

# Of Machines and Meat: Cyberpunk, the Postmodern Condition and a Posthuman Reality

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Try this experiment: walk down the street of any typical, modern city on any typical day and see how many cyborgs you encounter. No, this is not a joke: there is no chuckle to be had, there is no punch line. This experiment is very serious, but perhaps a short explanation of terms is necessary to carry out this seemingly impossible task...

For many, the term "cyborg" will conjure up images gleaned from modern science fiction: the emotionless logic possessed by the character of Data from *Star Trek: The Next Generation*, the unrelenting justice doled out by *Robocop* or the emotional anguish experienced by Gabriel in *Lawnmower Man*. Such modern tales abound with references



to beings that seem to possess the best (and sometimes the worst) of the characteristics of both humans and machines. But, let us examine the three examples cited and perhaps we may shed some light on the true definition of a cyborg. The character of Data, a likeable character, and certainly an indispensable member of the crew of *The Enterprise*, cannot be said to be a cyborg. Though he possesses a humanoid form, his physical body is entirely mechanical. He possesses nothing in his body that can be said to be living: no hormones, no genes, his hair does not grow, his skin cells never mature and slough away. Yes, it can be said that he has self-awareness, but it is made very clear to the viewer that this awareness is the result of a computer program that he possesses in his "brain". As for *Robocop*, his name says it all. Yes, once again here we see the recognisable humanoid form, but also, once again, this dispensary of law and order is fully a machine, one designed and built with no biological processes. Finally we come to

The Lawnmower Man and a completely different subject from that of the previous two examples. At the beginning of the narrative, we see a man like any other. Granted, Gabriel's emotional and mental maturity lags behind his physical maturity at the beginning of the narrative, but the viewer is made aware that Gabriel is human through and through. Through a meeting with a weapons researcher who utilises virtual reality, Gabriel begins to use his unrestricted access to VR software and hardware to extend the limits of his world. As the story progresses, Gabriel's body becomes merely an access point for his further explorations in the realm of computer "simulation". "Simulation" is a word that begins to hold less and less meaning for this once simple lawnmower maintenance man, however. The worlds represented to him through patterns of information begin to hold the possibility for disembodied immortality. The VR machines, like the lawnmowers he once handled with expertise, become an extension of his biological body, allowing him to experience a new reality, a simulacra of the world that he had known previously. Of these three examples, Gabriel is the only character can be said to be a true mix of biology and technology, of man and machine, thus a true "cyborg". The lawnmower man, with his seamless incorporation of his biological body with technology is what is meant by the term "cyborg".

Now what can be said of our experiment? Who among us is truly a "cyborg"? In this new light, we encounter cyborgs every day: the student who is nearly blind without contact lenses, the elderly heart patient who must wear a pacemaker, the young child who wears a hearing aide, and the accident victim who has had titanium screws implanted in a damaged limb are all examples of a cyborg. It is even possible that you yourself are a cyborg and have not realized it until now.

### **What About Humans and Machines?**

The following discussion seeks to outline and understand the relationship between the human body and technology. From the very first time that a *Homo habilis* used a pointed stick to dig for food to the introduction Virtual Reality games in video arcades, technology has been enhancing the ability of the human body. What has changed, however, is the perceived boundaries of human. No longer is technology used to simply extend the reach of the human body, it inhabits it. The pacemaker sits inside

the chest of the heart patient, and yet we do not perceive its owner to be the stuff of fantasy, nor is he perceived as inhuman- he is a human whose continued survival is enabled by technology.

So, what does a pair of contact lenses have to do with ontology and semiotics? The answer is "everything". By examining the new semiotic configurations that surround the notion of humanity in relationship to the human body, and locating these configurations in works of modern fiction, this discussion hopes to see this new understanding of "human" reflected in the products of our human bodies and minds. To do this, three examples from late post-modern science fiction, from sub-genre loosely known as "cyberpunk", as well as the theories of two prominent postmodern thinkers whose work falls into the field of what can be called "cyber-semantics" will be examined in relation to one another. This discussion will be ordered with the view to making clear the relationships between the sub-genre of cyberpunk fiction, the critical works of Donna J. Haraway and N. Katherine Hayles, and the work of William Gibson in his novel *Neuromancer*, the work of Pat Cadigan in her novel *Synners*, and that of film director/writer David Cronenberg in *ExisTenZ*.

The theories of Donna J. Haraway and those of N. Katherine Hayles, despite their differences, are remarkably alike. Both theorists see the technological advances (especially in communications) of the late twentieth century as being one of the major catalysts to the breakdown of previously ridged boundaries that we have known since the time of Plato: the boundaries between man and machine, between nature and culture as well as between reality and non-reality. These breakdowns, they argue, have irreversibly changed our entire ontology. Both also see the articulation of man and machine (what Haraway describes as the "cyborg" Hayles prefers to call the "posthuman") as a perfectly understandable and natural step in our evolution. Finally, both see this new condition as being the end of the liberal humanist subject in Western thought: no longer are we held to a rigid definition of what man is or ought to be- no longer is the free, autonomous man a reality only for the privileged, wealthy few. Hayles and Haraway envision a free for all, a literal orgy of data occurring within the human body and mind. What this discussion will attempt to prove then, in light of the theories of Hayles and Haraway is that cyberpunk writing is thoroughly imbued in the literary

tradition of postmodernism but that it articulates a human condition which cannot properly be called that. Cyberpunk has taken postmodernism and brought it to bear on what these writers seem to see as a new human condition. According to this, then, it is clear that postmodernism and posthumanism are two sides of the same coin. To think of it most simply, postmodernism, with its attendant semantics and ontology of forced signification, its glory in the breakdown of boundaries and playful creation of new meanings from old forms enables the realisation of a posthuman condition: for if posthuman is what we are, then postmodernism is the way we think about that condition. This discussion will make the argument that the three examples of cyberpunk writing present a posthuman reality through the use of postmodern modes of cultural production.

### **A Short History of Cyberpunk: Influences and Themes**

The path of historical events tend to resemble the roots of a giant redwood-tangled, layered, doubling back on themselves, and many seem to branch off in unlikely directions in search of sustenance. So too are the roots of cyberpunk. This section will attempt to bring about some understanding of the events that led up to the emergence of that sub-genre of postmodern science fiction that has been called (both in praise as well as in disgust) "cyberpunk". While it may be ultimately possible to trace the roots of this literary movement as far back as Mary Shelly's *Frankenstein* (as Larry Mc Caffery suggests in *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Science Fiction*), this particular survey will begin at a slightly more current point in time for sake of brevity and in the interest of being concise. That point in time is the end of W.W.II.

