WE'RE ALL CYBORGS: SCIENCE FICTION AND INFORMATICS—A REFLECTION OF CULTURAL CAPITALISM

A Thesis
by
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Abstract

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This thesis discusses how capitalism is reflected through science fiction novels. It begins with a historical triangulation of the science fiction genre and how, through the development of the New Wave movement, changes occurred in the genre that placed it in an ample position to critique burgeoning capitalism. Subsequently, this thesis explores the reactionary movement of Cyberpunk. It then proceeds to highlight how the portrayal of informatics in *Babel-17* (1966) by Samuel R. Delany and *Neuromancer* (1984) by William Gibson is reflective of capitalism through the separation of consciousness from the body and the co-dependent relationship between humans and technology in each of the novels. Finally, the thesis concludes with furthering the discussion through Martha Wells's *The Murderbot Diaries* series and how these books mirror traits from their predecessors, further working to reflect capitalism. The discussion then turns to how these science fiction novels, especially *Murderbot,* are demonstrative of today's social media, and the power that social media holds.

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Dedication

To mom and dad, who never stopped believing in me.

Also to Gabby: through your words, you are immortal.

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Chapter 1: Capitalism and Informatics 101: Flying Through History

As children, many of us imagine flying through space with our favorite science fiction heroes. From Buzz Lightyear and Chewbacca to Wall-E and Mr. Spock, science fiction pervades popular culture in many modes: nostalgia, escapism, utopian, and dystopian. The science fiction of decades gone by has often imagined what has now become a reality—private companies are sending humans into space, voice-activated machines allow us to operate various technologies within our homes, and many of us have online presences via social media. Although today's landscape may not be entirely reflective of a "futuristic" 1930s World's Fair, our technological reliance is nonetheless increasing at an alarming rate.

For instance, the way that I am currently typing this document would not have been feasible, or at least readily accessible, in the way that it is currently, only a decade ago. Like many others, I remember attending school during a time when word processing documents would frequently crash, and if not saved often, one risked the sudden and random deletion of their entire document. With the advent of cloud-based storage, word processing became protected from crashes in a way previously unseen! Of course, word processing itself was a dramatic advancement over the typewriter. Likewise, the advent of the internet has completely reinvented the way that we communicate with one another. My thesis will examine various aspects of science fiction tales from the 20th-century through the contemporary era, and how informatics (or the way information is communicated) in each of these novels serves to establish a critique of unprecedented material culture. This thesis will

conclude with a discussion of how this directly relates to the development of the internet and its influence on communication.

My argument will be broken down into three parts. First, I will triangulate the historical moment in which I will frame my selected works. Secondly, I will provide literary analysis regarding how works from the twentieth century established a postmodern setting indicative of critiques of capitalism, specifically regarding the increasing dependence upon, and development of, computer-like technologies. Finally, I will posit that this literature culminates in a reflection of today's social media landscape, and what this means going forward.

Science Fiction Movements

By the onset of the 20th-century, science fiction had become an established genre. Though there is a long history of elements of science fiction being incorporated into literature for centuries, the genre arguably began to come into its own in the nineteenth century. Works such as Mary Shelley's *Frankenstein* (1818) were reliant on technological advancement and scientific inquiry. Subsequently, novels like those published by Jules Verne, whose popular works include the famed *Journey to the Center of the Earth* (1864) and *20,000 Leagues Under the Sea* (1870) demonstrate a fascination with exploration stemming beyond typical travel narratives. Verne's popular works captivated readers through imagining settings that, though fictionalized, could potentially be reached one day through technological innovation. With the success of Verne also came that of writer H.G. Wells, whose *The War of the Worlds* (1898) served as a barometric social critique while also encompassing "hard" science fiction. Perhaps the best early evidence of the interaction between science fiction and culture is Wells's novel, which would later become the basis of a radio broadcast. This broadcast

caused pandemonium across North America when it convinced many that Martians had truly invaded the Earth.

