from a place of visual desire with the productive effect of accelerating our scopophilia. The desire to see/know the body, inside and out, has produced the body itself as a fetish. Yet, scopic is never an independent relation; it always implies touch (Haraway, 1997).

Philosophy and Identity Theory

The claims of philosophy and the claims of identity theories are like two sides of the same coin. Philosophy finds the location/origin of knowledge in the mind while identity theories locate knowledge in the body. Although this may at first appear to be a very oversimplified approach to a complex subject, it is worth noting that the extreme differences between these traditions of intellectual discourse and practical action are not equal or reactionary but both do exist in the same theoretical framework. Identity politics were fueled by the rejection of transcendent philosophies and political theories, both of which completely excluded large segments of the population in the name of universalism. In that sense, identity theory and politics can be viewed as reactionary; however, philosophy has not developed unfettered by the academic politics of its historical contexts which are dominant narratives and lived practices of privilege. The point is not to establish all theory and politics as reactionary, but rather to illuminate the necessity of historically situating this discourse. This does not judge either side as True, as there are many true stories. The previous chapter discussed the blurring of the boundaries (or a possible collapse of them), between what counts as factual, fictive and real.

Sociology and Western Theoretical Traditions: The natural body, the discursive body

Sex, like being human, is contextual. Attempts to isolate it from its discursive, socially determined milieu are as doomed to failure as the *philosophe's* search for a truly wild child or the modern anthropologists efforts to filter out the cultural so as to leave a residue of essential humanity. ... The private, enclosed stable body that seems to lie at the basis of modern notions of sexual difference is also the product of particular, historical, cultural moments. It too, like opposite sexes, comes in and out of focus (Laqueur, 1987, p.16).

Sociological theory and western philosophical traditions have been historically, but contingently, exclusionary. By this, I mean that the subject of sociology and philosophy have not been representative of society. Rather, these disciplines have reflected the social and material privilege (and oppressions) of their developers, as well as the historical time and context of their development. The subject of social theory is never constituted outside of these considerations. Social theory has masked this contingency with an incorporation of exclusionary practice that both constructed a universal subject and designated it as possessing natural embodiment. The western theoretical tradition has been grounded in the belief that reality and human nature are knowable. Theorists such as the *philosophes*, and later, various forms of marxist and critical theorists, believed that human emancipation depended on their ability to know how the world worked. "...[T]he philosophes had a fundamental faith in the human potential to know reality whole" (Jay, 1984, p.31). This knowledge was based on a privileged epistemic status in search of a unifying paradigm. Marx himself claimed epistemic privilege in the development of historical materialism (Seidman, 1992, p. 56). Indeed, all of the Enlightenment thinkers claimed transcendental status and a privileged view of the world. This project was seriously challenged

with its possible dissolution by the rise of new social movements in the 1960's. This challenge is directly linked to a pervasive crisis of representation and authority.

The body has never been the explicit subject of representation in sociology or western theoretical traditions. It is the organic component of the self or the natural receptacle of the social. This approach to the body is both incomplete and fragmentary however, relying heavily on science's perception of the body as a single biological organism (natural) and social sciences' one-dimensional belief that the body is the necessary (natural) locale of action and expression (social and cultural). Biology has generally been the backdrop to the dominant spheres of the sociological, however, craniometry, hormone therapies, and persistent voguings of sociobiology are but a few glaring examples of sociology's direct engagement with the biological.

Many sociologists and feminists have skeptical and suspicious reactions to the designation "natural". The body as both a social construction and a material biological organism uncovers the multiple implications of being a body which is never neutral or universal. Bodies signify race, gender, sexuality, age and ability in social and material ways. The lines between genetic code and social signification, inscription and expression are muddled. Nature and culture have been key concepts in understanding many aspects of theory, and they are of great importance in discourses of the body.

In sociology it is the social, rather than culture, [that stands in opposition to nature] and the social is defined as that which is not nature. I want to suggest that this opposition provides a certainty for social scientists: the presence of the social through a negation of nature....Nature is thus used as a means of demarcating the social (Game, 1991, p. 33).

Game continues to elaborate that this means of demarcating the social has had the historical consequence of jettisoning the body from the realm of sociology. This separation of nature and

culture has been most elaborately explored (and often reproduced) in feminist theories which have deconstructed the methods by which sex and gender are established as coherent categories which coalesce around embodiment (Hekman, 1990; Butler, 1990; Haraway, 1991).

Biology, however, has not only been the rallying call of those who seek to claim power and privilege against those who have been socially marginalized. Radical feminist theories have contributed a great deal to an analysis of biology in terms of sex as a primary determinant in the social oppression of women (Beauvoir, 1974; Daly, 1978). O'Brien (1981) explored the legacy of radical feminist theory by framing a theory of reproduction which she associates with giving life, to theories of production developed from Hegel and Marx which she associates with death. O'Brien asserts that the imbalance of gendered power relations are specifically tied to the biology of the reproductive process and our social organization of reproduction. Her primary thesis states that men are so alienated from this process, both biologically and socially, that they have forged property relations which exert their constructed (un-natural) power over social and political economies. These relations of property and power extend into the private realm as well as the public, where they visit the world of women and children with an alienated vengeance.

The distinction between nature and culture leads to a conceptualization of sex as a natural, genetic fact largely assumed in the sexual specificity of the body. Following this construction, gender can be clearly designated as a social practice produced by social structure and finding expression within the natural (pre-social) body. Radical feminist theory brought biology into the realm of the social even though they replicated the unsavory mistakes of biologically determinist theories. The separations between nature and culture excluded the body as a field of sociological study for sure, and the body played a very small role in enlightenment philosophy as well. The

body as a natural designation was properly the study of anatomy and the “natural” sciences. The history of the body in anatomy has been the subject of many volumes of analysis - and the role of sexuality has prominently figured in many of them. Thomas Laqueur’s (1987) historical study establishes the body as a field of the social that has been primarily expressed historically in the medicalization of sex/gender and sexuality.

The history of anatomy was not an innocent inquiry into a natural organic organism - it constructed a whole organism which existed separate from its environment and other bodies that surrounded it. It was (and still is) primarily an individualistic model which smacks of an active construction of universalism in the human species. That subject was always a sexed, raced and gendered subject, but sexed, raced and gendered differently throughout history. The development of anatomical science only recognized sexual dimorphism as opposed to the previous “one-sex” model in the late 18th century (Laqueur, 1987, p. 157). The “one-sex” model was a male model, upon which the female was transposed when necessary, an erasure of specificity that greatly influenced the formation of gender relations.

Sexual dimorphism has been a critical discourse in the establishment of the truth about the body, sex and gender. Sexual dimorphism today claims a two-sex model for the human body which relies on biological features ranging from hormones and chromosomes to visual identification of secondary sexual characteristics. However, social theory is increasingly beginning to grapple with the possibility of a third sex and/or third gender, although this challenge has often been marginalized. A “third” sex/gender, as it is being used in these histories and discourses, is not a literal “one-more”; instead a third category points to alternate possibilities which can be multiple and varied. A third sex/gender proposes another reality altogether that does not recognize sexual

dimorphism as a biological fixity. Historically, there has been cross-cultural evidence of third sex/gender, a phenomena that has been present in anthropological fieldwork for decades in diverse locations (Herdt, 1994, p. 16-18). This is not to say that evidence of a third sex/gender has been absent from western history and culture, it has most notably existed in the designation of hermaphrodite. Western treatments of biological challenges to sexual dimorphism have generally been to dismiss them as deviant aberrations which are “really” male or female.

The process of constructing sex, however, was accompanied by the construction of racialized and racist discourses. Race as a discourse of biology has had immense social and scientific consequences. The end of the nineteenth century was a critical time in the discourse of race as well as sex. The notion of race predominately related to blood lines and kinship at this time, feeding the early twentieth centuries notions of blood and evolutionary paradigms.

Organic rank and stage of culture from primitive to civilized were at the heart of evolutionary biology, medicine, and anthropology. The existence of progress, efficiency, and hierarchy were not in question scientifically, only their proper representation in the natural-social dramas, where race was the narrative colloid or matrix left when blood congealed. The plenum of universal organic evolution, reaching from ape to modern European with all the races and sexes properly arrayed between, was filled with the bodies and measuring instruments proper to the life sciences (Haraway, 1997, p.233).

What Haraway makes explicit in this discourse of race is that the groundwork for eugenics is located in historical constructions and narratives, not only about race, but about race as it is sexualized within the ‘natural’ historical discourses of taxonomy and hygiene. Race was a “pure” category, a signifier that should not be corrupted and should not corrupt: “For many in the first decades of the early twentieth century, race mixing was a venereal disease of the social body, producing doomed progeny whose reproductive issue was...tainted...” (Haraway, 1997, p.233).

The transfiguration of race and sex is always bound to specific bodies and narrativized in terms of families. Families are the (reproductive) source, or origin, of blood lines. The exploration of the family however, was never an innocent enterprise; the bloodlines of many cultures, although most notably the Africans, (Haraway, 1989) were exploited in the racist histories that brought us the "Family of Man" via Natural History.

Foucault (1978) investigates the body as a designated realm of sexuality, but his focus is the historically mutable categorizations of sexuality and the relationship to desire and power. In this sense, the body is interrogated as a discursively produced and productive site. Sexuality, sex and the body are highly variable constructions depending on several other social and cultural factors, predominantly the organization and exercise of power.

Sexuality is tied to the recent devices of power; it has been expanding at an increased rate since the seventeenth century; the arrangement that has sustained it is not governed by reproduction; it has been linked from the outset with an intensification of the body-with its exploitation as an object of knowledge and an element in relations of power (Foucault, 1978, p. 107).

Sex here is an effect of power; it is the historical production of sexuality (as a system of discourse and power) that generates sex and the body in an attempt to disguise and reproduce its productive power. Foucault's proposition that the juridical subject is formed, defined and reproduced by structures that they come to represent shines through this formulation of the system of sexuality (Butler, 1990, p. 2). A model of juridical power is useful to underscore exactly how systems of power have produced naturalizing effects which reside in (or on) the body, yet, Foucault approaches the body as an inscriptive surface upon which juridical power acts. Underlying this approach is an assumption about the fixity of the body: the body may be variable but this is only a result of the effects of power. It is not that Foucault implies biological stability or an original site,

moreover it is that the body as a category collapses into a site that always pre-exists power.

Deleuze and Guattari (1987) pick up this aspect of Foucault's work and argue that the categorization of the body is indicative of productive power, but not necessarily an effect of it. I will further explore these ideas in the last section of this chapter.

The notion of the discursive body is compelling and useful to feminist analyses of subjectivities generally, but its reformulation of agency and identity has been challenged by both feminist and non-feminists alike. Many feminists have been disturbed by the death of the subject at a time when women are finally beginning to establish their claims to subjectivity (Braidotti, 1989; Fraser and Nicholson, 1990; Brodribb, 1992). Foucault's work on sexuality has also been viewed as a useful tool for feminist discussions of sex/gender. Judith Butler (1990) takes up Foucault's analysis of power to expose sex as "always-already" gender. There is no nature-culture bifurcation which has filtered into sex-gender, object-subject relations in Butler's thesis; instead, all of these categorizations are modes of naturalizing the social to further an agenda of power. The feminist criticisms of the universal subject provoked theory which tried and succeeded to remake the Cartesian subject - with women added. As I argue in the following section, this response did not dislocate the problematic aspects of Cartesian subject that began to surface and it also did not fundamentally challenge social institutions and structures perpetuating oppressive social and power relations.

Identity Theory and Politics: New Social Movements

The search for the "good society" was subjective and suggested that the *philosophes* knew what was best; they would know the "good society" when they had constructed it. Such attitudes

of elitism were seriously called into question by the new social movements of the sixties¹⁵ including the civil rights movement, the student movement, the women's movement, and the peace movement. New social movements today have grown to include other areas of activism, most notably the gay and lesbian liberation movement and the environmental movement, but the grass roots history of the left in the sixties has clearly left its mark on all of them. For the purposes of my discussion, I will most closely examine the women's movement and the core concepts that emerged from the second wave with an eye towards identity theory as it developed in feminism over the past thirty years. My focus is theoretical, examining explicit beliefs about embodiment through the lens of women's identity. The rise of postmodernism has played a role in feminist theory, as much as feminism has played a role in postmodernity.¹⁶ The tensions between postmodernism and feminism are numerous but productive in an analysis of identity theory. Seidman (1992) sees the rise of postmodernism linked to the continuing development of new social movements in the 1970's and 1980's. The shift in leftist politics at this time from labour politics to new social movement politics has fostered the development of postmodern theory. While marxism facilitated social criticism for feminist, gay, and black activists, it still privileged class over other 'identity' politics (Seidman, 1992, p. 50). Eventually, this led new social movements to break with traditional marxist discourse.