The end of W.W.II is not an arbitrarily chosen point in history. Rather, this era has been chosen because it has been seen by many as the beginning of the economic/societal and cultural conditions which exist today. The culture of the 1950's underwent a radical change in terms of the way people felt about the world around them. From out of the smoke and dust of the second major war in less than fifty years, huge shifts in both political and economic realms were being realized.

## **Part I: The Rise of Postmodern Culture**

The postmodern would be that which, in the modern, puts forward the unrepresentable in presentation itself, that which denies itself the solace of good forms, the consensus of a taste which would make it possible to share collectively the nostalgia for the unattainable; that which searches for new presentations, not in order to enjoy them but in order to impart a stronger sense of the unrepresentable.

Jean-Francois Lyotard

### ***The Postmodern***

For the purposes of this discussion, there are three main areas that need to be discussed in order to understand the new culture that began to take shape in the late 1940's and early 1950's and which, some would argue, continues to this day. It is through understanding the elements of this new "post-modern" culture, that we may begin to understand the reasons for the rise of cyberpunk fiction in the 1980's. The three areas that must be discussed are: the rise of science and consumerism; the rise of multinationalism; and the major semantic shift that was precipitated by the commodification of information.

With the "success" of the hydrogen bomb in subduing the Axis forces, a new focus began to take shape in the collective mind of the Western World. No longer seen as something that was incidental to everyday life, science began to take prominence in many aspects of daily living. Mathematics and the physical sciences began to enjoy greater emphasis in schools, many jobs began to move towards a more scientific bent, and, coupled with the good economy enjoyed by North Americans and the resulting culture of consumerism, more technological products of luxury and convenience began to make their way into the average household. All this was further emphasised by the announcement that, due to the wonders of science, man would someday very soon set

foot on the surface of the moon. Science was seen as the great liberator: the hope for future prosperity and peace lay in the ability to master scientific principles to not only bring the benefits of science into the lives of citizens, but also to lift those citizens to new heights in achievement.

This point about the rise of science leads to the second aspect of postmodern culture that arose out of the end of W.W.II: the rise of post-industrial capitalism. While there are undoubtedly many other threads that tie in with this new phase of capitalism, the one that is of most interest to this discussion is the fact that the rise of science created a new way of thinking about one's role in the world. Larry McCaffery puts this idea rather succinctly in the introduction to his anthology of cyberpunk literature, *Storming the Reality Studio*. He writes:

This new stage, emerging roughly in the years immediately following WWII, has produced our own postmodern world by expanding capitalism's operations...this unprecedented expansion, made possible specifically by the exponential growth of technology, has profoundly altered not only the daily textures of the world(s) we inhabit but the way we think about the world and ourselves in it (p. 3-4).

McCaffery then goes on to make the next point that has been mentioned- that the rise of technology and science and the corresponding rise of post-industrial capitalism created a new era of the commodification of information on a scale not previously known in human history. No longer were businesses simply in the business of creating goods for other corporations or private citizens. Now they were also in business of buying and selling *information* (p.4). This information boom was not simply limited to multinational companies engaged directly in the capitalist market, however. With the growing importance of information came an explosion in the advertising and media industries in which a great importance was placed on selling copies of original experiences and simulacra of original consumer products.

It was not only *simulations* of experiences and products that were emerging in

the marketplace for the consumer, but there also began another profound shift in that *simulacra* of new experiences and products began to appear on the market. The idea of simulacra has been theorised by many critical writers about the postmodern condition, and for good reason: it is a thing uniquely belonging to the late twentieth century and one that has been made possible only through the explosion of technology. Jean Baudrillard summarises this situation well. He writes that this new brand of experience, that is, experience that does not imitate or copy experiences or products that already exist<sup>1</sup>.

Larry McCaffery adds to Baudrillard's theory by saying that this substitution of the real for the equally real constitutes

[a] postmodern desert inhabited by people who are, in effect, consuming *themselves* in the form of images and abstractions through which their desires, sense of identity, and memories are replicated and then sold back to them as products (1991, p.6)<sup>2</sup>.

In the era that followed W.W.II, economics, politics, semiotics and culture were all undergoing radical readjustments, not the least of which was the way that people in the Western World thought about things that had been taken more or less for granted since the time of thinkers such as Plato and Socrates. This created major boundary instabilities between heretofore oppositional aspects of human thought and experience. Long held, ridged ontological and semantic boundaries between such ideas as life/death, human/machine, real/simulated began to bleed together. No longer was there a definite relationship between the thing being signified and the picture-word used to signify it, and this slippery slope of semiotics has led to what Frederic Jameson describes as a

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<sup>1</sup>Baudrillard, Jean. Simulacra and Simulation. Translated by Sheila Faria Glaser. Ann Arbor: The University of Michigan Press, 1994 (p.2).

<sup>2</sup> The italics in this passage are McCaffery's own.

state of schizophrenia. He writes that this new situation is a result of

...the proposition that meaning is not a one-to-one relationship between signifier and signified, between the materiality of the language, between a word or a name, and its referent or concept<sup>3</sup>.

Jameson goes on to say that this "linguistic malfunction" can be connected to the psyche of the schizophrenic in that there are two realisations which emerge, both of which are essential to understanding the postmodern condition<sup>4</sup>.

The point to this discussion of the postmodern condition is that modern science fiction (including cyberpunk fiction) embraced this epistemological, semantic and ontological breakdown as easily as it embraced the technology that was used to produce it, the technology that it spoke of, and the technology that was used to distribute it. With this understanding of the cultural background which spawned modern science fiction, it would now be useful to turn to a discussion of the rise of cyberpunk fiction itself.

### **Part III: The Emergence of Cyberpunk Writers**

"Live fast, die young, and leave a highly augmented corpse"

-qtd. by Thomas Foster (1993)

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<sup>3</sup>Fredric Jameson. *From "Postmodernism, or The Cultural Logic of Late Capitalism"* in

*Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Science Fiction*. Larry McCaffery, ed. Durham: Duke UP, 1991. p.222.