It is important to note the differences between "hard science fiction" and "soft science fiction," two trends in SF that, as shown above, date back to the origins of the genre (even if the terms themselves do not). In order to establish these definitions, I will rely primarily on scholars Gary Westfahl and Donald M. Hassler, who collectively argue that "hard science fiction" while difficult to define, includes "evidence of a scientific thought process at work" (Westfahl 185), and often encompasses "heroic war[s]" (Hassler 252) in a setting inspired by, or occurring in, space" (252). This study will be utilizing this definition as the basis for "hard sci-fi." While the definition of "hard sci-fi" has previously experienced debate, the very existence of "soft sci-fi" is a much larger point of contention in the academy, as many simply see "hard sci-fi" as a divergence from a broader field, rather than a term made to divide said-field. In simple terms, however, "soft sci-fi" can often be seen as a basic opposition to "hard sci-fi," as it tends away from a scientific thought process, and wars are far less often heroic than they are the unfortunate result of social failure. This arguably includes utopian and dystopian texts that are more greatly rooted in society than technology (Wegner 88), and that extend into the twenty-first century with the cultural boom of YA dystopian. Therefore, for this study, the default contrapositive definition of "soft science fiction" is science fiction that is rooted primarily in non-technological advances and the social sciences.

It is evident that at the turn of the 20th-century, science fiction was becoming increasingly "hard" in nature. Along with works published by Verne and Wells, science fiction magazines, first published in the 1890s, gained popularity. In his 2005 book chapter, "Science Fiction Magazines: The Crucibles of Change" Mike Ashley notes that while these

magazines remained steadfast in their popularity over the course of much of the twentieth century, which magazines took the spotlight vacillated to reflect real-life events. For example, in the late 1930s through the conclusion of WWII, *Amazing Stories* could have been considered the most popular SF magazine (Ashley, *The Time Machines* 85, 112-116). Arguably, the first successful science fiction magazine, the narratives it contained were largely "hard sci-fi," containing stories generally characterized as implausible (60). These stories provided hope and fantasy for young children during the aftermath of WWI. The pendulum swung in 1950 however, as *Galaxy* asserted itself as the dominant magazine as the Cold War's impacts became increasingly widespread. In the post-WWII landscape in which technology was often associated with weaponry, *Galaxy*'s attention to social issues rather than technology proved popular. These magazines demonstrated the holistic shifts of the science fiction genre at these times, as Ashley argues that the final "shift" of sf magazines came in 1964, marked by the New Wave movement.

While some, such as Samuel R. Delany, dislike categorizing work through the New Wave movement, I argue that recognition of this movement is necessary in order to best situate the texts which I will eventually be analyzing. Simply put, New Wave sparked a trend in the genre toward fiction juxtaposed between "hard science fiction" and "soft science fiction." This widely contested movement of the 1960s-70s, spearheaded by Judith Merril, served to be a reaction to increasing material culture. Merril, both a critic as well as an author in her own right, outlined the movement with the publication of her essay entitled "What Do You Mean? Science? Fiction?" That essay was published in 1966, the same year of *Babel-17*'s publication, a work that I will extensively analyze in chapter two.

In her piece, Merril argues that science fiction is coming increasingly close to bridging the gap between technological scientific advancement and fiction and that deciding on a concrete definition for science fiction proves difficult. Merril believes that the ever-expanding nature of science means that the realm of science fiction is difficult to discern. Merril's argument can be seen as justification for the inclusion of "soft sci-fi" into the genre. Since the nature of science fiction is ever-changing, it was apparent to some that creating a concrete definition for the genre and subsequently limiting the texts included under the narrow umbrella of this definition would prove futile.

Beyond the question of definitions, it is imperative to note that a change in the popular attitude around science fiction accompanied and grew out of the New Wave movement. For example, the scholarly community became torn as to whether science fiction should be included amongst canonical literature[1]. Though science fiction studies began to become formalized in the 1940s, the first university class on SF was not taught until the 1950s and is not recorded as having been taught for credit until the 1960s, as many scholars believed that science fiction was a genre of play, and did not warrant scholarly insight ("SF in the Classroom"). However, the increased critical/academic attention to SF pointed towards mutual engagement between SF and the new left anti-capitalist critique taking place in the academy through scholars such as Leslie Fiedler, Fredric Jameson, and Erik Rabkin.