¹⁵ I think it is important to note that the Civil Rights movement in the United States was not limited to the sixties; it was active in the USA as early as 1955 when Rosa Parks refused to give up her bus seat (Gitlin, 1987, p.39). For the purposes of this paper however, I will refer to the social movements of the sixties, although I am not ignorant of the activism that preceded the more famous manifestations of new social movements.

¹⁶ This is not to say that enlightenment philosophy and the western canon has not played a role in feminist theory. However, the roots of postmodernism are often located in French theory and the events at the Sorbonne in Paris, 1968. The different historical contexts of American and French feminisms have produced marked differences in their responses to postmodernity.

This break with marxism indicates a larger problem which identity politics takes up as part of its praxis. The social movements of the 'developed' world, as well as movements in the emerging postcolonial world, argue that people are oppressed on the basis of social identities which are not easily reduced to economic relationships. The socially distorted identities of marginalized groups have been naturalized and legitimated by science. Science in this context is, again, revealed as a value-laden, historically situated, subjective conceptual approach (Sayer, 1984, p.50-54; Kirby and McKenna, 1989). New Left politics of this era sought to remake a public sphere that was representative of the population. The struggle of politics and social theory is ultimately a struggle of representation.

Identity politics and theory returned feminism, perhaps indirectly, to a careful consideration of embodiment. Identity theory and politics, as I am using it here, refers to a loosely bound collection of ideas, theories and practices in feminism that professes the privileging of experiential knowledge with an acknowledgment of, and active movement to represent, diversity amongst women. Although some of the core concepts of feminist standpoint theory survive (most notably, the epistemic privileging of experience as the basis of truth (Grant, 1993)), identity theory also argues that variable experiences, perspectives and knowledges proliferate amongst groups of similarly identified and identifiable women. In practice, this has meant group and caucus processes and coalition politics replaced consciousness raising groups. In theory, it has meant a rethinking of much early feminist work on "Woman" which was exposed as an exclusionary category that had been universalized from the experiences of mostly white, middle class women (Lorde, 1984; Bulkin, Pratt and Smith, 1984; hooks, 1984).

The claim to ground knowledge in experience places subjectivity and identity firmly in the realm of embodiment. This is not to say that consciousness became irrelevant, but rather that sex/gender, race, class, sexuality, age, ability all mark the body in specific ways. Identity theory brought the particularity of bodies to the forefront of (white) feminism.¹⁷ Demands to become more inclusive shook the feminist community, and such conflicts remain unresolved in theory and practice today. This crisis in feminism echoes the crisis of representation that occurred in the legacy of the universal subject. The crisis was somewhat more complicated however, and the questions leveled at the feminist community were not only about an absence of representation, but also who had the *authority* to represent.

What I find compelling in this juncture of feminist history is that the location of knowledge is placed in the body of Woman, and then in the bodies of women. The body as the location of the subject is a familiar theme, but instead of the body being the locale of the mind or consciousness as western theory proposed, the body determines the experiences of a person - *their oppression marks their consciousness*. In a curious flip that Marx would appreciate, identity theory turned western notions of embodiment on their head. Grosz (1994) has characterized these two approaches to the body as “the inside out” and “the outside in”. Neither completely transforms the framework of the other; they remain dependent on oppositional Cartesian constructs. The legacy of Descartes resurfaces in a different guise to reiterate the transparency of the corporeal.

¹⁷ I am using the phrase “white feminism” to connote several discriminatory practices within the women’s movement which were racist, but also heterosexist, homophobic, ageist, classist and ableist. Predominantly, this was referred to as “white feminism” because the initial women identified with making these challenges to feminism were women of colour.

Deleuze and Guattari's BodywithoutOrgans

Deleuze and Guattari (1987) have moved the category of the body into a relational field which differs quite dramatically from the naturally or discursively passive body. They are still interested in the ways in which signification affects bodies, but bodies are reformulated as contextual categories. There is no concept of "the body" so much as there is an establishment of an inter-relationship between bodies which can be human, animal, non-human or environmental. The rhizome is pivotal in understanding the way in which Deleuze and Guattari conceptualize what they call the BodywithoutOrgans (BwO).

...any point of a rhizome can be connected to anything other, and must be. This is very different from the tree or root, which plots a point, fixes an order. ...not every trait in a rhizome is necessarily linked to a linguistic feature: semiotic chains of every nature are connected to very diverse modes of coding (biological, political, economic, etc.) that bring into play not only different regimes of signs but also states of things of differing status. *Collective assemblages of enunciation* function directly within *machinic assemblages*; it is not impossible to make a radical break between regimes of signs and their objects (Deleuze and Guattari, 1987, p. 7; italics in the original).

This project maps space, but the space of philosophy is not limited to the academic; Deleuze and Guattari's rhizome permeates diverse areas. Rhizomes are connected ceaselessly to other spaces, emphasizing heterogeneity and multiplicity. Multiplicity here is a transcendence of binarisms (nature/culture, subject/object) but it also transcends the One (for my purposes, the body); multiplicity is when "...the multiple is treated as substantive" (Deleuze and Guattari, 1987, p. 8). Another key feature of rhizomes is asignifying rupture, a continual refiguration of aspects or lines of the rhizome. If a rhizome is composed of lines and one is broken, this line may take on a new

path or re-irrupt on the same path as several lines. These ruptures rebound and restructure perpetually from these middles, for rhizomes are polycentric and polymorphous systems.

The rhizome is crucial to understanding the formation of plateaus in their work which are the polycentric and multidimensional levels that encourage links and assemblages. This BodywithoutOrgans is processual and immanent, consisting of flows, intensities, energies, speeds, dimensions, and becomings instead of delineations of boundaries for organs, bodies, species. Becoming is not limited by sex/gender, race or any of the identities we have come to associate with a lived or experienced body. However, becoming-woman is a becoming both women and men (as we currently live those categories) can access; by this Deleuze and Guattari propose that the BwO can form links and/or circulate intensities that produce the assemblage woman. What this means for feminism is unclear; there are alliances to be forged with rhizomatic theory, but there are also cautions to be extended.

It is not by accident that the language of Deleuze and Guattari plays with the machinic and mechanistic metaphors of the seventeenth and eighteenth centuries' writings on the body. It is also not an accident that the rhizome is a modern scientific term for a biological feature of an organic system. The acknowledgment of nature/culture binarisms as well as their transformation is constituted by these pervasive slippages; indeed, the repetition and continual feedback loop of these lines of intellectual flight *naturalize* the rhizome. This process by which the machinic becomes natural is an intentional slippage, and also a commentary on anti-naturalness, which is not reducible to culture but is also not culture's alterity.

It is in the context of Deleuze and Guattari's desiring machine that Mettrie's struggle to elucidate borders takes a particular significance. Mettrie's borders are revealed as wholly

arbitrary, contradictory, historically predictable (in retrospect of course) and multiple. While the body does not figure prominently in the first half of *Man a Machine*, it does star in the second half of the book when Mettrie grapples with questions of the soul. His drive to erect boundaries feeds a fascination with the machine as a subservient object of production as well as an ontology of productivity itself. Mettrie's boundaries are the markers of our representations: what does it mean to be human? or a plant? or an animal? These philosophical and ontological categories are both absorbed and subverted in the acts of "becoming-human", "becoming-plant" or "becoming-animal". The importance of these boundary spaces is precisely their (productive) power to categorize. If we strategically invoke Foucault, this act of production claims to represent the space which it has actually produced. The key point here is that *these boundaries or categorizations have productive power*. If we transpose an analysis of corporeality, bodies as multiplicities are granted productive power which is not reducible to reproduction (the theoretical rearticulation of sexual dimorphism and "nature") or production as merely an effect of power. Bodies are exposed as contingently bounded categories whether their containment is considered natural or social.

Feminisms, the BodywithoutOrgans, identity and madness

"Why do our bodies end with our skins?" (Haraway, 1997)

Haraway's question may seem an obvious sarcastic poke at the resurgence of the body/bodies in social theory, but it also points to the necessity to situate the body in a context which is not only historical but environmental as well. To some extent, Deleuze and Guattari have

provided a theoretical landscape that is conducive to feminist projects. However, although there have not been as many feminist theorists engaged with their work, there have been some notable criticisms. Luce Irigaray (1977) has critiqued some of the conceptual tools of Deleuze and Guattari as indicative of yet another commentary on the phallogentricity of theory.

...do women rediscover their pleasure in the economy of the multiple?...I am certainly not seeking to wipe out multiplicity, since women's pleasure does not occur without that. But isn't a multiplicity that does not entail a rearticulation of the difference between the sexes bound to block or take away something of women's pleasure? In other words, is the feminine capable, at present, of attaining this desire, which is neutral precisely from the viewpoint of sexual difference? Except by miming masculine desire once again. And doesn't the "desiring machine" still partly take the place of woman or the feminine? Isn't it a sort of metaphor for her/it, that men can use? (Irigaray, 1977, p.140-141).

Multiplicity here collapses into an economy of the Same for Irigaray because it does not address the specificity of woman's desire. While Deleuze and Guattari have carefully reformulated the nature of desire to issue it from a productive place rather than a lack, does that location still locate itself in the feminine? The desiring machine has feminist potential but as long as the erasure of sexual difference marks it, the technology (machines, language, sex) remains masculine. The affirmative, productive construction of desire still requires a locale of alliance that Irigaray suggests takes place on woman's body: the reterritorialization of "becoming-woman".

Grosz (1994) has written more substantially on Deleuze and Guattari's potential for feminist theory. While she believes that there is potential in their work for feminists who are deconstructing gender, she also sees significant problems with the *BodywithoutOrgans* and their theory more generally. I am most concerned by two of Grosz's criticisms for the purposes of this

thesis. The first is the romanticization of psychiatric illness and its tenuous (but implicit) connection to the category of becoming-woman

...Deleuze and Guattari invest in a romantic elevation of psychoses, schizophrenia, becoming, which on one hand ignores the very real torment of suffering individuals and, on the other hand, positions an unlivable ideal for others. Moreover, in making becoming woman the privileged site of all becomings, Deleuze and Guattari confirm a long historical association between femininity and madness which ignores the sexually specific forms that madness takes (Grosz, 1994, p. 163).

This criticism points to a potentially more dangerous aspect of their work - where does the lived specificity of embodied experience enter the world of a BodywithoutOrgans? Although Deleuze and Guattari seek to refigure the body as affirmative and productive, rather than negated and lacking, they have glossed over and perhaps romanticized aspects of these conditions.

The second criticism Grosz outlines is the notion becoming-woman itself. Becoming-woman is constructed as process of becoming which is deceptively sexually specific by using the designation "woman", when it takes no notice of particularities associated with identity (categorizations which are considered illusory representations) or desire. Deleuze and Guattari seek difference outside of the order of representation that proliferates binarisms and the designation of man/woman. Grosz indirectly echoes Irigaray's concerns with desire: if the positive affirmation of desire as productive process replaces the Oedipal development and corresponding location of lack in psychoanalytic theories, the designation woman still inhabits the second position of Other. These are difficult issues which are by no means absent from feminist theory or postmodernism more generally.

Deleuze and Guattari however, are also instructive if we listen closely; becoming is a process - the rhizome does not judge, it feels and acts. This is not the reassignment of ontology

and essentialism because feeling and acting are particular links or assemblages which cannot be hierarchically structured and re-presented as Truth. Isn't this part of what feminism has been talking about? Deleuze and Guattari would answer Haraway's question by saying no, our bodies do not end with our skin. In terms of the environmental crisis, the assemblages people might make while becoming-tree, or becoming-animal may expand our sense of interconnectivity with other beings and the land. These are not new concepts, but very old ones found in many shamanic cultures (Deleuze and Guattari make some use of this knowledge), pre-Christian Europe, pagans worldwide, and in many First Nations and Indigenous Cultures. To some extent, these cultures have always recognized the socio-cultural construction of nature; instead of seeking to clearly mark boundaries between the two, they work "between the worlds".