<sup>4</sup>Fredric Jameson. *ibid.* (p.222).

By the early Eighties, SF writing had evolved. Being, on average, about 10-15 years younger than the New Wave, the new writers were thoroughly steeped in early technoculture: MTV, video games, and media-fuelled pop culture was part of their every day milieu. In his anthology *Mirrorshades: The Cyberpunk Anthology*, Bruce Sterling (himself an accomplished writer in the genre) makes the point that cyberpunks were as much a part of the Eighties techno-ethic as were their writings. He writes:

The cyberpunks are perhaps the first SF generation to grow up not only within the literary tradition of science fiction but in a truly science-fictional world. For them, the techniques of classical "hard SF"-extrapolation, technological literacy- are not just literary tools but an aid to daily life. They are a means to understanding, and highly valued (p.ix).

With this idea in mind, then, it is possible to construct a working definition of cyberpunk. It must be recognized, however, that for as much cyberpunk produced, there are an equal number of literary critics that have their own specific definitions of what cyberpunk is. The following is intended to be a generalised definition of the main themes found.

Basically, there can be said to be four major aspects to cyberpunk literature, and while these four aspects may vary in the degree to which they are found in specific examples of cyberpunk, there is a general consensus among critics as to their presence.

First, the idea that cyberpunk was a movement grown out of what several critics identify as "punk sensibilities" (McCaffery, 1991: 205) or the culture of the street. Sterling makes the point that these writers were engaged in defining the aesthetic of their decade as a whole, "...a new kind of integration. The overlapping of worlds that were formerly separate: the realm of high tech, and the modern pop underground" (p. ix). He also stresses that cyberpunk writers were most interested in the implications of visceral technology, the interzones where the technology normally found in government and corporate labs is appropriated for street use. Sterling brings up a useful quote from William Gibson: in *Neuromancer*, the character of Case, a matrix cowboy, declares that "the street finds its own uses for things" (1986: xi).

Larry McCaffery adds to this idea as he compares the cyberpunk movement in literature to what was happening at the same time in the world of music. He compares punk music to cyberpunk writings:

The overall effect of cyberpunk within SF is analogous to what occurred within rock music in the mid-1970's when punk music rudely and crudely deconstructed nearly everyone's relationship to popular music...In the case of both punk and cyberpunk...[there was no] constricting attitude of conformity among ambitious writers and musicians...Truly imaginative artists hardly felt that they were now required to narrowly imitate, say, punk and cyberpunk's emphasis on sensationalised, S&M surface textures, its Benzedrine-rush pacings, or its paradoxically nonconformist stance (1991: 13).

Second, there is an overarching awareness of the persuasiveness of technology in cyberpunk fiction. No longer relegated to what Sterling calls the "ivory tower", these new writers were ultimately concerned with the integration/invasion of technology into every day life and into the human body itself. Thomas Foster agrees. He writes:

The cyberpunk understanding of technology as "pervasive" and "utterly intimate," as "under our skin" if not "inside our minds," informs its representation of media technologies and computer interfaces just as much as its representations of mechanical prostheses, surgical alterations, and genetic engineering (1993, p.2).

This view is also supported by Sterling, who lists what he sees as the central themes found in most, if not all, cyberpunk writings: "...body invasion, prosthetic limbs, implanted circuitry, cosmetic surgery, genetic alteration...mind invasion: brain-computer interfaces, artificial intelligence, neurochemistry-techniques radically redefining the nature of humanity, the nature of the self" (1986 p.xi).

Third, along with the actual literary themes of integration of technology into the human body comes the question of how the human body is viewed in light of this integration. This new view of the human condition must somehow change how we view

the body itself. As was mentioned above, the writers of classical SF tended to see the human body as essentially untouched by science, while the cyberpunks see a "social situation...in which all subjects signify for others, in which all bodies function as signifying surfaces" (Foster, 1993 p. 2) and

...technology no longer plays a dialectical role as the Other of humanity; instead, that otherness exists within the "human", thereby denaturalising assumptions about the relation between the body and cultural identity, especially gender and racial identities. Cyberpunk science fiction would therefore represent a cultural site were the construction of such identities and the whole apparatus of subject-constitution could be interrogated (Foster, 1993, p. 14).

It should be emphasised that this collapse of the barriers between human and machine is not treated with horror, as it would be in the realm of hard, or mainstream SF, however, but with a sort of curious pleasure in the creation of a wholly new set of situations and opportunities for interaction. On this point Tom Maddox agrees. He writes that cyberpunk treats technology neither as technophobic, nor as technophilic and points out that "...cyberpunk did not so much embrace [an understanding of] technology as go along for the ride" (Maddox, 1982: 43).

Finally, with its tendency to embrace the new cultural implications inherent in the fusion of human bodies and technology, there arose new implications for signification. Thomas Foster suggests that cyberpunk "...presumes and offers a concrete representation of Beaudrillard's postmodern 'pornography of information and communication...of functions and objects in their legibility, availability, regulation, forced signification, capacity to perform [and] connection'" (1993, p. 2). What Foster and Beaudrillard are suggesting is that this collapse of reliable signifiers leads to a social situation in which there is no single, reliable method of viewing anything. All signifiers lose meaning and are therefore recuperated by various social groups that give them meaning all their own. This, Foster suggests, inevitably leads to a social situation in which "all subjects signify for others" resulting in "social fragmentation or balkanisation" (1993, p.2).

## Part IV: Criticisms of Cyberpunk

Not everyone agrees with this definition of cyberpunk, however. In order to give the reader a well-rounded view of the issues surrounding this much critiqued sub-genre, the following section will bring to light four main problems with the term that have been identified by various critics.