The technological innovations to which Merril was referring in her work were driven by a booming economy reliant on an expansion of consumerism. Throughout the US, as well as many other parts of the world, the populace was being increasingly encouraged to invest in a wide array of products with increasing expendable incomes. The booming consumerism

[1] That said, it is important to address that Delany would go on to become a professor at Temple University, as well as a critic of science fiction, publishing various works critical works in the field of science fiction in the 1970s and 80s.

that occurred in the post-WWII era demonstrated a shift in priorities amongst readers. While many were still interested in the possibilities of space travel offered by the classic space odyssey, many were becoming more and more intrigued by the idea of what could be developed within their lifetimes. While the computer was not yet a popular medium, the idea of "computer-like" technologies was becoming widespread.

The classification of entities as "computer-like" is a difficult one to make. According to Oxford Languages, a computer is "an electronic device for storing and processing data, typically in binary form, according to instructions given to it in a variable program." Computers have transformed our everyday lives. As I will assess in my third chapter, the impact of social media has become increasingly widespread in recent years, as people hold pocket-sized computers via smartphones at all times. As of 2018, "Personal computers [could] perform elementary arithmetic operations, such as addition, at a speed of 10 billion operations per second" (Luo), and the speed of computers only continues to increase. The rapid processing speed of computers, and perhaps more importantly, the ability of the computer to become fundamental to everyday life, are the qualities of its being that I use to define "computer-like." Furthermore, a "computer-like entity" may also have the potential to glitch, crash, and malfunction in ways that are almost strictly reserved to machines.

To put it bluntly, "computer-like" may be seen as the ability to process vast amounts of asynchronous data at a velocity that transcends the speed of unaltered organic thought. Asynchronous in that the data presented may or may not be related or harmonious (think analyzing wavelengths of the rainbow while simultaneously translating Arabic to Latin). Conversely, organic thought (or that which the typical human brain is capable of) usually follows a linear evolution and is often incapable of processing dissimilar lines of cognition,

at least at similar rates. Computer-like processes are able to not only evaluate discordant data sets but do so at similar velocities.

The general rate of evaluation for computer-like processes almost always greatly exceeds the speed of computations capable in organic thought. This is often speculated to be a result of the estimates of the "mind power" percentage that is expected to be utilized in the average brain . . . some estimates are as low as 10%. Imagine the speed of data assimilation if we as a species could increase our cognitive abilities by another 90%. Could we approach a computer-like state? Would we all be like Rydra Wong (a character who, in the second chapter of this thesis, will be discussed in terms of her "computer-like" brain and thought processes)?

It is imperative to note that I qualify my original premise with "unaltered" organic thought. As science progresses, the augmentation of "natural " thought evaluations with artificial and/or nonorganic enhancements becomes an increasingly real possibility, in which case the ability to process larger amounts of data at faster speeds becomes a possibility . . . and the line between "organic" and "computer-like" begins to blur.

The New Wave movement's development coincides with the advent of the "computer-like" entity, arguably a hallmark of postmodernism, which by definition, was a reactionary movement precipitated by an increasingly consumer-based culture. The postmodern movement in art and literature was a movement in which authors and artists worked consciously to deny deeper meanings within texts while also rejecting boundaries between "low" and "high" art (Postmodernism in Literature: Definition and Examples).