Chapter Three

Bodies, Cyberspace, Subjectivity, Neuromancer

“Science Fiction: The body’s dream of becoming a machine.”
(Ballard, 1992, p. 277)

William Gibson’s *Neuromancer* was published in 1984, the end point in the Orwellian trajectory of doom. Gibson conjures a futuristic world filled with the extremities of our social strata, but none of the middle sections. The bodies of this world are diverse, ranging from completely organic humans to virtual bodies to modified bodies to Artificial Intelligences and automatons. I have chosen *Neuromancer* as the primary text for this project because it is still engaged as the definitive cyberpunk text and speaks to a rising cultural prominence (or obsession) with the accelerating technological impact on our everyday lives. Although the body is not the explicit subject of the novel, the characters are embedded in technology and explicitly embodied by it as well. The diffuse nature of embodiment and the malleability of the category “body” is captured by Gibson’s construction of artificial intelligence, making the other cyborg bodies that litter the text more evasive.

Neuromancer was the first novel of an unofficial trilogy also including *Count Zero* and *Mona Lisa Overdrive* which constitute the second and third books respectively.¹⁸ *Neuromancer*

¹⁸ Gibson has proved to be a prolific writer since his splashy debut novel *Neuromancer* which won the Hugo, Nebula and Philip K. Dick Memorial Awards in 1984. His most recent novel is *Idoru* (1996); also to his credit is *Virtual Light* (1993), *Burning Chrome* (1986), *Count Zero* (1986), *Mona Lisa Overdrive* (1988) and *the Difference Engine* (the latter co-authored with Bruce Sterling). *Virtual Light* and *Idoru* are set in the pre-*Neuromancer* world of the very near-future. However, these are still haunting futures wrought with a paradoxical familiarity, cultural alienation and an edgy, abject sensibility.

offers insight into a recent historical juncture (the eighties) where the reformulation of the body became a popular focus for artists, scientists and cultural theorists. Survival Research Laboratories (SRL) is only one of the many performance art groups which seeks to provide a forum for technology to express itself by building machines and then giving them the space to “perform” for a human audience.¹⁹ The performance of these machines usually includes their eventual destruction by one another, but there is no moralism associated with this destruction by Pauline and Co. It is a rupture in narrativity precisely because meaning is absent:

...where Cyberpunk reveals a penchant for surrealism, the clearest precursor for a Survival Research Laboratories performance is dada, in all its antirationalist, technoterrorist tactical glory. After all, the notion of an out-of-control technology that reduces all human attempts at understanding to the level of the absurd and irrelevant, is hardly without precedent in the twentieth century. In fact, the “meaning” of “meaningless” destruction in SRL performances is entirely clear in its assault on the convergence of technology, consumerism, militarism, and commodification (Bukatman, 1993a, p. 290-291).

There would seem to be no machine ontology being constructed by the members of SRL, however the audiences of these spectacles construct their own stories in the absence of narrativity. SRL is a cyborg enterprise; we negotiate the meanings of these boundary stories spawned between the worlds of technology and bodies. The videos that SRL produces give an even more refined vision of the collision between the organic and the mechanical. When the humans scrambling in the “off-space” to set these mechanical beings in motion is edited out of our point of view, a much eerier feeling ensues indicating that these machines are thinking and acting of their

¹⁹ The character Slick from *Mona Lisa Overdrive* is modeled after Mark Pauline of Survival Research Laboratories.

own volition. The first time I watched an SRL video, I heard the piercing screams of these hybrids for weeks after watching the video and any passing machinery on the street seemed to mimic these noises. SRL gives the machines voice, but when we think about the particular invested projects of science, and technology, are the machine voices really their own? The questions that SRL raises in audiences, live or via video, are the same questions that science fiction addresses: what is the future of technology and society, and who controls that future?

Wajcman (1991) has argued that technology has developed with a masculinist bias and that the ideology of masculinity is implicitly bound up in the development of technology. She distinguishes between different forms of masculinity that impact technological interaction. Forms of masculinity, however, vary culturally and historically. Her analysis explores how different ideologies converge to impact a hegemonic association between masculinist ideology and technological savvy. For the purposes of looking at *Neuromancer*, the example of the computer hacker is most notable for this discussion. The hacker may not be the most visible form of masculine ideology, but Wajcman links the behavior of the hacker to a larger value of technological mastery and control. A hacker is someone (usually a young, white male) who seeks to explore the potential of computer systems; sometimes this involves breaking into restricted access databases (Sterling, 1992). Although there is some debate about the core beliefs of hackers, most believe that access to computers should be unlimited and that information should be free (Levy, 1984, p. 40-41). Ethnographic research by Sherry Turkle at MIT in 1984 illustrates the link that Wajcman refers to:

According to Turkle, these young men [it is predominantly a male activity and culture] have an intense need to master things; their addiction is not to computer programming but to playing with the issue of control. It is about exerting power and domination within the unambiguous world of machinery (Wajcman, 1991, p. 142).

The world of machinery may not remain unambiguous though; the alliances formed between the machinic and the body are producing new subjectivities. Both SRL and hackers are examples of the desiring machines that Deleuze and Guattari pointed towards. To follow this line of thought, the links and assemblages made between the embodied hacker and his computer body would be a productive process. The cyborg is not the product, but rather a site of circulating intensity; becoming-cyborg seems to be the status of the hacker. The restricted access to technological systems, however, resonates further than the hacker ethic. Electronic culture is not a third world phenomena; the development of computer technology (much of it from militaristic research) and histories of gender, race, class and oppressive social relations have an important impact on the access to technology. This is not to say that marginalized peoples are not in cyberspace, rather, we need a cautionary approach to thinking about their access to electronic technologies (hardware and software), education and development of the technologies themselves. This access and education, as well as the research and development is still primarily a male dominated field (Jones, 1995, p.41-42).

The oppressive histories of ideology and technology need not push us to relinquish too quickly the possibilities of progressive social change at the inception of these cyborg subjectivities. Haraway's (1991) much discussed cyborg acknowledges the despair of these histories but also proposes possibilities of hope:

From one perspective, a cyborg world is about the final imposition of a grid control on the planet, about the final abstraction embodied in a Star Wars apocalypse waged in the name of defense, about the final appropriation of women's bodies in a masculinist orgy of war (Sofia, 1984) From another perspective, a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of

permanently partial identities and contradictory standpoints
(Haraway, 1991, p. 154).

The cyborg is a new way of categorizing the body, a body that exists in space and non-space at once. This conceptualization of space, known as cyberspace, is an electronic space in which liminal creatures proliferate. Gibson, who is responsible for coining the term cyberspace in *Neuromancer*, provides one systematic description of this new space. Cyberspace is conceptually the home world of cyborgs - not to be confused with a place of origins. Cyberspace will be discussed in the next section of this chapter. After I have established what this space is, I will point towards its implications for embodied existence by examining four characters in *Neuromancer*: Case, a computer hacker; Molly, a bodyguard and assassin; and Wintermute and Neuromancer, both artificial intelligences.

What is Cyberspace?

The work of Henri Lefebvre (1974) has been crucial in exploring space as a social process which both shapes our everyday lives and is created by them. Heavily influenced by both marxism and surrealism, he makes a convincing argument which explores the space of our collective psyches as well as the space of capital.

In reality social space 'incorporates' social actions, the actions of subjects both individual and collective who are born and who die, who suffer and who act. From the point of view of these subjects, the behavior of their space is at once vital and moral: within it they develop, give expression to themselves, and encounter prohibitions; then they perish, and that same space contains their graves. From the point of view of knowing (*connaissance*), social space works (along with its concept) as a title for the analysis of society (Lefebvre, 1974, p. 34).

The space that Lefebvre refers to is not everywhere²⁰, but it is a relationship that we live and produce. He distinguishes between mental space (the space of philosophy) and social space (actual lived everyday life spaces). Space exists in relation to the mode of production and new modes of production produce new spaces (Lefebvre, 1974; 1991t, p. 31); history is not opposed to spatial constructs, but is interrelated with them.

The assumed spaces of our lives and the environment we live in has shaped our understanding of, and theorizing about, social structures and everyday life. The importance of space and its unfortunate oversight in much of social theory can have significant implications for social change. Specifically, the rise of electronic space (or 'cyberspace'), and its infiltration into our everyday lives, transforms the worlds we live in. The impact of this 'new' space, cyberspace, on the grapplings of social theory surrounding the status of the subject and corporeality points to an important struggle to understand how these assumed spaces shape social life. If we return to the Lefebvre quotation above, cyberspace is a lived phenomena, a place which "incorporates social action."

Cyberspace has been receiving a lot of attention lately with the growth of on-line communications, but it has come to represent many different things. On one end, cyberspace is the space that links computers and people in what we have come to know as the World Wide Web. On the other end, cyberspace encompasses all electronic or electronically mediated space which may or may not have human users present. *Neuromancer* introduced us to the term cyberspace, which Gibson claims was only the splicing of root words for catchy effect (Gibson, 1991, p.28). It did have a catchy effect, as discussions about what constitutes cyberspace have mushroomed in

²⁰ Lefebvre cites Foucault as an example of someone who frames space as 'everywhere' (Lefebvre, 1974, p.10-11). Lefebvre argues that such a claim is a misuse and misunderstanding of the production of space and its situation in the mode of production - capitalist or post-industrial.

conjunction with our digital interactions in the workplace and at home. Cyberspace today is just one virtual technology among many; the perfection of virtual reality and the formation of on-line communities are also virtual technologies. Cyberspace is machine space, the boundary world that Haraway spoke of, the locale of Stone's liminal creatures, or even the BodywithoutOrgans becoming-terminal. Cyberspace is predominantly an imaginary space where we grapple to assign meaning to an everyday locale that gives us that old metaphysical (transcendent) sensation. The definition of cyberspace began with Gibson's, by now, familiar description:

The matrix has its roots in primitive arcade games, ... in early graphics programs and military experimentation with cranial jacks.Cyberspace. 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. Unthinkable complexity. lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding.... (Gibson, 1984, p. 51).

Featherstone (1995, p. 5-6) distinguishes between three forms of cyberspace: Gibsonian cyberspace, Barlovian cyberspace and virtual reality. Gibsonian cyberspace, as the quotation above partially demonstrates, is a space where people as data (and data) interact in a simulated environment. However, not only humans interact in this space since there are also "constructs" which are data representations modeled after particular personalities as well as intelligent (and not so intelligent) entities.

Barlovian²¹ cyberspace entails all electronic spaces from telephone spaces to automated tellers to on-line communities. Jones (1994) refers to this phenomena as computer mediated

²¹ This is named after John Barlow, founder of the Electronic Frontier Foundation (EFF) which included notable names such as Mitch Kapor (founder of Lotus Development Corporation and president of EFF) and Jaron Lanier (VR pioneer) among many other famous and wealthy men of the computer community. (Sterling, 1992, p. 234-

communication or CMC. This conceptualization of cyberspace demarcates it as a space and a technology that is already present in our everyday life, rather than as a theoretical construct or imaginary space. Virtual reality is a term coined by Jaron Lanier, founder of VPL Research Inc., which researches, develops and markets VR gear (Rheingold, 1991, p. 16;155). Virtual Reality is still partially in the space of the imaginary; while there are virtual environments that can be accessed with data gloves, head mounted displays and sensory 'suits', the technology does not approach the cyberspace that Gibson uncovered in *Neuromancer*. Featherstone sees Gibsonian cyberspace as a combination of Barlovian cyberspace and an advanced form of the virtual reality we have today (Featherstone, 1995, p. 6). It is interesting to note that Lanier cites Gibson as a source of inspiration for his research on virtual systems.

It is important to make the distinction between these virtual environments, but not to ignore the immense overlap between them. Cyberspace may still be largely "in the making" but it is being constructed rapidly while people inhabit some of its realms.