The first criticism of the term and definition of cyberpunk comes, oddly enough, from the cyberpunks themselves. The writers of the early- to mid-Eighties that have been come to be identified as members of the cyberpunk movement: Cadigan, Gibson, Sterling, John Shirley and Rudy Rucker to name a few, had no intention of giving their writings a label. Unlike writers of the "Beat" generation, for example, they did not see themselves as a group of artists united through some shared sense of purpose. Rather, these writers were writing the science fiction that they were simply because that is how they experienced technology-because it was the only way that they knew how<sup>5</sup>. Tom Maddox makes the point that the term cyberpunk was exploited to the fullest of its marketing potential in the months that followed the release of William Gibson's *Neuromancer* and the announcement that it had won the triple crown of SF literary awards: the Hugo, the Nebula and the Philip K. Dick. Maddox goes on to point out that the actual term *cyberpunk* was coined not by a writer that existed in that literary circle, but rather by a critic by the name of Gardener Dozois. From the appearance of the word, a media circus ensued:

Cyberpunk became talismanic: within the SF ghetto, some applauded, some booed, some cashed in, some even denied that the word referred to anything; and some applauded or booed or denied that cyberpunk existed *and* cashed in at the same time-the quintessentially postmodern response, some might say...Literary cyberpunk had become more than Gibson, and

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<sup>5</sup> Tom Maddox does point out, however, that many of the "original" cyberpunks were connected to one another though loose association with Bruce Sterling's early 1980's SF faszine *Cheap Truth* (Maddox, 1982; 44).

cyberpunk itself had become more than literature and film. In fact, the label has been applied variously, promiscuously, often cheaply and stupidly. Kids with modems and the urge to commit computer crime became known as "cyberpunks"...so did urban hipsters who wore black, read *Mondo 2000*, listened to "industrial" pop, and generally subscribed to techno-fetishism (p.44).

This point brings up a second, and more sombre criticism about cyberpunk literature. Randy Schroeder finds a problem with referring to the symbiosis of human and machine, known as cybernetics (a major theme in cyberpunk writing), and the literary theory behind postmodernism. He writes that the reality of cybernetics and the distinct duality of man and machine cannot be found in postmodernist thought as the two ideas are mutually exclusive. He writes:

[T]he interzone of postmodernism and cybernetics is a problematic one...[c]ybernetics is reductionist; postmodernisms are not. Cybernetics affirms some kind of objectionist reality; postmodernism questions it. Cybernetics is fundamentally about binaries; postmodernisms are fundamentally about the collapse of binaries. Cybernetics is about construction; postmodernisms are about deconstruction (1994, p. 330).

The third criticism raised about cyberpunk lies in that of narrative technique. Novels such as Gibson's *Cyberspace Trilogy* (*Neuromancer*, *Count Zero* and *Mona Lisa Overdrive*), and movies such as Ridley Scott's *Blade Runner* recuperate the dark, "hard-boiled" style of writers such as Mickey Spillane and Raymond Chandler. Critics argued that such techniques could not rightly be considered to be revolutionary, but rather that they were reactionary, and that this was a negative label to have attached to one's work. Of this situation McCaffery notes that many critics saw this use of narrative technique as "...exhibiting [cyberpunk's] superficiality and collective failure of imagination" (1991), but then goes on to make the point that this sort of criticism ignored the true beauty of cyberpunk fiction: its ability to refresh old narratives by juxtaposing their style with new situations and semiotic configurations. He applauds "cyberpunk's postmodernist spirit of free play (*jouissance*) and collaboration, its delight

in creating cut-ups and collages (a la Burroughs) in which familiar objects and motifs are placed in startling, unfamiliar contexts" (1991 p.15).

## **Part V: The Theories of Haraway and Hayles**

### **Donna J. Haraway: "The Cyborg Manifesto"**

The section entitled "The Cyborg Manifesto: Science, technology and Socialist-



Feminism in the Late Twentieth Century" is only one short chapter in Haraway's larger volume *Simians, Cyborgs, and Women: The Reinvention of Nature*, and yet it contains an important discussion of the semiotics of the integration of the human with technology. Haraway makes use of the image of the cyborg- a biological/technological entity- to form the basis of her discussion about how our understanding of the word "human" and thus our understanding of our nature and culture has been radically altered. Haraway contends that the cyborg has been an important aspect of our ontology, of our political

and economic systems, of our very understanding of our language in the late twentieth century. She writes:

...we are all chimeras, theorised and fabricated hybrids of machine and organism; in short, we are all cyborgs...The cyborg is a condensed image of both imagination and material reality, the two joined centres structuring any possibility for historical transformation. In the tradition of "Western" science and politics...the relation between organism and machine has been a border war. The stakes in the border war have been the territories of production, reproduction, and imagination (1991, p.150).

From this passage it is clear that Haraway sees the cyborg as more than simply a human/machine hybrid. Throughout her piece she makes the argument that the cyborg has radically and permanently changed the landscape of not only Western society and

culture, but also the language and the very ontology that this culture has been based on since the Greeks. She identifies three main changes have been wrought by the appearance of the cyborg in our society:

1.) The cyborg represents an apocalypse in western teleology as it has no familiar links with the origin story as told in the Western world. She maintains that the Western origin story is concerned with humanist values "...the myth of original unity, fullness, bliss and terror, represented by the phallic mother from whom all humans must separate, the task of individual development and of history..." (p. 151), while the cyborg represents a value system that has no connection with our deeply entrenched liberal humanist past. Of this she writes:

The cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-oedipal symbiosis, unalienated labour, or other seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity (p. 150).

2.) In the cyborg we see an enmeshing of the private and public spheres, the former polarity of the household and the world outside that unit is washed away, leaving the way open for the questioning of other boundaries that have traditionally rigid boundaries in both nature and culture. She makes the point that this boundary breakdown allows for the possibility that nature can no longer be considered a "resource for appropriation or incorporation" by culture (p. 151). She points out that "the cyborg does not dream of community on the model of the organic family...The cyborg would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning to dust" (p. 151) and therefore much of western ontology falls away.

3.) Finally, Haraway makes the point that the cyborg also represents a breakdown of boundaries between not only human and machine, but also of what is physical and what is non-physical. Thus the understanding of the difference between human and machine is made unclear by the fact that many of the technological advances made today are designed to mimic ourselves in terms of growth and ability, and yet perform these functions with even greater precision and success:

Pre-cybernetic machines could be haunted; there was always the spectre of the ghost in the machine...[b]ut basically machines were not self-moving, self-designing, autonomous. They could not achieve man's dream, only mock it...Now we are not so sure. Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed...Our machines are disturbingly lively, and we ourselves frighteningly inert (p. 152).

In terms of the boundaries between physical and non-physical, Haraway suggests that, with the advent of the silicon chip, our ideas about physical reality have changed. It is no longer feasible to identify reality simply by whether or not one can actually see the technology moving or hear it working. She writes:

Our best machines are made of sunshine; they are all light and clean because they are nothing but signals, electromagnetic waves, a section of a spectrum, and these machines are eminently portable, mobile...People are nowhere near so fluid, being both material and opaque. Cyborgs are ether, quintessence (p.153).