Some scholars, such as Veronica Hollinger, have argued that science fiction and postmodernism became intertwined in the 1980s, as science and technology seemed to

slowly become hallmarks of postmodern texts. For Hollinger, this conjunction first becomes evident through the self-reflexivity of science fiction works. She agrees with Welch D. Everman that early examples of "postmodern SF writers are parodists, playing with and within the genre they have chosen to champion pioneering, self-consciously questioning the rules that their forerunners simply accepted without thinking, . . . creat[ing] works of science fiction that are also about science fiction" (Everman qtd in Hollinger 234-35). Hollinger cites several examples of this from "from the New Wave of the late 1960s and 1970s" (Hollinger 235), including Delany's *The Einstein Intersection* (1967) in which the "narrative is interspersed with excerpts from the journal that Delany kept while writing [it]" (235). That said, Hollinger contends that:

> signs of the postmodern in science fiction are more readily recognized in the details of its imagined worlds than in the relatively rare instances of its formal self-referentiality. Science fiction "officially" became postmodern in 1984, with the publication of William Gibson's now-classic Cyberpunk novel, *Neuromancer*. As a result of the attention generated by Gibson's novel in particular and the Cyberpunk "movement" in general, many critics and scholars from outside the field turned to Cyberpunk during the latter half of the 1980s and the early part of the 1990s as a particularly privileged textual expression of "the postmodern condition" at the turn of the millennium (Jameson 1991; McHale 1992; Bukatman 1996). (236)

Examining SF and postmodern texts of this period certainly showcase this claim. For example, Hollinger points out that *Neuromancer* explicitly blends the inorganic with the "natural" world in Gibson's first line: "The sky above the port was the color of television,

tuned to a dead channel" (Gibson 3; Gibson qtd in Hollinger 337), creating a sense of decontextualization that undoubtedly marks the postmodern.

In this essay, I will argue that the connection between the genre and the literary movement began prior to either being conceived. Through surveying the development of the genre through science fiction magazines, for example, one is able to see the direct connection between real-world developments and those occurring in the popular literature of the era. For example, Ray Bradbury's publication in *Galaxy* of "The Fireman," the earliest incarnation of what would become *Fahrenheit 451,* clearly demonstrated the overarching concerns of government control in the aftermath of WWII and the early stages of the Cold War. Therefore, I assert that science fiction and its development echoed the postmodern movement even prior to various elements of SF being hailed as characteristic of postmodern settings.

This assertion is demonstrated through the first text which I will assess. Published in 1966, Samuel R. Delany's *Babel-17* entered the SF landscape during the heat of the Cold War and arguably the height of post-WWII consumerism. Though Delany's novel may be viewed as a traditional space odyssey that "integrate[s] psychological and sociological insights . . . and social commentary," (Weedman 132) the novel's premise of technologized language demonstrates an emphasis on the "computer-like" that was fresh, new, and relevant to the burgeoning state of capitalism. Through the relay of information within his novel, Delany creates a setting that is shown to be reliant on technology, though not in the way that one would at first be led to believe (which will be further expounded upon in the subsequent chapter). Although Delany has opposed the notion of his texts being categorized under the New Wave movement, it is difficult to ignore that much of Delany's work is often

categorized as New Wave despite his personal reservations about the movement (Derakhshani).

Furthermore, it is vital to address that Delany's work is situated at an important intersection in the genre. In drawing inspiration from previous hard science fiction works, but pivoting away from their emphasis on warfare or exploration driven by machines, Delany created a complexity in his work that would arguably serve as the basis for many authors going forward. Although it is William Gibson's *Neuromancer* (1984), which is widely credited with establishing the Cyberpunk genre, it is Delany's novel that foreshadows many of the revolutionary messages and themes that ultimately surface in *Neuromancer*. For example, though the "augmented human," as Martha Wells's contemporary series *The Murderbot Diaries* deems a person with body modifications (often rooted in hard technologies), is a staple for many late twentieth/early twenty-first-century science fiction novels, Delany's inclusion of these characters was unique for its time period. Of course, these modifications were expansively built upon in Gibson's novel, as Gibson emphasizes physical modification such as retractable claws and modified eyes as an integral part of character development.