Although cyberspace has been popularized by Gibson's books, it is neither a pure "pop" phenomenon nor a simple technological artifact, but rather a powerful, collective mnemonic technology that promises to have an important, if not revolutionary, impact on the future compositions of human identity and cultures. (Tomas, 1991, p.31-32)

The revolutionary potential of cyberspace has been hotly debated for the last decade, but its inherent ability to change our world is a hasty assessment.²² New technologies have almost always

250) The primary mission of the EFF was free speech in cyberspace, although it was covered in the press as a "defense fund for hackers" (Sterling, 1992, p. 250).

²² For dissent on the liberatory potential of cyberspace see *Resisting the Virtual Life: The Culture and Politics of Information*, (Brook and Boal, Ed.'s, 1995)

acted as prostheses for already existing social processes and structures and they are usually reflective of the dominant historical narratives from which they emerge (Stone, 1991). Cyberspace does offer us a particular opportunity in social theory to gain insight into the construction of embodiment and identity. As this space is continually being reworked, so are the bodies that inhabit it. Whether our on-line identities correspond to the human referent at the keyboard is not as relevant as whether or not these performances of textual embodiment 'pass' in their communities. The experiences of people in simulated environments are always real and embodied experiences.

Summary of *Neuromancer*

The world of *Neuromancer* is a bleak, near future post-industrial patchwork of commodity worship, corporate back stabbing, extreme wealth and extreme poverty. The locales of the novel vary from the Sprawl (the name of the urban wasteland that now covers the entire eastern seaboard of the USA) to orbital colonies. The earth is extremely overpopulated and urban spaces have taken over "natural" environments. In this sense, the world of *Neuromancer* is always a virtual environment, even when it is disengaged from cyberspace. The dim economic and social forecast that Gibson animates places us in a world where technology is itself "natural." Cyberspace is akin to a parallel universe; it is not the playground of, or for, new ideas but an extension of the grim world that already exists in the novel. The narrator of *Neuromancer* is outside of the story, but views the narrative completely from the vantage point of Case, the protagonist. Case is a "computer cowboy" who has been hired to steal data for an unknown supplier. Molly, is a hired bodyguard who organizes and coordinates these thefts with Case. A

man named Armitage manages Case and Molly and hires assorted others necessary for their mission along the way. Armitage takes orders from an Artificial Intelligence (AI) named Wintermute. Wintermute has become self aware and seeks unification with another AI named Neuromancer in order to evolve. The evolution and independence of these AIs, or the potential resulting entity of their combination, is illegal. Since this evolution is illegal, the team hired by Wintermute has a counter-cultural flavour because they are always working against the system to realize the autonomy and freedom of the AIs. This is similar to the anarchist rhetoric found among many hackers today, but for them the call for freedom of information is most often unrelated to a larger contextual understanding of counter-hegemonic practices and social oppression.

Bodies in Cyberspace: *Neuromancer* and Other Stories

The bodies of *Neuromancer* collide with technology in ways that echo J.G. Ballard's *Crash* (1973)²³: technology which seems to offer humanity the ability to maim in increasingly hideous ways as well as the hope of corporeal redemption and reconstruction. The tensions of Gibson's work illustrate many debates within social theory. The relationship between pop and high culture has an extensive history in theory, one that now resides in the deliberation of the status of the subject as well as the text. Gibson places this particular narrative in the relatively near future, where the Industrial Age has clearly given way to the (postindustrial) Age of

²³ The movie version of *Crash* (directed by David Cronenberg, 1996) garnered a lot of attention when it was released - most of it negative - including outcries of obscenity and the rallying call to censorship. Between the legends of David Cronenberg and J.G. Ballard lies a tale that points to the rearticulation of the human body, a body reconstructed from the ashes of abused technology. There are definitely correlations between the cautionary tale of fetishism, technology and bodies that Ballard spins and the morphing flesh of Gibson's *Neuromancer*.

Information. There has been a proliferation of work which explores the meaning of this conceptual shift for both social theory and social reality (Baudrillard, 1983; Jameson, 1991; Bukatman, 1993a). What I am proposing here is not a reading of *Neuromancer* as if it could be predictive or somehow indicative of a causal relationship between pop culture and social reality;²⁴ rather the interrogation of texts explores the tensions of a historical, cultural and political context (both real and imagined) which is useful to the interpretation of the social. The negotiations of meaning that occur between the textual and the social posit a reciprocal relationship that uncovers the social itself as text. What becomes of bodies in cyberspace? If cyberspace is structured by old metaphysical themes, do the possibilities of reconceptualizing bodies and our lived specificities follow a familiar pattern of dualism and denial? If a body in cyberspace is a cyborg, what are the theoretical potentials of exploring corporeality in such a space?

Neuromancer is conducive to an exploration of the body's relationship to embodiment along these lines, however much this distinction is often elided in postmodern discussions of the body. The body, even as a constructed social/cultural/semiotic sign, is still primarily a normative object discernible from other texts or bodies. What has been overlooked, as Katherine Hayles points out, is a rigorous assessment of the interplay that occurs between what we classify as the body - a signifier that is linguistically constructed, and embodiment - the experience of being a body (Hayles, 1993b). At first glance the distinction seems insignificant; however, the difference points to the potentially tenuous assumptions of much postmodern theory that aims to escape

²⁴ Feminism has struggled with these issues more explicitly in the anti-pornography movement. Some feminists believe that pornography consumption produces violence against women; some feminists believe pornography is a symptom of an already misogynist and violent culture and some feminists believe both of these assertions. My point here is that the relationship between spectatorship in any form and lived social reality has long been an issue for feminists. The example of pornography is not comprehensive, but rather illustrative.

such essentializing universalisms. The body is constituted discursively (process of categorization and/or normalization); embodiment is practiced through incorporation (the activities of lived specific bodies). The liminal creature surfaces again in the familiar habitat of boundaries: it is precisely the metonymy of discursivity and embodiment which animates cyborgs and monsters.

Nature, Culture, Technosociality and Terminal Identity

The collapse of nature and culture in Gibson's novel is particularly suitable to investigating the status of subjectivity and embodiment. Although the narrative moves quickly and tends to disorient the reader, Gibson's aggressive style of "information overload" masks an otherwise familiar plot which falls between detective novels, traditionally examining the realm of knowing, and science fiction, traditionally examining the realm of being (McHale in Bukatman, 1993a, p. 141). These two realms collide in a consideration of the subject and the body. The implosion of nature and culture brings us quickly into the cyborg world, where we can both situate ourselves and our environments, and remain completely dislocated at the same time. Cyberspace here is not a location exactly, but more like a prosthetic device. Stone's discussion of this electronic prosthesis invokes her definition of technosociality: "...referring to the state in which technology and nature are the same thing, as when one inhabits a network as a social environment" (Stone, 1995, p. 36). The technosocial subjects of this discussion are the characters of *Neuromancer*, and ourselves, as readers and inhabitants of new technological spaces. The world of the novel is a virtual environment, but not generally a space we physically inhabit.

Bukatman (1993a) explores aspects of technosociality in his struggle to pin down terminal identity, a term borrowed from William Burroughs that Bukatman uses to describe the new subjectivities emerging from the implosion of nature, culture and technology.

The world has been refigured as a simulation within the mega-computer banks of the Information Society. Terminal identity exists as the metaphorical mode of engagement with this model of imploded culture. [It is] ...a potentially subversive reconception of the subject that situates the human and the technological as coextensive, codependent, and mutually defining. A new subject has emerged: one constituted by electronic technologies, but also by the machineries of the text (Bukatman, 1993a, p. 22).

These new subjectivities, as Bukatman is careful to state, are not inherently revolutionary or transcendent of their previous manifestations. The new subject constituted by electronic technologies and the text point to the way that historical narratives tend to overlap when new technologies emerge (Stone, 1991). The text already produces a virtual environment of sorts, but the technologies of writing differ significantly from the specular technologies of the screen, by which I would include cinema, television and the computer. These technologies all imply different modes of social interaction, and it is the connection between these terminal formations and social behavior that produces a highly visible body and ideologically saturated gaze. The significance of this implosion of nature, culture and technology for the body however, relates significantly to the "point of view". The body is a point of view established from a boundary rupture: "Historically, body, technology, and community constitute each other" (Stone, 1991, p.111). Terminal identity speaks from a body as an emergent technology; but it works the other way too.

The characters of *Neuromancer* all speak to and from this rewriting (or rewiring) of the human subject. The human subject has never been represented as amorphously human, it is always a sexed/gendered and raced subject and there are (at least) two sexes, and many "races" (Gatens,

1996; Haraway, 1989). All the characters of *Neuromancer* are socially demarcated by status of race and gender, although one of them is referred to as sexless. His sex seems to implicitly but ambiguously define his gender. Julius Deane, the character in question, is one hundred and thirty five years old and routinely alters his metabolism and resets his DNA.

Sexless and inhumanely patient, his primary gratification seems to lie in devotion to esoteric forms of tailor-worship. Case had never seen him wear the same suit twice, although his wardrobe seemed to consist entirely of meticulous reconstructions of garments of the previous century. He affected prescription lenses, framed in spidery gold, ground from thin slabs of pink synthetic quartz and beveled like the mirrors in a Victorian Dollhouse (Gibson, 1984, p. 14).

Deane is an illusion predicated on selective histories, not unlike the other characters but rather more blatantly. His use of technology is not cutting edge, like many of the other cursory characters; rather, Deane's use of technology has a cumulative effect. In Deane's office homages to Dali, Kandinsky, Disney collide with a large steel desk crammed full of debugging gear. His incorporation of technology is not overt in an obvious machinic way, but his very life is predicated upon the use of technological advances in DNA coding and hormones. Deane's incorporation of technology is intensely personal, it is his body. How is it that Deane remains Deane if his DNA is consistently altered?²⁵ Does this imply the work of a natural referent, even if that referent is itself a simulation? Bodies are not only DNA code, but to believe that Deane is still the same man even

²⁵ Regarding the continuity of the body, Eric S. Rabkin (1996) refers to the philosophical conundrum of the farmer's axe:

“Have you had that axe a long time?”

“Oh yes. Twenty years. I've replaced the handle three times and the head twice.”

The persistence of the individual is a fantasy, clearly, yet a productive fantasy *without which we would have no sense of self...* (Rabkin, 1996, p. xiii, my emphasis).

This conundrum perhaps oversimplifies the issue, but it clarifies the implied location of a natural reference point, usually considered to be the body. Rabkin's adherence to the centred self however, overwrites any alternate engagements with this “productive fantasy”.

with a continually changing code implies that the self resides somewhere else. This “elsewhere” does not need to be a natural reference point or a natural body.

Teresa de Lauretis (1987) has pointed to the “elsewhere” of representation as a space of resistance against any form of hegemonic cultural production.

...what we [feminists] have produced is not recognizable, precisely as a representation. For that “elsewhere” is not some mythic distant past or some utopian future history: it is the elsewhere of discourse here and now, the blind spot, or the space-off, of its representations. I think of it as spaces in the margins of hegemonic discourse, social spaces carved in the interstices of institutions and in the chinks and cracks of the power-knowledge apparatus (de Lauretis, 1987, p. 25).

This “elsewhere” is the space of contradiction which produces the subject of feminism. It exists concurrently, not oppositionally, with the subject of humanism. The tensions of elsewhere can be extended in this discussion to elaborate the location of the self in relation to the body and the body in relation to technology. Cyberspace, as such an elsewhere, has the potential to foster the technosocial subject.

Case: hacker, “cheap-ass hood”

Case is the star of the novel; he is the hero and also a fairly pathetic person. As science fiction usually goes, the heroes are never too cool, they are always accessible to the reader. Case is a freelance hacker who stole from an employer who, as punishment, damaged his nervous system to prevent him from jacking into the matrix.

For Case, who’d lived for the bodiless exultation of cyberspace, it was the Fall. In the bars he’d frequented as a cowboy hotshot, the elite stance involved a certain relaxed contempt for the flesh. The

body was meat. Case fell into a prison of his own flesh. (Gibson, 1984, p.6).

The body is a prison of flesh to the “computer cowboys” with whom Case identifies; his inability to “jack-in” and become a disembodied consciousness in cyberspace had left him as a street hustler and junkie in Night City. However, Armitage (heading the team hired by Wintermute) repairs Case’s nervous system in order to make him functional enough to continue his career in data thievery.