According to Haraway, these three changes have led to a major revolution in the way that we think about ourselves and the way that we experience reality. She suggests that the myth of the cyborg has changed our lived bodily and social realities, that we have begun to lose our fear of integrating ourselves with machines. She goes on to say that this integration has become as natural as using tools to extend the abilities of our bodies had become to the pre-industrial man. She suggests that, previous to the present era, machines could be animated or organisms be mechanised but that the new reality is one that begs the question: "Why should our bodies end at the skin, or include at best other beings encapsulated by skin?" (p. 178). She goes on to say that our new reality includes the possibility that the fractured identity that arises from the machine-human interface is a natural, and even desirable, one:

For us, in imagination and in other practice, machines can be prosthetic devices, intimate components, friendly selves. We don't need organic wholism to give impermeable wholeness... (p. 178).

In terms of semiotics, Haraway's view of the cyborg means that our language has had to change in order to accommodate the revolution in ontology and teleology represented by the new integration of human and machine. In typical postmodern fashion, words are no longer relegated to one simple meaning. For each word, there is multiplicity of suggestions. Signification no longer comes easily and simply, there is no longer a single possible meaning for each signifier. Haraway seems to take the point of view of Lacan and subtly suggests that this new brand of signifier, one in which all things can stand in for one another can be thought of as "floating". She makes the point that meaning has been made fluid by new communications and biological technologies, that these technologies have stripped away formerly ridged significations in their search for a common language to control the flow of information:

Technologies and scientific discourses can be partially understood as formalizations...but they should also be viewed as instruments for enforcing meanings. The boundary is permeable between tool and myth, instrument and concept, historical systems of social relations and historical anatomies of possible bodies, including objects of knowledge. Indeed myth and tool mutually constitute each other...The world is subdivided by boundaries differentially permeable to information. Information is just that kind of quantifiable element (unit, basis of unity) which allows universal transition, and so unhindered instrumental power (called effective communication). The biggest threat to such power is interruption of communication (p. 164).

### **N. Katherine Hayles: *How We Became Posthuman***

The theories of Donna Haraway are an important stepping stone to understanding those of Hayles. Hayles takes Haraway's ideas, ideas drawn from a postmodern view of the world, and takes those ideas a step further. Rather than building another layer of theory onto these ideas however, she expands them by reducing much of Haraway's postmodern understanding to level much more basic: Hayles deals not with the actual physical presence of the man/machine hybrid, but with the semantic "pulses" that emanate from it.

Hayles begins her discussion about posthumanism by presenting what she sees as the four main elements of this condition:

1) **The posthumanist view privileges informational pattern over material instantiation.** Hayles notes that there has been a significant change in the way that the Western world has come to see reality. As was noted by Haraway, reality is no longer guaranteed by presence and non-reality by non-presence. Hayles takes this idea and adds another aspect to it. She sees the absence/presence dialectic in conjunction with information theory and informational technologies in that material presence or absence of something is only part of what to consider when considering reality. She asserts that, for the posthuman, the dialectic between pattern and randomness as found in informational theories to be as profound, if not a more profound, aspect of reality. In this, she says, signifiers become not so much "floating", as is suggested by Haraway, but "flickering", much like words represented on a computer screen. She writes:

Foregrounding pattern and randomness, information technologies operate within a realm in which the signifier is opened to a rich internal play of difference. In informatics, the signifier can no longer be understood as a single marker...Rather it exists as a flexible chain of markers bound together by the arbitrary relation specified by the relevant codes. As I write these words on my computer, I see the lights on the video screen, but for the computer, the relevant signifiers are electronic polarities on disks...A signifier on one level becomes a signified on the next-higher level (p. 31).

2) **That "body" and "embodiment" are not the same thing.** Hayles argues that the body can no longer be regarded as a main site for discourse about humanity. She makes a clear distinction between *body* and *embodiment*. She feels that the posthumanist view falls in line with Elisabeth Grosz' statement that "...there is no body as such; there are only *bodies*" (Hayles, p. 196):

Embodiment differs from the concept of the body in that the body is always normative relative to some set of criteria...In contrast to the body, embodiment is contextual, enmeshed within the specifics of place, time,

physiology, and culture, which together compose enactment. Embodiment never coincides exactly with "the body", however normalised that concept is understood...Embodiment is thus destabilising with respect to the body, for at any given time this tension can widen into a perceived disparity (p. 196-97).

3) **Consciousness is not the seat of human identity.** Hayles aligns with Descartes in her view that human consciousness is merely an epiphenomenon. She argues that as signification has changed (as is outlined in the first point), and as our concept of our bodies and what it means to be embodied has changed (see point number two), so too has our view of what consciousness is. She argues that the conscious mind can be "hijacked" by the multiple levels of language coding that can be experienced through the communications technologies that we now use: computers, telephones, et cetera. She writes:

The more consciousness is seen to be a product of multiple coding levels, the greater is the number of sites where interventions can produce catastrophic effects. Whether consciousness is seen as a precious evolutionary achievement that we should fight to preserve...or as an isolation room whose limits we are ready to outgrow,...we can no longer simply *assume* that consciousness guarantees the existence of the self. In this sense, the posthuman subject is also a postconscious subject (p. 279-280).

4) **That the body is our original prosthesis: to extend the body through technology is merely another step in an evolutionary process that has already begun.** This point goes back to point number two: that technology, no matter how far it reaches into our biological bodies, will never erase the "body". She argues that the form of the body may change, and so too our concept of embodiment, but that, as humans, our materiality is the key to our lives. Whether or not we exist in the most primitive of flesh or in a computer mainframe, our physical reality is one that not even the posthuman can escape, these are simply forms, extensions of what we need to survive, that is, physical reality. For the posthuman, there is a recognition that embodiment can exist outside of the biological body, that humans can be "seamlessly

articulated with intelligent machines" (p. 2) and that, through our new understanding of the dialectic of pattern/randomness we are all, literally "data made flesh" (p.5).