Moreover, though *Babel-17* is less reliant on extensive advancements in computer technologies than *Neuromancer,* it can be argued that the use of body modifications in each of these novels helps to establish the notion of the cyborg. Though Donna Haraway would not publish her groundbreaking piece "The Cyborg Manifesto" until after the publication in *Neuromancer*, this essay's work asserts that humans have dissolved certain boundaries which have served to change the course of the human race. This boundary disillusion directly reflects the body modifications found in Gibson's novel, which was likely directly influenced

by Delany's. Haraway's work describes the idea of a world with cyborgs, a cross between humans and technology, in which differences like sex traits have little impact.

Many scholars would proceed to use Haraway's work as a basis for their own. For instance, Hollinger suggests that Haraway's manifesto "suggests possibilities for resistance and political challenge from the margins of the social world" (242). Her reading of the cyborg as a political instrument does not fall far from Christine Cornea's assessment that

> the cyborg can not only be understood to mark a possible shift in the very structures that underlie the science fiction genre, but can also be seen as a potent threat to much of Western philosophy's reliance upon Cartesian-inspired dualisms (mind/body), or the binary dichotomies that underpin dominant patriarchal society – self (white male)/Other (female, nonwhite male, etc.). (275)

By threatening our binary way of thinking, the cyborg breaks societal norms and threatens social order. For example, Cornea offers the example of the gender non-conforming cyborg, and how this breaks down the male/female binary and inherently, the hierarchical structure that accompanies this. For example, Murderbot of Martha Wells's *The Murderbot Diaries* (a character that I will assess more in my third chapter) provides an example of this. While the sexless Murderbot, a cyborg, is portrayed as being physically superior to humans, it begins its journey enslaved to them. Humans routinely express discomfort at believing that Murderbot may be a free-thinking, autonomous being, as it challenges their perceptions about social order and what should be considered sentient.

The female/male binary is also explored in *Neuromancer,* as Molly (who, through her body modifications, may be considered a cyborg) is arguably the more powerful of the two in her partnership with Case, the protagonist. Though she is a woman, Molly proves herself to

be the sexually dominant partner, as well as arguably physically more capable, as it is often she, not Case, who does the physically demanding work, while Case deals with the more technologically driven elements of their mission. For example, while Molly steals the construct of Dixie Flatline, an incident that will be discussed in greater detail in the next chapter, Case joins her virtually, but not physically. While this does not suggest that Case's components of the mission are easier (as his heart gives out multiple times over the course of the novel due to his interactions with Artificial Intelligences (AIs), in cyberspace) Molly's dealings with the physical realm can be seen as demonstrative of the flipping of the male-dominant binary.

Perhaps the flipping of this binary is even more greatly demonstrated through Rydra Wong of *Babel-17*. Though technically not a cyborg, in my second chapter, I will discuss how Rydra may be seen as a computer-like entity. In short, after undergoing childhood trauma, Rydra's brain operates in a computer-like way, easily and almost automatically being able to translate between various languages. Her gift for language has manifested in a variety of ways, having served both the government as a cryptographer and also having become a widely established poet by her mid-twenties.

When language comes under the assault of technology in order to weaponize it, the first (and primary) victim that the reader is exposed to is the Butcher, a man who is later revealed to be genetically modified to become an optimal soldier. Despite the Butcher's hypermasculine qualities, under the spell of Babel-17, he is unable to do so much as grasp personal pronouns. While at first, Rydra tries to help/teach the Butcher, she soon becomes "infected" with Babel-17 herself. Because of her computer-like mind, however, Rydra is able to eventually create a "counter-weapon" to Babel-17, deemed Babel-18. Despite her status as

a woman (not to mention her role as an ethnic minority), Rydra is ultimately the hero of *Babel-17.* It is important to note that the flipping of gender norms in the novel was likely even more radical than it would be seen today, given that in 1960s America, women were commonly relegated to the domestic sphere. That said, the flipping of binaries that occurs in the novel is consistent with the defamiliarization that is notable in a novel in which a non-augmented human is in the minority, and many people partake in three-way sexual and romantic relationships, rather than partnerships.