The word “meat” suggests that the body is a discardable object once one becomes a disembodied consciousness in cyberspace. As something many people eat (as in the bodies of animals), it is associated with consumption. In western contexts particularly, meat is taken for granted as a necessity of human diet even at the expense of the environment and human health. When the human body is referred to as meat, the boundary between human and animal is destabilized, reconstituting the body as an object to be consumed and digested. Most of the characters’ bodies in *Neuromancer* are entirely extinguished, and if they are not killed outright, they are at least injured or altered significantly. Case has his nervous system reworked, Molly nearly loses her leg, Armitage dies, and Wintermute and Neuromancer merge into one entity and become a virtual body. The text treats the body as meat explicitly by annihilating bodies, and implicitly by rewiring or transforming their corporeal stature. The natural is treated as raw information for human consumption. The text itself becomes a machine which feeds on materiality, much like Wintermute and Neuromancer rely on human bodies to sacrifice themselves for their evolution. All of Gibson’s metaphors rely on this pervasive technosociality. These metaphors, even for what we might still consider nature (trees, the sky), are drawn from scenes of industrial capitalism (Bukatman, 1993b, p. 641). As long as the body remains categorized in such

a way that it can be objectified, it can be consumed. Case is the most explicit in his treatment of the body as meat. He views the body as a hardware necessity, a vehicle to take him to cyberspace. Even Case's name betrays his loathing for the body; a case is a receptacle for something else, in this instance his consciousness. However, a case can also mean planning with the intent to rob (as in "casing the joint"), and *Neuromancer*'s Case is a data thief or hacker as well as a street hustler.

The skill of a hacker is not about ability or knowledge in Gibsonian cyberspace; it is more subtle than that: it is about timing and code. The computer hardware and software that Case uses are responsible for much of the hacking, so that he stands in as more of a facilitator. Case's body has remained relatively free of hardware; his disdain for the meat pushes him to escape it altogether in cyberspace. Cyberspace does require a constant hands on involvement with a cyberspace (Sendai) "deck". Most of Case's life is on-line - he lives in cyberspace but he survives in meat space. The two bodies do converge however, since a death in cyberspace means a death in meat space and vice versa. Gibson has kept some of the referents alive here, but he disrupts this neat correlation with personality constructs and artificial intelligences.²⁶

Personality constructs are ROM memory files of a (usually dead) personality that one can interact with in cyberspace. Case regularly uses the construct of the Dixie Flatline, a dead hacker Case knew when he was young and still learning to hack. Case finds the construct useful for his hacking knowledge, but disturbing because his personality is flat, replicated (Gibson, 1984, p. 76). While discussing their mission with Case, the Finn (another team member hired by Armitage) comments on the ease of interacting with constructs rather than people. "The Flatline here, if you

²⁶ In *Count Zero* and *Mona Lisa Overdrive*, the artificial intelligences "evolve" and become Loa's or voodoo gods and goddesses of cyberspace. These entities have no human corporeal equivalent; their embodied existence is solely in cyberspace. For brevity however, I will focus only on the characters and concepts of *Neuromancer*.

were all like him, it would be real simple. He's a construct, just a buncha ROM, so he always does what I expect him to" (Gibson, 1984, p. 205). The Flatline's skills and personality are coded as pure information distilled in computer memory. The constructs are activated by physical bodies, but the artificial intelligences have different kinds of bodies altogether. I will discuss the artificial intelligences in the Wintermute section of this chapter.

Molly: Cat Mother, Razorgirl

Molly, in stark contrast to Case, has surgically inset mirrored glasses with an optic readout chip and double edged, four centimeter scalpel blades that extend, at will, from underneath her burgundy lacquered fingernails. Molly's body modifications are intimate to her corporeal existence while Case's modifications assist him in the mad dash to leave the "meat" behind. Not so much has changed in the future in terms of Cartesian gender constructs of mind and body: women are still relegated to the body and the (historically familiar) realm of labour (O'Brien, 1981; Arendt, 1958), while men are still enabled to pursue enlightened consciousness, free their minds from corporeal constraints, and dream of leaving their bodies behind. *Neuromancer* is a novel which constructs the sexed/gendered body in routinely traditional ways. Gibson's corporeal constructions may superficially appear to be a radical departure from the familiarity of our own twentieth century comparatively unmodified flesh; however, they are not so far from present or past technologies of the body.

The definitive symbol of cyberpunk are Molly's mirrorshades. Her glasses were not only the protective (and removable) prostheses of modern mirrored sunglasses²⁷ but rather direct implants shielding her eyes from the viewer and creating a continual feedback loop in the retina of anyone who looked into them. What one receives by gazing into Molly's eyes, is a reflection of themselves. This conjures up two points: that Molly, the only significant female character of *Neuromancer*, is a receptacle who only reflects those around her, and this characterizes Molly as a victim rather than as an autonomous productive agent. There have been many discussions of Gibson's textual machismo (Nixon, 1992; Sponsler, 1992; Delany in Dery, 1993) which delineate a familiar problem in most science fiction (i.e., "if it isn't labeled feminist sf, it's probably not"). Most of these critiques have centered on Molly, whose character provokes a necessary exploration of sex and gender in *Neuromancer*.

Molly is the quintessential survivor; certainly she is less a victim than Case who regularly feasts on his own nihilism. Molly works for herself; she is independent and holds contempt for those of her profession who work for governments. Although Molly's politics are never overtly stated, there are moments in the text where we can piece together parts of her belief system from monologues on her past to her reaction to others in the plot. Molly is not androgynous, she does not renounce her sex/gender in order to pursue her career as a bodyguard and assassin. Molly flaunts her body, the mark of her sex, in the course of a regular work day. She is not inconspicuous; even at the Villa Straylight (a wealthy resort where she clearly stands out), she refers to herself as an "exotic" and does not try to assimilate into her surroundings.

²⁷ The most common reference to mirrorshades in our culture prior to the cyberpunk appropriation has been as the favorite accessory of police officers. The link to authority has, no doubt, had some bearing on the choice of imagery, as well as the implication that the police hide from or deflect us in the same way that cyberpunks do: the dual purpose of deflection and concealment operate in both scenarios.

Molly is a complex character, unlike Case who is entirely visible and remarkably simple. Although we are not given the same access to Molly's thoughts as we are to Case's in the narrative, we are given access to her body through the simstim (simulated stimulation) link she has with Case. The simstim link is a technology that allows Case to access Molly's body while he is in cyberspace. Case's access to Molly's body is from the inside, he can feel what it is like to be inside her body. While stealing the Dixie Flatline construct, they arrange a switch that allows Case to move from cyberspace into the space of Molly's body.

Then he keyed the new switch.
The abrupt jolt into another flesh. Matrix gone, a wave of sound and colour...She was moving through a crowded street, past stalls vending discount software, prices felpenned on sheets of plastic, fragments of music from countless speakers. Smells of urine, free monomers, perfume, patties of frying krill. For a few frightened seconds he fought helplessly to control her body. Then he willed himself into passivity, became the passenger behind her eyes.
(Gibson, 1984, p.56).

We know Case by his narrative; we know Molly by Case's narrative of his experience of her body. Such technologies resonate with imaging technologies today that probe for a complete vision of the body from the inside. Molly's corporeal visibility is heightened in comparison to the other characters; but her vision is also keener than the others. Molly's body is the site of the specular in *Neuromancer*, as women's bodies are continually refigured under the gaze of social reality and science fiction.

Kroker (1987) argues that women's bodies have always been postmodern. By this he means that the materiality of our bodies have been disappearing into the proliferation of signs. This disappearance has been facilitated primarily through a heightened visibility of women's bodies and the signs of saturation are those of industrial capitalism. Molly's body reads like a

walking advertisement for the new technologies of the industrial world. Her visibility is constant in the course of the novel; however, any interiority is filtered through Case. Molly's voice emerges only through the signification of her body and her actions. Deleuze and Guattari's notion of becoming offers opportunities as well as caution in that the BodywithoutOrgans denotes a process and an aesthetic which does not preclude corporeality. Molly is constantly forming new links and assemblages in her becoming-cyborg. Case, in sharp distinction, appears as an example of OrganswithoutBodies. Deleuze and Guattari see the OrganswithoutBodies as the inability to circulate intensities or flows, as a body which has no processes at all because it is so full that it cannot move. Case cannot engage in becomings because he is trapped by his strict separation between the meat and transcendent consciousness. This strict codification of the body allows nothing to circulate in or through it. If we think about the name Case as a receptacle again, we might think that he is an empty container but he is full of his own corporeal denial. Case is so consumed by this emptiness that he refuses materiality any process or connectivity that does not serve the purpose of escaping embodiment. Molly tells Case that she had seen his file and he was out to kill himself before she and Armitage showed up. Case had indeed locked himself into the "prison of his own flesh."

Molly's body is the site of her power, and her becomings are frequent. She is able to circulate as the specular object, as well as the invisible "tail" that followed Case at the outset of the novel. The scopic surfaces repeatedly in relation to Molly. While she is breaking into the Villa Straylight (the home of the Tessier-Ashpool clan/corporation) to retrieve a computer access code from 3Jane, she mistakenly intrudes on the suicide of Ashpool, the patriarch of the rich and eccentric Tessier-Ashpool Corporation. Ashpool is clearly quite mad, and threatens Molly's life

for intruding on his ceremony. Molly however, manages to kill him first by shooting him through his eye. The AIs were created by the Tessier-Ashpool clan to protect their home in the gravity spindle and take care of their business while they were cryogenically preserved. The clan consists of clones of the original mother and father, of which only the father Ashpool survives since he murdered the mother. One of the Janes and Jeans (clones that are effectively children) is awake at any one time to keep business in order in a way that the AIs cannot do. When Molly discovers Ashpool, he has already murdered one of the Janes after raping her. Instead of killing Molly instantly, he toys with her, asking her about her eyes:

“How do you cry Molly? I see your eyes are walled away. I’m curious”...

“I don’t cry, much.”

“But how would you cry, if someone made you cry?”

“I spit,” she said. “The ducts are routed back into my mouth.”

“Then you’ve already learned an important lesson, for one so young” (Gibson, 1984, p. 183).

When Molly shoots him, she shoots him in his left eye, while his other eye opens as he dies. (Gibson, 1984, p. 186) Molly does not become another meat puppet victim, she has learned to turn her fear to anger, and has been technologically enhanced to act on her anger: she spits when she cries.

After Molly leaves Ashpool for dead she finally confronts Peter Riviera at 3Jane’s. Riviera is technologically enhanced to project images, a kind of holographic performance. Riviera is also sadistic, psychotic and perverse, having been a feral child who emerged from cannibalism to perfect his perversity in holographic/performance art. Riviera was hired to get Molly into Villa Straylight to see 3Jane. It seems that 3Jane has a taste for the perverse, and had come to see him perform the evening before. The performance that Riviera did to entice 3Jane, involved projecting

Molly as his meat puppet. He projected her naked body in pieces starting with her deadly hands and ending with her head.

Riviera and the Molly-image began to couple with a renewed intensity. Then the image slowly extended a clawed hand and extruded its five blades. With a languorous, dreamlike deliberation, it raked Riviera's bare back. Case caught a glimpse of exposed spine....There was an inverted symmetry: Riviera puts the dreamgirl together, the dreamgirl takes him apart. With those hands. Dreamblood soaking the rotten lace. (Gibson, 1984, p. 140-141).

Molly is also in the audience at this performance, but leaves before the show is over. Molly knows that Riviera is sick and has hated him from the moment she read his file. When Molly comes into the Villa Straylight, Riviera has convinced 3Jane to let her in. Riviera knows that Molly needs an access code from 3Jane so that Case can break the ICE in cyberspace to free Wintermute and Neuromancer. However, Riviera is only interested in toying with Molly and then killing her.