## **Part VI: The Cyberpunk Texts: How Do they Prove It?**

The final part of this discussion will deal directly with the three aforementioned cyberpunk texts. In this section the work of Pat Cadigan, William Gibson and David Cronenberg will be examined in relation to this idea that cyberpunk uses, at least in these three cases, a postmodern view of the world to describe a posthuman condition. As in much cyberpunk literature, all three pieces are extremely dense in terms of overlapping narrative and multiple themes. In order to maintain brevity while at the same time promoting understanding, only one major theme and its associated narrative in each piece will be examined.

### **Synners: "*Change for the Machines*"**

This novel is set in a post apocalyptic world of southern California after a major earthquake-a world in which information reigns supreme. Not only is information knowledge and power, it is also a pastime, a means for erotic satisfaction, and a way of life. Modifying one's body with informational implants to cure an ailment or correct a character flaw is about to be taken one step further- the implantation of "sockets" in one's head that will allow the user to project the exact contents of one's mind- even one's imagination- onto a video screen and into a database for all to see. Cadigan makes a recurring theme out of the phrase, unwittingly spoken by ad-man Gabe Ludovic to rock-music video synthesiser ( a "synner") Visual Mark, a theme that highlights the ideas of Hayles that there is a difference between embodiment and the body- that the seamless incorporation of man and machine has taken place:

[Mark] turned slowly, as if he were underwater, his faded green eyes seeming to search Gabe out from a distance. "Can I help you?" He put a slight emphasis on the second and fourth words so that is actually came

out "Can *I* help *you*?" Which, Gabe thought later, was not so unreasonable.

"Ah. I thought you looked like you needed, um, change for the machines." Gabe shrugged self-consciously; he could feel the entire Common Room watching.

The man's smile was unexpectedly broad and sunny. "That's a good way to put it. How did you know?"

Gabe had the sensation of going over a mental speed-bump. "Excuse me?"

"My whole life has been, 'okay, change for the machines.' Every time they bring in a new machine, more change." ..."God, the truth is running in the gutters today. Karma so thick you can cut it with a knife." He fed the coins Gabe had given him into the coffee-machine slot. "Gets that way every time there's change for the machines"..."And the more change, the more you don't know what the fuck is going on. Right?" (p.97)

Gabe's innocent phrase "change for the machines" becomes a sort of mantra for the characters in the book, especially for Visual Mark as he attempts, through help of the sockets in his head, to leave his dilapidated physical body behind him and enter the clean, pure world of information by joining his identity with a sentient computer virus called Dr. Arty Fish.

This phrase exemplifies Cadigan's use of the postmodern technique of forced signification in order to make her point about the incorporation of man and machine. In this phrase we can see that Visual Mark is playing with semiotics, putting the words of a typical, twentieth century phrase in which the usual emphasis is on the use of coins to operate a machine to gratify human ends into a whole new configuration. This is much like Burroughs' technique of cutting out words from a page and reconfiguring them to make new meanings. The meaning which Visual Mark forces Gabe (and the reader) to extract places new signification on the words and causes the innocent question to have a new meaning entirely- one in which it is the machine which forces the

human to operate for *its* ends.

The phrase also introduces the posthuman element into the equation in that it highlights the dissolution between man and machine. In Visual Mark's application of the phrase "change for the machines", there is the suggestion that Mark (and, by extension, all others) have no control over the incorporation of the machine into their lives. Mark, however, while he suggests that this change can be confusing and unsettling (another aspect that postmodernism addresses), in no way suggests that he is not willing to accommodate the machine. His is an acceptance of the condition in which he finds himself, a state of mind in which Mark, as a man whose life and livelihood are involved in data transfer takes active pleasure in experiencing.

Finally, Visual Mark's pun speaks to the idea of the difference between "body" and "embodiment". Thomas Foster makes the point that while Mark is at relative ease with the idea that he must continually change for the machines, his partner, Gina is less comfortable with the idea and this is related to the different outlooks that she and Mark have on embodiment. Foster says:

[Gina] refuses to devalue her own body as a "meat-prison", and in a pun on Mark's name she thinks "she could have told them who was *really* fucking *marked*" (S, 390). For Gina, understanding how her specific body functions as an information structure emphatically does not make her regard embodiment as obsolete...In contrast, Mark thinks of his transformation into "pure information" as a way of curing the pain of embodiment (1993, p. 3).

Mark's ambivalent comment about machines is paired with his desire to merge with the technology if only to escape his body, in a sense choosing what he obviously feels is the lesser of the two evils. His point of view is that his physical body is a hindrance to the clean, pure state of the information which he deals with on a daily basis. What is important to note, however, is that throughout the novel Mark has difficulty escaping embodiment. Whether he is curled up on his office floor with the plugs to his sockets in his head or he is communicating with his friends through a computer after he merges with Dr. Fish to become a new identity called "Markt",

embodiment in some form or another is impossible to escape. On this point, Thomas Foster remarks that "...embodied experience is an informational impurity, a "noise", but the whole point of Cadigan's novel is that this condition of impurity is incurable in the postmodern world the novel represents" (1993, p. 3). In Foster's comment, then, we can see that the cultural implications of human interaction with communications technology makes it difficult find "...distinctions between inside and outside, text and context, or individual and society" (p.3).

### **Neuromancer**

One of the many areas William Gibson explores in this novel is the semantic, ontological and cultural implications of disembodied consciousnesses. The story centres around a "deck cowboy" named Case- a man wired with neural implants which he uses to enter "cyberspace": a world-wide matrix of data that can be accessed and manipulated almost as objects can be manipulated in our own physical reality. Case is recruited by an AI (artificial intelligence) which calls itself Neuromancer, a consciousness that is part of a larger computer system created to run the Tessier-Ashpool family empire. Neuromancer's goal is to separate itself from and control the computer network that it is a part of, and uses Case as a means of achieving the assassination of the systems' master program, an AI called Wintermute.

In this novel, Gibson presents a posthuman reality through the fact that his characters privilege informational pattern/ randomness over physical absence/ presence, although he also suggests this is a result of the changing status of the body in a postmodern culture in which the body is devaluated to make way for the situation of the body as a site for multiple signification. This is part of the novel's cultural representations.

There are several examples of disembodied consciousnesses throughout the novel: Neuromancer and Wintermute being two of them, but the two that hold the most interest for this discussion are that of Case and the Dixie Flatline. It is these two characters that, because they have been *embodied* consciousnesses, hold the most interest as *disembodied* ones.