Of course, the development of technologies that allowed for the formation of the cyborg to occur, both in fiction, as well as the developmental technologies occurring in actuality, were heavily reliant on the aforementioned post-WWII capitalism that was pervading culture throughout the United States. According to Becky Little, "Radar, computers, penicillin and more all came out of development during the Second World War." The first computer, known as Colossus, was "originally invented as a way to speed up the cracking of the Enigma codes" (B. Little, "10 Everyday Inventions We Owe to World War 2"). However, as soldiers arrived back from the war and expendable income grew, war technologies gradually transitioned to serve the general public, though for a price. While in some ways, these developments/technologies made life easier and more enjoyable, some worried that the increasing obsession with the material could have detrimental and long-lasting societal impacts.

Many scholars and theorists reacted accordingly, including Jean Baudrillard, whose theory of the hyperreal I will assert in the following chapter is prevalent in both *Babel-17* and *Neuromancer,* assisting each of the novels in crafting a critique of consumer culture. Baudrillard uses his work to teach the function of the simulacra, or signs that are attempting

to, or are succeeding in, displacing the original. He argues that society is so inundated by the sign that we fail to care about the disintegrated real. Baudrillard achieved worldwide recognition for a series of books published in the late 1960s. His work was among "the first to appropriate semiology to analyze how objects are encoded with a system of signs and meanings that constitute contemporary media and consumer societies" ("Jean Baudrillard").

Among his most famous examples of simulacra is Disneyland, which he argues is closer to reality than the surrounding Anaheim/Los Angeles area. When Baudrillard published this idea, Disneyland was an entirely new cultural phenomenon. Opened on July 17th, 1955, Walt Disney was looking to create a concept in which parents and children could simultaneously be entertained. While carnivals and amusement parks that opened prior to Disneyland were often dirty and did not have positive reputations, Walt was determined for his park to be different. An idealist, much of Walt's park centered around what *could be* rather than what actually *was.*

This became especially evident when the 1964-65 World's Fair opened. Walt and his team of "Imagineers" were instrumental in creating four different exhibits for the World's Fair (Schmidt). For instance, the audio-animatronics in *Great Moments With Mr. Lincoln* as well as *Carousel of Progress* (both of which were ultimately moved back to Disneyland) served to simultaneously advance toward a posthuman landscape while romanticizing the American experience. These robots were unprecedented, as prior to the World's Fair, human-based audio-animatronic figures had never existed. Baudrillard took note of Disney's use of advanced technologies and imagined landscapes and how the corporation used the idea of creating a fantastical area as a marketing tool. As noted on the website "Cultural Reader," Baudrillard demonstrated that "Disneyland produces a clear cut distinction between reality

and imagination. Disneyland can be thought of as a second order simulacra, one in which reality is somehow reflected in its representation and the way American ideology is manifested there can be studied."

Furthermore, Baudrillard explains that he believes the Watergate scandal to also be representative of a simulacra in a way that is similar to Disneyland.

> According to Baudrillard[,] Watergate constitutes the same type of illusion which hides the workings of a simulation. The scandal serves to reestablish order, and it is therefore not a scandal but rather a cover-up for some other unspoken scandal. Watergate for Baudrillard serves as the illusion that the unruly and blind force of capital can be . . . altered. With all of economical reality hanging on the limb of capital's recklessness, we use W[a]tergate to imagine that evil can be uncovered and justice can be obtained, and thus we are blind to the true destructive force of capital. Like Disneyland, a hyperreality creates the illusion of distinction between right and wrong, truth and lies, and the illusion that order can be restored. ("Jean Baudrillard on Disneyland and Watergate")

It is evident that, for Baudrillard, the remarkable influx of capitalism in the post-WWII society served to blur the lines between the destructive forces of the economic system and any other impacts.

Baudrillard further asserts that as society has become increasingly driven by consumerism, we have manifested a cyclical pattern in which we yearn for the real, kill the real, and therefore create a sense of nostalgia. Baudrillard ultimately posits, in reaction to capitalist culture, that authenticity has been substantially, if not completely diminished. As

previously noted, his work claims that the things that we see as “fake” are actually “hyperreal.”