In the process of the confrontation between Riviera and Molly, he breaks one of her eye implants. Riviera also claims that 3Jane will not release the access code. His intention to thwart Molly's retrieval of the code is unrelated to the game of the AIs; rather, Riviera's only game is with Molly and involves the power to produce the specular. In the course of the confrontation, Riviera also blinds one of 3Jane's ninja bodyguards, unaware that Hideo (the ninja that protects the clones) operates just as effectively in the dark. 3Jane informs him of this mistake: "Peter, ...don't you know he does it in the dark. Zen. Its the way he practices." Riviera is the gaze, and he actively seeks to monopolize his vision which he regularly projects to confuse and anger people. What he doesn't realize is that Hideo is more equipped to kill him blind, without the distraction of Riviera's holographic projections. Molly has also been slowly poisoning his drugs so that his body will freeze up completely, leaving him unable to move anything but his eyes. It is a curious irony

that Molly has left Peter with his vision, his most coveted and perverse tool; but she has ensured that he is essentially comatose. In this sense, Molly is as sadistic as Peter, choosing to leave him in a living hell rather than kill him outright (Davidson, 1996).

Wintermute and Neuromancer: Disembodiment machines

“Wintermute, Case. It’s time we talk.”

It was a chip voice.

“Don’t you want to talk, Case?”

He hung up.

On his way back to the lobby, his cigarettes forgotten, he had to walk the length of the ranked phones. Each rang in turn, but only once, as he passed.

(Gibson, 1984, p.98).

“The perfect disciplinary apparatus would make it possible for a single gaze to see everything constantly” (Foucault, 1977, p. 173).

When I turn on my personal computer the voice of HAL (the computer gone wrong in the film *2001: A Space Odyssey*) chirps at me “ I’m sorry Dave, I’m afraid I can’t do that...” in its smug, superior voice. Although I am not Dave and never even once dreamt of being an astronaut, I am taken with the polite mockery of HAL which is ever so familiar in a world where bureaucracy politely and unemotionally taunts us while denying us our desires. We are all, really, a Dave of sorts being pitied and monitored by HAL, another disciplinary apparatus, a technology of denial. The notion of cybernetic malevolence and conspiracy is rampant enough in our culture for the voice of HAL to be available as part of my standard soundcard. While many people choose not to program their computers to taunt them in the voice of HAL, the more common programming features involve the sounds of nature. In terms of technosociality, the slippage

between nature and culture surfaces again when we have our computer mimicking the “natural” world.

Today we wonder if the machines are alive, or what they might do to us if they become alive. Working in any office environment will breed the habit of talking to your machines, believing that they hate you or that they love you, and never forgetting that the machines ‘talk’ to one another. We participate in these practices collectively knowing that they are silly - we *know* that the computer is not really our friend, that the photocopier cannot know that we are late, that the telephone will not really tell the other machines that we are not technology friendly if we mistreat its receiver.²⁸ Andrew Ross (1991) discusses this personification of technology as evidence of the increasing psychology of fear about technology, particularly the “smart” machines of an increasingly technologically interactive culture. In this context, the evolution of artificial intelligence is not unthinkable. The AIs of *Neuromancer* are credible because Gibson plays on our cultural beliefs, fears and confusions about technology and intelligence.

Wintermute is self aware, self propagating and seemingly alive. Wintermute operates as the perfect technology of surveillance and speaks to the widely circulating notion discussed above that the machines are indeed alive, in communication with other machines in the system we refer to as technology, and possess interests and agency which may be very different from ours. This notion indicates that there is a pervasive war of human vs. machine and recognizes that we are the

²⁸ In my years of employment as a secretary I have been party to such discussions countless times. I have been known to talk to my machines, to treat them with both kindness and contempt and to subscribe to the belief that somehow they are aware of these distinctions. It is bad luck to treat a machine as only a machine. These practices and beliefs are not passing oddities, but occurrences in many offices and other technical environments where there is increasingly more interaction with technology than people. It is also interesting to note that many neo-pagans will refer to the haunting of their answering machines, the possession of their hard drive - when the machines misbehave we fit it into our “reality picture” regardless of what that construction may be.

creators of machinery; we are the 'parent' to technologies distorted in a mutating dance of ontological angst. The notion of the machine as humanity's brain child is limiting but germane to the issue at hand.

Case has one final conversation with the entity that resulted from the merging of Wintermute and Neuromancer, where he asks "what are you now?" and the AI responds "I'm the matrix, Case" (Gibson, 1984, p.269). Although we know more about Wintermute from contact in the narrative, Neuromancer is more covert and resistant to the merge between the two. Neuromancer is all personality and similar to, but more advanced, than the other ROM constructs like the Dixie Flatline. Unlike the Flatline, Neuromancer is fluid and intelligent; he works in symbols and emotions. Neuromancer is his code name, the code that Molly and Case needed from 3Jane. Neuromancer is like a ghost in the story and is known initially as "Rio" after the hardware location. His actions are often interpreted as Wintermute's and we discover that Neuromancer has also been masquerading as other people to Case in cyberspace, just as Wintermute has been. Neuromancer is like a shadow, a trickster of sorts. When Case flatlines Neuromancer creates a dream world for him and tries to persuade him to stay. Case, however, is not fooled by the reality of his surroundings and finally finds and confronts Rio, who appears to him as a small Brazilian boy.

"You're the other AI. You're Rio. You're the one who wants to stop Wintermute. What's your name? Your Turing code. What is it?"

The boy did a handstand in the surf, laughing. He walked on his hands, then flipped out of the water. His eyes were Riviera's, but there was no malice there. "To call up a demon you must learn its name. Men dreamed that, once, but now it is real in another way. You know that Case. Your business is to learn the names of programs, the long formal names, names the owners seek to conceal. True names..."

"A Turing code's not your name."

“Neuromancer,” the boy said, slitting long gray eyes against the rising sun. “The lane to the land of the dead. Where you are my friend. Marie-France, my lady, she prepared this road, but her lord choked her off before I could read the book of her days. Neuro for the nerves, the silver paths. Romancer. Necromancer. I call up the dead. But no, my friend,” and the boy did a little dance, brown feet printing the sand, “I am the dead, and their land.” He laughed. A gull cried. (Gibson, 1984, p.243-44).

The land of the dead is a beautiful beach in this instance and it is also the most diagetic contact we have with the “natural” world. This world is a real world, but we revisit technosociality again as the natural world is holographically constructed via technology. The beach that Case visits while he is flatlined is a spatially open world which stands in stark contrast to the dense urban spaces he usually frequents. Neuromancer’s beach is a rare appearance of “nature” in the text, but it is uncovered as another instance of technology seemingly creating nature while imploding the distinction between them.

Villa Straylight is also a dense labyrinth, while not teeming with people like the Night City, it does not seem to be the kind of space where people would live at all. The Villa Straylight is a Panoptic society grown in on itself. A gravity well implodes our conceptualization of normal space, but it is also the home to the Tessier-Ashpool clan (most of them cryogenically frozen and clones of original descendants) which created Wintermute and Neuromancer. 3Jane tells Molly about the vision her “mother” had for the family and the AIs and the reason Ashpool murdered her:

“He [Ashpool] couldn’t accept the direction she [Tessier] intended for our family. She commissioned the construction of our artificial intelligences. She was quite a visionary. She imagined us in a symbiotic relationship with the AI’s, our corporate decisions made for us. Our conscious decisions, I should say. Tessier-Ashpool would be immortal, a hive, each of us units of a larger entity. Fascinating. I’ll play her tapes for you, nearly a thousand hours. But I’ve never understood her, really, and with her death, her direction

was lost. All direction was lost, and we began to burrow in on ourselves. Now we seldom come out. I'm the exception there."
(Gibson, 1984, p. 229).

The "burrowing in" created a hive like structure with extreme spatial disorientation. The AIs however, continued Tessier's vision, and the union between Wintermute and Neuromancer resulted in a new presence in cyberspace, an entity without a corporeal referent "jacked into" a cyberspace deck. The union of the AIs and their evolution points to a whole other set of questions about electronic culture and space. This shift entails a movement from locating ourselves within the context of emergent technologies to locating an intelligence in this space that has no organic components whatsoever.

Wintermute demonstrates on many occasions that the AIs are surveillance extraordinaire - all seeing, all knowing, all powerful. Wintermute is abstracted power in the Foucauldian sense: a universal body executing power over its subjects, on behalf of Tessier-Ashpool, but mostly out of self-interest. Although the Panopticon was never built, Foucault's (1979) appropriation of the abstracted form of the panopticon and its use of surveillance techniques to produce a self-regulating effect on the bodies/subjects it disciplines operates on several levels in *Neuromancer*. However, the bodies of the novel do not come across as docile bodies: everyone in *Neuromancer* is a murderer. The evolution of the AIs is at the expense of many human bodies; their technological "progress" feeds on human life.

“The street finds its own uses for things”²⁹

I have outlined Case, Molly, Wintermute and Neuromancer specifically to propose that we can read Gibson's characters as Cartesian components of a particular machine. Case and Molly constitute the mind and body of a struggling humanist subjectivity; while Wintermute and Neuromancer constitute another mind and body of an emerging technosocial subject. At the same time, we can read these collapses as part of the same evolution; both of these subjectivities are mutually dependent on the existence and historical peculiarities of the other. In a sense, the virtual bodies of Wintermute and Neuromancer are predicated on the physical existence of Case and Molly. This is not a revelation of great optimism, especially since cyberpunk generally (and *Neuromancer* in particular) has been touted as a subversive new cyberculture. In terms of the body as we have historically categorized it, things look relatively familiar.

These are the arguments that many feminist and leftist critics have found with Gibson's project in/about cyberspace. Many of the feminist discussions of the Internet and Gibson's matrix in *Neuromancer* center on the notion of gendered spaces. The etymology of matrix returns us, again, to the mother. This connection has lead many feminists to argue that the matrix of the fictional and the factual world are feminine spaces. Cyberspace has been gendered female and “the boys” are at war/play on the female body.

If the data constructs of the domestic or familial corporations are metaphorically feminized, protected as they are by feminine counter-intrusion membranes that resist “bor[ing] and interject[ing],” so too are the interspatial zones in the matrix. Any (masculinist) scientific and technological purity the computer matrix might once have had has been violated, invaded... (Nixon, 1992, p. 226).

²⁹ Gibson, (1986a) in “Burning Chrome”.

Nixon correctly delineates the systematic sexist, heterosexist and ethnocentric vision of *Neuromancer* and locates cyberspace as a site of (masculinist) privilege, where all the heroes are anarchic Americans pitted against the collectively structured corporation. Corporate structure in *Neuromancer* finds its expression through Japanese social structure and cultural beliefs. But Gibson offers us more than one dimensional views that only reassemble current problems; he has been careful to situate all of his characters in the interstices of power. None of these people are completely disenfranchised, and none of them are working for the legitimate business world. This location however, does not place them completely outside of either world: "...their very existence, their goals, aspirations, and every action are in accord with the largesse of a hegemonic power" (Easterbrook, 1992, p. 390).

Neuromancer can also be read as a primer for understanding the potentiality of cyberspace and what that means for corporeality and subjectivity. While I acknowledge that the politics of oppression emerge in significant (and often unprogressive) ways throughout the text, the possibilities of a technosocial subject also clearly emerge. In terms of Deleuze and Guattari's work on the BodywithoutOrgans, *Neuromancer* is an instance of becoming-terminal. Terminal, however, can be read as either a fatal sentence or a new electronic assemblage. While cyberspace is still being negotiated and constructed in our world, it may be productive to explore the permutations of merging different notions of subjectivity rather than condemning and dismissing them. Classifying cyberspace as a masculine space erodes its real significance for women and its potential for feminist theory. We need not be faithful in our negotiations of cyberspace, or Gibson's meditation on the technosocial/cyborg subjects; we can find our own uses for emergent technologies.

Chapter Four: Conclusion

Sex/Gender, Technology and Cybersubjectivity

Artificial intelligence in *Neuromancer* may be easier to contemplate as a fiction, but artificial life and intelligence are a growing (or evolving) phenomenon. We are, and rightfully so, concerned about issues of extinction on our planet, while little attention has been given to the new life forms that are emerging. Some of these life forms have artificial parts, some of them rise up from the destruction of our planet. What, for instance, might grow from our misuse of the environment? We know that radiation and toxic dumping is inflicting disease and killing many species (including our own) but what might be able to survive and grow from this wasteland? This is the stuff movies are made of, this is the stuff of science fiction. However, the erosion of the boundary between science fact and science fiction has been a crucial aspect of this project, one which leaves us with reassembled subjectivities.