In the novel, the Dixie Flatline is described as a computer construct of the skills and personality of a famous console cowboy named McCoy Pauley, a former hero of Case's who had experienced brain death, according to an EEG scan, three times before heart failure had caused his final death. His memories, skills and experiences had been preserved on a ROM cassette so although the Flatline cannot be called human, it nevertheless has the memories of being human, of owning a body, and of functioning within the physical world. This is a good example of what Hayles refers to as the privilege of pattern/ randomness over that of presence/ absence. No longer is the Flatline defined in terms of a physical body- it is no longer really anywhere at all. It no longer exists for itself when it has not been accessed, that is, when Case does not run the ROM which contains it, it simply ceases to exist, for itself, at least. It has no recollection of where it goes, nor when the connection is terminated or for how long. The Flatline itself describes this condition for Case:

"I'm dead, Case. Got enough time in on this Hosaka to figure that one."

"How's it feel?"

"It doesn't."

"Bother you?"

"What bothers me is, nothin' does."

"How's that?"

"Had me this buddy in the Russian camp, Siberia, his thumb was frostbit. Medics came by and they cut it off. Month later he's tossin' all night. Elroy, I said, what's eatin' you? Goddam thumb's itchin', he says. So I told him, scratch it. McCoy, he says, it's the *other* goddam thumb...do me a favour, boy."

"What's that, Dix?"

"This scam of yours, when it's over, you erase this goddam thing." (p. 105-106).

The story of the missing thumb neatly sums up the Flatline's reaction to being disembodied. It is clearly ambivalent about the fact that it is merely informational pattern and randomness, something that only a computer, with its formal acknowledgement of such phenomena can cause. He relates the idea that the fact that being dead does not bother him to the idea that he cannot feel anything without the presence of his former human body. Just as Elroy's physical body had trouble letting go of the frostbitten thumb, the Flatline explains that the mere reconstruction of his consciousness is in itself not enough to make up for his lack of physical presence. This is part of what Hayles means when she subscribes to the view that consciousness is merely an epiphenomenon, that consciousness itself cannot account for what it means to be real, to be alive.<sup>6</sup> In this way, then, Hayles is making the point that to be posthuman must necessarily include both aspects of the dialectic: the phenomena of pattern and randomness which technology brings to our lives cannot be truly experienced without the accompanying phenomena of physical presence or absence. Just as being pure information is a hellish situation for the Flatline, so would it be for anyone who had formerly been used to having experiences that one could relate to physical presence.

Case, however, does not outwardly seem to share the Flatline's ambivalence about being disembodied, although, on a deeper level, he can be shown to be intimately connected to the presence/absence dialectic of experiences through physical being. Several times throughout the novel Case refers to his body as "meat". In the beginning of the story he is extremely depressed about the loss of his ability to enter cyberspace as a result of having his implants removed (an act of revenge carried out by a former employer). His inability to enter cyberspace is traumatic event for him. Gibson writes:

For Case, who'd lived in the bodiless exaltation 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.

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<sup>6</sup>Also interesting to note is that the Flatline instructs Case to erase "this thing" referring to the ROM cassette on which his consciousness is stored. This also goes towards indicating that the Flatline is acutely aware of the loss of his physical body.

Case fell into the prison of his own flesh (p.6).

When Case's ability to enter cyberspace is restored, he makes a wide swing away from the reality of his physical body, ignoring his physical needs in order to enjoy the disembodiment of cyberspace:

This was it. This is what he was, who he was, his being. He forgot to eat. Molly left cartons of rice and foam trays of sushi on the corner of the long table. Sometimes he resented having to leave the deck to use the chemical toilet they'd set up in a corner of the loft...the rainbow pixel maze [of cyberspace] was the first thing he saw when he woke. He'd go straight to the deck, not bothering to dress, and jack in. He was cutting it. He was working. He lost track of days (p.59).

Timo Siivonen describes Case's feelings about his organic body as signaling a dissolution of the borderlines between human and machine. He writes:

The borderline between self-supervising and self-directing machines, on the one hand, and the human being posing as the model for autonomy is the problem raised by Gibson. It is a double tension, on the one hand between the body as defined by the libidinal economy and the human subject, and on the other between the autonomous subject, determining and directing its own activities, and the machine (p.228).

Although Case is described as being resentful of his "meat" and the distractions that go with it, it is important to note that, throughout the novel, many of his experiences are still mediated through physical reality. Despite Case's feelings of revulsion towards "the meat" Gibson nevertheless details Case's reactions while he is "plugged in" to Molly's body for the purposes of their mission: he is able to feel exactly what she feels, to see things exactly as her eyes see them:

[Case] keyed the new switch.

The abrupt jolt into other flesh. Matrix gone, a wave of sound and color...She was moving through a crowded street...For a few frightened

seconds he fought helplessly to control her body. Then he willed himself into passivity, became the passenger behind her eyes...He found himself wondering about the mind he shared these sensations with. What did he know about her? (p.56).

Another instance in which Case uses sensations of the physical body in order to claim experience occurs with reference to Molly, but this time it is in a much less mediated form, that is, through sexual union. The way that Gibson details Case's first sexual encounter with Molly is not only intensely physical, but for Case it is also described in terms of the bodilessness that he experiences in cyberspace:

She rode him that way, impaling herself, slipping down on him again and again, until they had both come, his orgasm flaring blue in a timeless space, a vastness like the matrix... (p.33).

Wendy Whal (2000) makes the observation that these examples serve to remind the reader that Case does not seem to be given to awareness of physical sensation unless it is through Molly. She suggests that this serves to highlight the separation of mind and body found in Case's character, as well as that Gibson preserves this separation in the very structure of the novel: every time Case enters or exits the matrix or "simstim" (simulated stimulation) of Molly's experiences Gibson starts a new paragraph.

While Gibson's novel may present a posthuman reality to the reader, it is clear that Gibson's writing of the novel utilises postmodern techniques to bring this posthuman reality to the surface. Gibson's treatment of Case's preference of "mind" over "meat" throws up some important road signs: first, as mentioned in the above discussion of Haraway, the cyborg body (like that of Molly) and its accompanying experience as a surface upon which multiple signification can be read (Foster, p.15), was once reserved for "subjects marked by gender and race" (i.e.. women and non-whites) and thus the cyborg-of a human/machine hybrid- has come to signify the acceptance of a postmodern world. This idea is implicit in the fact that Case only seems to experience bodily sensations through the medium of Molly's (previously gendered and racialized) cyborg body. Thomas Foster notes that this represents the typical postmodern technique of blurring the boundaries of formerly ridged classifications:

[T]he unmarked, universal position of the white, middle-class male subject no longer seems available, and we therefore have access only to partial perspectives, not a generally human one... (p.15).