Baudrillardian theory has been used before in discussion of *Neuromancer.* For example, Cynthia Davidson discusses how various elements of Gibson's novel, such as the use of AIs, demonstrate Baudrillard's notion of simulation. Holistically, Davidson’s argument is that

> Riviera and Case serve as examples of two creators contrasted by Jean Baudrillard in "Simulacra and Simulacrum": the specular, discursive representational artist, and the operational adept who efficiently codes the machines which perform work that until recently would have been performed by the specular, discursive imagination. (abstract)

More important to my argument, however, is Davidson's position that through Baudrillard’s four phases of the image in becoming a simulacrum: “1) It is the reflection of a basic reality. 2) It masks and perverts a basic reality. 3) It masks the absence of a basic reality. 4) It bears no relation to any reality whatever: it is its own pure simulacrum,” (Baudrillard, *Selected Writings* 170) the paralyzing of the character of Riviera by Molly prior to his actual death successfully manifests a “simulated death” (190). Furthermore, it is imperative to note that Riviera and Molly’s conflict is “staged by the AIs” (195), demonstrating their power.

Building upon Davidson’s ideas, my second chapter will assert that it is the codependent relationship between technology and the human entity in *Neuromancer*, a concept shared by Delany’s earlier work, that establishes a hyperreality within each of the novels, establishing them as critiques of capitalism in their own right. In *Babel-17,* the reader can see a hyperreality being forged through various technologies deeply impacting the

dissemination of knowledge. This is demonstrated through both the inclusion of what Delany terms "discorporate characters" (or, the living dead) as well as, most notably, the inclusion of the titular language. Furthermore, this impact is demonstrated through the interactions between technology and the human in *Neuromancer,* such as through the AIs direct communication with Case. The question that is naturally raised by informatics in both novels leads one to question: what is real, and what is not? These questions are in line with Baudrillard's notion that, in the real world, hyperreality can quickly become the status of an object or period. For example, it is important to note that, according to Baudrillard, episodes of hyperreality took place during various world conflicts, such as the Gulf War and the Iraq War, as he questioned how much of the dissemination of information accurately represented what was occurring. So then, too, can we question how the spread of information impacts novels such as *Babel-17* and *Neuromancer.*

Baudrillard's theories are also reflective of those of Fredric Jameson. Much of Jameson's work establishes the direct linkage between postmodernism and consumerism. In his aptly titled work "Postmodernism and Consumer Society" Jameson states,

> I believe that the emergence of postmodernism is closely related to the emergence of this new moment of late, consumer or multinational capitalism. I believe also that its formal features in many ways express the deeper logic of that particular social system. I will only be able, however, to show this for one major theme: namely the disappearance of a sense of history, the way in which our entire contemporary social system has little by little begun to lose its capacity to retain its own past, has begun to live in a perpetual present and in a perpetual change that obliterates traditions of the

kind which all earlier social formations have had in one way or another to preserve (125).

Jameson's "postmodernism" references and reflects a capitalist social system that promotes a fundamental focus on the here and now, continually emphasizing the significance of loss of historical connection, and is naturally self-perpetuating towards a progressively capitalist dystopia (the definition of which I will discuss shortly). This progression acknowledges the evolution away from a societal structure that has, in the past, not discounted its own history, sacrificing its significance for the capitalistic present, instead embracing history as an integral piece of itself. Once this process begins, its progression gains momentum and becomes difficult to alter.

The evolution of capitalism, and its effects on societal structure, can be best appreciated by first examining the emergence of widespread domestic and international capitalism that flourished in the post-WWII era. Prior to that time, rudimentary consumer consumption had limited capitalistic expansion so the concentration on, and appreciation of, social history had been the norm. With the advent of ubiquitous consumption, social focus on the present became more and more contemporary. (Evolution in general, and in particular social system development, tends to adhere to Isaac Newton's first law… an object in motion, stays in motion unless acted upon by an outside force.) The social system transformation initiated by capitalism was difficult to deflect once started. The progressive concentration on the present at the cost of history birthed and has nurtured the fundamental rise of postmodernism—Jameson's central thesis.