This reassembly provides us with many opportunities to understand the boundaries themselves and to understand the performance of identity. Do Artificial Intelligences like Wintermute and Neuromancer possess virtual bodies? Can we refer to a virtual body when there is no organic referent "jacked in" to the matrix? The virtual body is a real body and the virtual world is a real world. Reality collapses into the concept of virtuality and exposes the virtuality of our everyday world rather than solidifying its subjects and practices. In this context, I see the technosocial subject as an avenue which pursues Butler's project on identity.

Butler (1990) argues that the sex/gender system has historically been based in the distinction between the natural and the social. She challenges these distinctions and posits that sex was always-already gender and that sex is just as constructed as gender. Aspects of this argument were dealt with in Chapter Two when I discussed the history of the body. (Laqueur and Foucault both dealt with aspects of this particular area.) Butler explodes the seemingly natural (and causal) relationship of sex to gender. Butler's thesis is that sex is not the natural basis upon which we have socially constructed gender; that is, sex is a prediscursive category of gender. The very basis of a sexually dimorphic opposition serves to legitimate compulsory heterosexuality. The implications of sex as a social construction and an effect of gender is to question the basis for the category "woman," as well as the meaning of representational and identity politics. Feminism has recently become more aware of the instability of the category "woman" (Wittig, 1992; hooks, 1990; Irigaray, 1985; Spelman, 1988; Kristeva, 1982). Feminist concern for the postmodern death of the subject is not a paranoid overreaction. It is hardly accidental that once women began to assert their rights to be represented as subjects, the subject was declared dead (Hoagland, 1988, p. 39). This however, does not dismiss the validity of the theories that have deconstructed subjectivity. Rethinking identity and difference may be one of feminism's most productive theoretical inquiries and Butler's contributions to this area are substantial.

Butler argues that the dissolution of the (already fictive) subject points to radical possibilities for the subversion of gender oppression. Her argument does not include a dismissal of feminist movements or the negative assertion that "... (as if) the indeterminacy of gender might eventually culminate in the failure of feminism" (Butler, 1990, p. 1). To the contrary, feminist foundationalism may have added women to the universal subject but it has not subverted the

essentialism that underlies and assumes the exclusionary and misrepresentative categories of identity and politics. Butler exposes the disturbing, but revelatory, notion that the concept "female" is not a stable category with a fixed meaning. The interplay of sex and gender is constituted as the natural and the social respectively through the construction of bodies and the institution of heterosexuality.

Gender is the repeated stylization of the body, a set of repeated acts within a highly rigid regulatory frame that congeal over time to produce the appearance of substance, a natural sort of being (Butler, 1990, p. 33).

Butler does not deny the existence of women; she interrogates the categories of meaning which constitute a binary gender ontology. She also recognizes the significance of the body in theoretical conceptualizations of gender and sex: "To what extent does the body come into being in through the mark(s) of gender" (Butler, 1990, p. 8). Through her readings of Beauvoir, Irigaray, Wittig, Kristeva, Lacan, Foucault and others she deconstructs a path to agency that cannot be and need not be grounded in essentialism. Butler's version of the death of the subject does not eliminate agency but recasts it as an illusion in terms of unified subjectivity. Once this is acknowledged, (fragmentary and constructed) subjects are able to subvert the law (of the binary) through parody and pastiche, until finally the excess of its proliferation precludes it as nonsensical (Butler, 1990, p. 127).

Butler proposes that identity is a set of stylized repetitions of signifying practices that subjects do, rather than are. This performance of identity can be extremely useful to feminist and other projects which seek to destabilize hegemonic notions of gender and identity. The Age of information dramatized in *Neuromancer* and in our lived social world provides a technological twist to Butler's notion of performative identity. With access to virtual worlds, identity becomes

fantastic and exposes the fluidity of already existing categories of meaning. When identity is disassociated from the body, the correspondence between signifier and signified becomes multiple and open, or irrelevant. *Wintermute* and *Neuromancer*, for example, were able to project themselves as any image that they chose since the virtual body is always in a process of becoming. This becoming is always located in terminal identity because this kind of construction is framed as a matter of data selection.

Bukatman's terminal subject is always mediated by terminal spaces, whether by the TV screen or the computer monitor. Cyberculture is implicitly bound to spectatorship. New subjectivities in this context are formed within the dissolution of the barrier between the spectator and the text. Once the space behind or within the television or computer screen is accessible to the spectator, we become the information that was our object; "we become the Other to our self" (Hayles, 1993c, p. 186). The masquerade (to use Butler's words) of *Wintermute* and *Neuromancer* is a spectator sport throughout the text. Case encounters the AIs in cyberspace when they pose as someone else that he knew. Virtual bodies do not dismiss the importance of corporeality; rather, they speak to the same cultural obsessions with traditional physical categorizations of the body. In the rush to escape the body, our bodies are constituted as the struggle yet again.

Fleeing from the corporeal is not a new development in our history, as Chapter Two on the history of the body outlined. The flipside of technological enhancement and virtual worlds is material poverty and powerlessness. In *Neuromancer* and in our lived social reality, equal access to technology is not granted to all people. Technology is a privilege related to technical experience and education as well as social and economic class. Access to computer technology

and cyberspace is not usually (or legally) the privilege of marginalized peoples in *Neuromancer* or our present world. Vivian Sobchak (1993) argues that the cyberculture of today is forming an apolitical discourse of escapism. She recognizes the very contradictions that have been amplified in *Neuromancer*. At a time where the homeless grow greater in numbers and people are starving, proponents of the electronic frontier celebrate the possibilities of disembodiment.

Historical accounts of virtual reality tell us that one of the initial project's slogans was "reality isn't enough anymore", but psychoanalytic accounts would more likely tell us that the slogan should be read in its inverse form "Reality is too much right now" (Sobchak, 1993, p. 576).

Sobchak believes that the current manifestations of cyborg subjectivity have not actually presented the liberatory opportunities that Haraway envisioned, although she does recognize that Haraway is not a naive proponent of this new culture. Instead Sobchak sees this hybrid consciousness as reconstituting a holistic and transcendental subject in radically individualistic terms. I have argued that technosocial subjectivities can foster resistance and open up new possibilities for subjectivity and embodiment; at the same time new spaces and new ways of conceptualizing bodies, virtual spaces and our world could slip away into a reinforcement of status quo power relations.

Many writers have speculated about the freedom to construct chosen, imagined identities on-line where people are not immediately gendered, raced or classed by the physical referents we interpret in face to face interaction. This, of course, is also a fantasy world where such social classifications produce both the negotiation/interpretation of an other in rigid categories, as well as a signification and performance of self within these same categories of meaning. Butler's thesis of sex/gender as a practice of signification operates on-line, although its mode of signification has

been coded differently. Practices of representation in virtual worlds like cyberspace are coded by information and data codes, not linguistic codes. Still, data - like language - is not a pure or innocent substance devoid of history and culture. Virtual worlds and the technologies which produce them, existing and imagined, are products of our history and culture. Technology is not created in a scientific vacuum.

If we think of language as yet another interface, the shift from this form of mediation and communication to the coding of electronic impulses in an information network provides a metaphor for postmodern subjectivity. Hayles (1993a) proposes that the dialectics of presence and absence are disrupted by the dissolution of absolute correspondences between signifier and signified. Hayles sets up the dialectics of presence and absence as one instance of the binarisms of western logos. She perceives these binarisms as being fundamentally disrupted by the flow of information which does not conform to these categories, nor does it conform to the behaviors of dialectics: instead Hayles proposes that information societies produce a relation of paradox. What has been constructed as dualistic or oppositional (for example, mind and body) has now imploded into a flow of information.

...the posthuman implies a coupling so intense and multifaceted that it is no longer possible to distinguish meaningfully between the biological organism and the informational circuits in which it is enmeshed (Hayles, 1993a, p. 80).

The possibilities for human subjectivities and identity that emerge from this coupling or collapse of boundaries suggests possibilities for agency in the sense that Butler has argued.

In the beginning of *Neuromancer*, we thought that all of the AI communication with Case was from Wintermute masquerading as friends and acquaintances. Later we learn that Neuromancer has also been appearing to Case, but that Case had assumed that it was always

Wintermute since he did not know about the existence of a second AI. Since the AIs can choose any virtual body to represent themselves, there could be many people or intelligences imaging and imagining infinite possible representations. While Butler's performative identity is still grounded by the material and semiotic body as the site of subversive signification, Gibson's AIs surpass the posturing of the masquerade. Wintermute and Neuromancer are coded by information and data codes as well as discursive formations. Subjects live this disruption in coding through their interaction with technology.

Perhaps we can approach some of the criticisms leveled against Butler with the possibilities of technosociality. Butler's notion of agency has been read as a flippant decision, as if identity in consumer culture were as superficial as visiting the mall. Joan Copjec (1994) refers to this problem as "confident voluntarism." Copjec's argument is persuasive because she seeks to refine the problematic aspects of Butler's work rather than rejecting her premise as theoretically unreasonable and/or politically unpalatable. Copjec roots her objection to Butler's analysis in her understanding of Kant's "euthanasia of pure reason", when reason is applied to things which cannot become objects of our experience and falls into contradiction with itself (Copjec, 1994, p. 201). She argues that the contemplation of sex is an instance where reason falls into this internal contradiction: faced with this unresolvability reason can either cling to dogmatism or abandon itself to a despairing skepticism. To Copjec, "confident voluntarism" is the flipside of Kant's despairing skepticism and her critique takes hold in both an understanding of reason and psychoanalysis. Copjec argues that sex cannot be a natural fact, in agreement with both psychoanalysis and Butler; but she also argues that sex cannot be a discursive construction.

Sex is the stumbling block of sense. This is not to say that sex is prediscursive; we have no intention of denying that human sexuality is a product of signification, but we intend, rather, to refine this

position by arguing that sex is produced by the internal limit, the failure of signification. It is only there where discursive practices falter - and not at all where they succeed in producing meaning - that sex comes to be. (Copjec, 1994, p. 204).

Sex, in this case, is a failed and unintended performance, but still not a natural fact, as well as a successful and intentional performance (Butler). If the lessons of feminism over the past twenty years have anything to tell us it is that there are no exclusive or unified categories. Butler might not be adverse to such a position; although her argument does not include these ideas, it does not disallow them.

Copjec believes that Butler's crucial error is in the transition from the shifting concepts of "women" to making conclusions about the "being" of "women". At this point Copjec's argument begins to disintegrate. She believes that an understanding of the instability of the terms of sexual difference does not ground the conclusion that Butler asserts, namely that sex itself is shifting and incomplete. At this point, however, we depart quite substantially from the larger core of Butler's argument. If we accept that sexual difference is a signifying practice and that the discursive realm is a cultural construct, Butler argues that the discursive interrelates with the real. This interrelationship means that the discursive can render real, or natural, that which is discursive, and vice versa. This is not a simple relationship, but a complex structured repetition of acts or signifying practices. Butler does not conflate the terms of sexual difference with sex itself; rather Copjec has reproduced the separate categories of the symbolic and the real in the pursuit of reason.

Copjec's argument implies that sexual difference is language and sex is the thing itself, as if language always reflected the actual, or even the natural. Sexual difference is a real and not a symbolic difference to Copjec, unlike race and class which are inscribed in the symbolic as well

(Copjec, 1994, p. 207). The distinctions made between sexual difference and "other" constructions of difference appear highly suspect in her argument. While an acknowledgment of varying structures is important, I think we need to be careful about setting sex apart from the interrelationships of various oppressions as it privileges a gendered analysis over a race and class analysis. The limits of reason, which Butler herself acknowledges, are located precisely within the inability to theorize the relations between the symbolic and the real as interrelated and possibly interchangeable. Butler has purposefully gone beyond reason, (which incidentally is framed by the very binary she seeks to undermine), in order to expose the constructed nature of both the symbolic and the real.