In terms of cultural production, this universal and forced signification that is thrust upon the postmodern body leads to a culture in which balkanisation and fragmentation is unavoidable. In the novel, the elite are the people like Molly and Case—those people who have been technologically "enhanced: implants, prosthetics and the like. Technology has marked their bodies in new and different ways than they would have been marked before their absorption of technology. Without this elite status, the average human, presumably one without technological enhancement, one is considered just another piece of meat. Pam Rosenthal notes that both Case and Molly reject this sort of life, rejecting, as Case puts it the "company housing, company hymn, company funeral".

### ***eXisTenz***

David Cronenberg's film *eXisTenz* can also be thought of as an example of cyberpunk. While Cronenberg himself was not aligned with the original literary movement, the film undeniably falls into the category due to both its subject matter and its treatment of technology as being "utterly pervasive". The story goes like this: security agent Ted Pikul is assigned to protect famous games programmer Allegra Gheller at a very elite focus group meeting, gathered to test out her newest offering, a game "system" called *eXisTenz*. The gamers have all arrived with their prototype "metaflesh game pods", portable gaming hardware which is designed to jack into a "bioport"—a bio-technological interface located in the spine of the player. As the game is about to begin, an assassination attempt is made on the life of Gheller, the assassin shouting the slogan "Death to the demoness Allegra Gheller" as he brandishes a strange, bone like gun that shoots teeth. Pikul and Gheller manage to escape to a "safe house" that Gheller knows of, and, to find out whether or not Gheller's game has been lost in her damaged game pod, they begin to play *eXisTenz*. A complex and frightening mix of reality and fantasy ensues, both for Gheller and Pikul as well as for the viewer.

The major theme of Cronenberg's film is the blurring of boundaries. This occurs

in two major ways: first, the boundaries between real and not real are completely broken down, both on the level of the narrative, and on the level of the viewers' experience. Throughout the course of the film Cronenberg is continually thwarting the distinction between fantasy and reality for the viewer, he makes it difficult to distinguish between the actual story line and the story line being followed by the characters whilst playing the game. In this we can see Cronenberg's use of the postmodern technique of "cutting up" boundaries that would normally serve to inform the message of the film, its play of back and forth between message and story in itself forming a completely new experience for the viewer.

This "cutting up" of boundaries between reality and non-reality also occurs on the narrative level and contributes to this sense of postmodern waylessness. In one clear example from the end of the film, Ted Pikul and Allegra Gheller have been revealed as "reality rebels", which have infiltrated a game system test group and carry out an assassination of the game system's creator. In the confusion that follows, one of the gamers pleads with Pikul and Gheller for a dose of reality. He says: "Hey, tell me the truth, are we still in the game?". The fact that these are the last words of the film is a telling reminder of the way in which the narrative makes the boundaries of reality and non-reality impossible to make out.

This also relates to the idea that this film is about the posthuman condition. The game pod used by Gheller and Pikul is a piece of technology that is incorporated into the bodies of the players, and it is the incorporation of this technology into the bodies of Pikul and Gheller that is the agent of the dissolution of boundaries. This falls in with Haraway's theory that the incorporation of technology into the human body, literally, the becoming of a cyborg, signals the dissolution of hard and fast rules about physical reality.

The most important pieces of technology in this film are represented as being highly organic. In this way we can see that Cronenberg is also playing with the boundaries between what is organic and what is not. The key piece of technology which is representative of this is, of course, the game pods. These pods are described as a system unto themselves, as "metaflesh". They are organic in shape and texture, and

they are manipulated not through mechanical motions of a joystick or typical hand control, but are rather massaged and caressed. The two most significant aspects of these pods however, is that when these pods break down, they are said not to have crashed (like a piece of computer hardware), but that they are "diseased" , and great care must be taken not to infect the rest of the pods in the system. Secondly, and most significantly, these pods have a cord that is not unlike an umbilical cord, and they are literally, "plugged in" to the gamer, the life of the pod dependant on the life of the gamer. The bioports into which the cord is plugged is itself a completely intimate part of the body of the gamer- one that can even become infected.

In terms of what this signals for Cronenberg's creation of a posthuman reality, it is easy to look back to the theories of both Haraway and Hayles. Haraway may call the condition that of being a cyborg, while Hayles identifies it as being posthuman, but the result is the same: both writers do not see technology that has been incorporated into the body as being foreign. For both, this incorporation is considered to be a natural stage in our human evolution. Cronenberg underscores this idea by the fact that the pods are not equipment to be used for anything but entertainment. This demonstrates the extreme decadence of the incorporation of human and machine, suggesting that evolution of the cyborg has come far enough that it has gained pop culture status.

As was suggested earlier, Hayles tends to go a bit further in the concept of the posthuman than Haraway, and in the example of the game pods, we can see her point. She writes:

...the posthuman implies not only a coupling with intelligent machines but a coupling so intense and multifaceted that it is no longer possible to distinguish meaningfully between biological organism and the informational circuits in which the organism is enmeshed. Accompanying this change is a corresponding shift in how signification is understood and corporally experienced...flickering signification is the progeny of the fascinating and troubling coupling of language and machine (p.35).

What Hayles is suggesting in this passage is that not only does the way in which we see biology change with this sort of incorporation, but the way that we see reality

changes as well.

## **Conclusion**

Cyberpunk writing is about more than a simple "punk ethic". It is also about more than commentary on the technological age. This discussion has attempted to discern the roots of this literary (and, some would argue, social) movement, as well as understand the cultural implications of such writing. To borrow from the words of a famous scientist: sitting on the shoulders of the traditions of postmodern thought, cyberpunk has seen further: to a future-present which is clearly beyond the liberal humanist subject, to a state that is post-humanist- one in which humans have



incorporated technology not only into commerce, into politics, and into exploration, but also into our very bodies and our culture. Cyberpunk writing seems to accept this new configuration of the human body as inevitable and desirable, and attempts to locate this radical change semantically, ontologically and culturally. Cyberpunk is about more than technology and the human body- it is the story of the new evolution.

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