What is compelling in Copjec's critique is the notion of sex as "... the impossibility of completing meaning..."; sex itself is the contradiction of reason. Copjec is not so far from Butler's position. When we extend Copjec's argument, sex is not a performance (Butler's position) but the failure of performance. The notion of sex as the failure of performance (rather than its success) does not eliminate the "confident voluntarism" she accuses Butler of promoting. What Copjec points to is the absence of more involuntary aspects of identity formation in Butler's thesis, but Butler is not ignorant of the structured aspects of the symbolic and the real. Butler, however, does not deal substantively with the failure of performance. When "being" is the power to represent or reflect reality, "being" becomes only an appearance of "being" - a masquerade (Butler, 1990, p. 45-47). Nowhere does Butler proclaim that this masquerade is always or necessarily willful; she does suggest that our awareness of the masquerade of sex and/or gender presents the possibility of intentional and subversive performances. Butler's performative identity is only contingently voluntary. Such a performance is structural (socially, and symbolically) and propelled by

necessity, not privilege. This is not to say that all performances are necessary, and none are privileged; it is to say that the social, the real and the symbolic are not always discrete categories.

Trinh (1989) argues that the social, the real and the symbolic are interwoven in many women's lives, as they were in *Grandmother's Story* (discussed in Chapter One). Indeed, reality itself as performance is not a new concept, but a very old concept rooted in the notion of magick and healers, arts that were generally associated with women. Women healed with words, not only herbs; healing was a signifying practice which held a direct relationship to the social and the real. The notion of such performance does not dismiss the impact of the masquerade. Butler is aware that the constitution of the physical is a complicated matter: "Is there a "physical" body prior to the perceptually perceived body? Impossible to decide" (Butler, 1990, p. 114). In this context, virtual bodies (like Gibson's AIs) are not new phenomena.

What Hayles suggests is that the reciprocal relationship between bodies and technology produces a new notion of subjectivity outside of conventional binarisms. If pattern and randomness collapse in terminal identity, performative identity poses only part of the puzzle - the patterned responses of bodies to their lived social world. The subject, however, is not only constructed in the moments of planned or deliberate performances of identity. The random aspects of information posit the possibility of cyborg subjectivity. Virtual bodies and virtual worlds (however foreign they may appear) are not unreal; they already shape and inform our subjectivities. As the collapse of boundaries coalesce in the Age of Information, terminal identity can still be located in the boundary between the embodied and the virtual self.

The AIs have virtual, but not physical bodies. AIs today may have physical (machinic or hardware) bodies, but they are not composed of organic matter (biological or wetware). Sherry

Turkle (1995) describes two different approaches to Artificial Intelligence: the engineering side which produces "smart artifacts" and the theoretical side which visits an interactive exploration of computer intelligence and the philosophy of the human mind. Although both of these operate within the same field of research, they approach Artificial Intelligence with very different ideas. While the scope of their research and the practical problems may lead different directions, they are never completely separate (Turkle, 1995, p. 125). The details and successes of AI research are not as relevant to this discussion as the methods by which we are deciding the parameters of life and the signs of intelligence. Since humanity is alive and intelligent, scientists seek to replicate human conceptualizations of these bounded categories. However the parameters of life and intelligence have been historically contentious. The Turing test was created in the 1950's to test a machine for intelligence and variants of the Turing test still persist in research today. *The Vancouver Sun* (March 31, 1997) reported that one of UBC's research associates, Richard Gibbons, is entering his program "Julie" in an AI competition in New York this year where "she" will be tested by a Turing Test. If we take Copjec and Butler seriously, the performance of gender is constituted within the masquerade, whether that performance fails or succeeds. Such arguments about sex/gender construction become muddled in intelligence testing for machine subjectivities because the mark of sex is not corporeal.

The Turing Test was designed by Alan Turing to test a computer for intelligence. Turing is sometimes credited with the theoretical design of a programmable computing device which produced the universal Turing machine. The Turing machine can be seen as the basis of all modern programmable computers (Dennet, 1992, p. 48). It is a debatable point as to whether Turing can be considered the only scientist responsible for the theoretical and practical

development of the computer: "...by most accepted definitions the first functioning computers were developed independently and virtually at the same time in three different countries, one of which was at war with the other two" (Kurzweil, 1992, p. 175). Kurzweil cites these three men as Konrad Zuse (German), Alan Turing (British) and Howard Aiken (American). Popular credit usually goes to Howard Aiken (the American) even though Zuse's work predated his by at least three years. Turing is also often overlooked, perhaps due to homophobia of the time. Turing was arrested in 1952 for homosexuality and forced into "hormone therapy" - believed to 'cure' homosexuality, it drove Turing to suicide (Grant, 1990, p.46).

Turing's article "Computing Machinery and Intelligence" (1950) posed the question which still riddles us today: can a machine think? The method by which Turing proposed we could test machines was by way of an "Imitation game". Briefly this game consists of three people: one man, one woman, and a judge of either gender. The judge is to determine which one is the woman by asking questions through teletype. Both players try to convince the judge that they are the woman. Sometimes a machine will take the place of the man and try to convince the judge that it is a woman - the test is to see if the judge is convinced as often by the man as he/she is by the machine. This test of intelligence, however, seems really to be a test of assumed cultural and gender cues. Turing does not define intelligence but rather operationalizes it through the performance of culture and gender. He argues that to pass the Turing test is equivalent to intelligence, although intelligence is never overtly defined (Stevens, 1996, p. 424).

To play a woman better than a woman can - that is Turing's test of intelligence? The woman is the marked sex, a sex marked by an inessential performance. Tyler Stevens (1996) discusses the Turing test and the problem with this implicit definition of intelligence as a

provocation of the "realization that every conversation is an imitation game, every form of representation is a Turing technology" (Stevens, 1996, p. 431). The computer is not gendered, unless the judge declares it a woman; Butler has already exposed our gender as negotiated - not through a teletype screen, but through the incorporating practices and performances of our bodies. But what of the incorporating practices of bodies that happens through technology?

The hotbed of research that is occurring around MUD's, MOO's³⁰ and sex/gender is riddled with questions about our performances of gender on-line, and the way in which we perform corporeal presence through language. Although many studies have shown that many of the gender, race and sexuality stereotypes which plague our everyday world also thrive on the net, there are also some hopeful, or at least exploratory, performances of physicality on the net. We have been having sex with machines for a long time; in the tradition of sex toys and phone sex, net sex is not an entirely new phenomenon. If we take Mettrie's "man-machine" metaphor literally, sex is the realm of the machine. Net sex does, however, provide users with an interactive fantasy world which can be entirely imaginary.

Shannon McRae (1996) explores these performances of physicality and their implications for gender identity through an exploration of the gendered interaction, particularly sexual, on the net. McRae points out that netsex on various MOOs are not reinforcing a mind/body split but rather magnifying their intimacy:

...netsex involves a constant phasing, simultaneous awareness of the corporeal body at the keyboard, the emoting, speaking self on the screen, and the existence of another individual, real and projected, who is similarly engaged. Mind/body awareness is not split, but doubled, magnified, intermingled (McRae, 1996, p. 260).

³⁰ MUD stands for Multi User Domain, or more commonly now Multi User Dungeon (in the tradition of Dungeons and Dragons legacy), and MOO, MUDS that are Object Oriented. Both are public, text based online systems.

Although netsex does not directly involve a physical corporeal body, the body is discursively constructed and rearticulated in these interactions. The body is named and gendered, although not all lists constrict the choices of players to two traditional genders. Of the genders available for designation, the spivak stands out as an exceptional category; a spivak can morph at will and create any sexual features, or sexualize any features, that it chooses. To write a spivak however, is not only a one-sided project since spivaks can be molded by their partners if they are friendly to the modifications (McRae, 1996, p. 257). The transformation of gender identity and identification on the net is a fascinating account of the processes at work in both writing and gender construction. The gender being constructed is situated in a body, written through a body and identified as an apparent consequence of the body inhabited. When the body is written on the net, using the tropes of gender, the notion that gender is written through the body IRL (in real life) becomes more tangible. However the subjectivities produced through netsex are not only physical subjects with some technological gusto. This relationship transforms the construction of subjectivity itself. With the curious and relatively harmless forms of identity experimentation that occurs on-line comes the invasion of people's private lives under false pretenses. While the same problems arrive on the net, like MUD rape and sexual harassment, that we encounter in everyday life, these oppressions are also being extrapolated and reassembled in cyberspace.

Our significations of ourselves on the net require a proficiency with writing that many people do not initially possess; writing one's body needs to be learned. It is not uncommon to unsuccessfully write your body in these interactions, even though your experiences are true, or real. A friend recently told me about an acquaintance who visited a lesbian chatroom; a lesbian herself, she wanted to make contact with other lesbian women. As a recent RCMP recruit who

had relocated for training, her contact with a larger gay community had recently been restricted. She was "deleted" or tossed out of the room for "being a man" after using the word "chicks"; she is unable to return, essentially exiled without any recourse or ability to prove that she is *really* a lesbian, even though she has seemingly violated the normative behavior established in this particular room. Whether or not she really is a lesbian, masks the issue the system operator and members of that chatroom have established as essential cues for lesbian performance. The lesbian that they have constructed would not write herself, or other women, as "chicks." This form of delineation represents a particular truth about these women, who may or may not all "really" be lesbian or even women; these subjectivities are not always correlative to the bodies which write them.

Identity politics have heightened our awareness of prejudice and discrimination based on social identities. Cyberspace offers people interested in cultural innovation a possible space of anonymity to develop ideas apart from stereotypes, racism, sexism, homophobia, ageism, classism.

Online, users can float free of biological and sociocultural determinants, at least to the degree that their idiosyncratic language usage does not mark them as white, black, college educated, a high-school drop-out and so on. ... "People are judged on the content of what they say" (Dery, 1993, p. 561; quotation refers to Wayne Gregori, a computer consultant).

But I am not so naive to suggest that this is wholly the situation today. It remains to be seen if people can suddenly interact freely in cyberspace when their corporeal existence has been shaped by oppression. Again, cyberspace is accessible to a relatively privileged population who have access to the web, are literate and somewhat technically educated.

Corporate and government interests have been much more successful at exploring and employing cyberspace. Information is not without politics, and the links between commerce and

information are strong. "Commerce is the ocean that information swims in. ...the means of exchange in commercial culture is now pure information" (R.U. Sirius, Mondo 2000 Editor, in Sobchak, 1993, p. 583). Cyberculture is still best known to those who are economically privileged - they have the time and the resources to acquaint themselves with the technoculture. The privileged development of new technology becomes more of a problem as cyberspace infiltrates businesses and government. As computers become more accepted, people who lack this knowledge are outcasts in terminal culture. It is no longer a question of experimentation on-line, but of the necessity to understand these processes and spaces in order to perform terminal identity. Without access to these technologies we become marginalized within our own society. The possibilities of liberatory technologies today can quickly be appropriated and solidified as technologies of surveillance in service of the state or big business.

Yet the potential of free interaction does exist. Many political bulletin board systems (BBS's) exist and are very active. While the potential of cyberspace as a democratic space is still possible, it seems that the oppressive structures of everyday life have permeated cyberspace as well. On-line experience has revealed clearly that many of the issues of identity are still pervasive in cyberspace. We cannot, and do not, leave behind the problems of our physical world when we enter cyberspace. The psyches of those creating, producing and interacting within this space and with these technologies are still present. The Turing test quantifies gender classifications, gendering the computer in order to define it as intelligent. Gender as the mark of (artificial) intelligence revisits the separation between mind and body, between knowing and feeling.

This thesis has looked at the fluidity of subjectivity, particularly as it is constructed through emerging technologies. This technosociality has been explored by looking at the body through science fiction, particularly *Neuromancer*. The exploration of fiction as a social text has

been conducive to looking at the relationship between bodies, machines and subjectivity. The boundaries between fact and fiction are filtered through an understanding of how our narrative constructions produce certain forms of subjectivities. Once these categories become elusive, the categorizations of bodies and machines also seem less secure. Although new technologies and cyberspace tend to reproduce similar social relations to the technologies which have preceded them, emergent technologies and their spaces have the potential to expose the processes which contribute to subject formation.

When we conceive of activity in cyberspace, we can't help but superimpose old technological and spatial models and behaviours onto this new domain (in much the same way that early television was essentially radio theater in front of a camera). Every aspect of virtual "residency" offers fascinating, fertile ground for examining issues of embodiment, disembodiment, authenticity and artificiality, biological gender and gender role-playing, information ownership and free access (Branwyn, 1993, p. 791).

These processes indicate the propensity to fundamentally change the oppressive relations that have been historically associated with the kind of body one inhabits.

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