Furthermore, it is important to note that Jameson (in his 2003 essay "Fear and Loathing in Globalization") has explicitly tied *Neuromancer*'s use of the global economy to

the budding capitalism of the time. Jameson believes that many of the hallmarks of *Neuromancer*'s story, such as the inclusion of brand names, help to foster an environment that feels hyperrealistic due to the reader's total integration in consumer culture.

Taken collectively with its heightened usage of technology and the cyborg, *Neuromancer*'s foray into the global economy helps to define the text as a new sub-genre. The global economy and multinational corporations in the novel are part of what distinguishes the story as widely recognized as the first Cyberpunk text. For the sake of my study, I will be relying on the same definition of Cyberpunk used by Mark Bould, who attributes the definition to Bruce Bethke. The word "Cyberpunk" comes from the Greek "to steer" (218) alongside the "punk rock" movement. The prefix "cyber" was also being used for cybernetics (which Norbert Wiener defines as "the science of control and communications in the animal and machine" ("Cybernetics")) which became instrumental for routing information and with it, the course of culture. These elements come collectively together to forge the name of a genre that is unrelated to both navigation and music, but one that fosters an untraditional, arguably grungy, take on cybernetic technology as a critical component of diegesis. The relay of information being reliant on technology serves to demonstrate the universal reliance on it is essential to Jameson's postmodernism and the notably posthuman landscape that it in turn creates is indicative of Baudrillard's hyperrealism.

At its essence, the term defines a dystopian genre rooted in technological disaster. Dystopian texts can simply be viewed as those written as the inverse of utopian texts. Starting with Thomas More's *Utopia* (1516), dystopian texts demonstrate a society that is opposite of idyllic. These texts are often, though not exclusively, characterized by corrupt

governments or leaders, and/or organizations. According to Angela B. Lindsey and her colleagues, "A technological disaster is an event caused by a malfunction of a technological structure and/or some human error in controlling or handling the technology" (1). By combining these elements, cyberpunk was born: creating a unique sub-genre.

Like Bould, I argue that there are a variety of texts that lead up to the proper development of Cyberpunk, although I suggest that many of the texts traditionally seen as not inherently proto-Cyberpunk, such as *Babel-17*, actually are important parts of the movement. This is demonstrated through the use of body modifications in *Babel-17,* though it is also seen through the inclusion of cognitive assemblages central to the narrative. This will be discussed in detail in the next chapter, that said, it is imperative to note the historical linkage between Delany's text, which has been traditionally viewed as either simply a classic space opera or read as New Wave text, to the development of the movement which Gibson is credited with creating.

The historical-cultural framework is key to understanding the broader implications of each story and acknowledging the real-world analogs to the cyborgs, discorporates, net cowboys, and brainwashed assassins their fabulation turns on. While my subsequent chapter will examine the relationship between technology and the human and how it fundamentally shapes the way that information is communicated, my further analysis is grounded in the assumption that both *Babel-17,* as well as *Neuromancer,* are reactions to the time periods in which they were written. My argument lies in the fact that the configuration of someone in reality inherently underscores their processing of information. Therefore, the reality of the books, and the reality of the real world that surrounds the authors, fundamentally allows one to best understand how the novels work to critique the society that surrounds them

specifically via the implementation of technology and the way that this impacts communication.

In addition to a consideration of Baudrillard's hyperreal and Jameson's postmodernism, I turn to the work of N. Katherine Hayles's text *How We Became Posthuman* (1999) and how this argues to configure the human entity as reliant on technology. Her study provides the framework for my own as it examines the implications of living in a technologically driven world fueled by consumer society and how this broadly impacts humanity.

For example, Hayles defines and further examines what she deems to be "the flickering signifier." Though I will assess the deeper complexities of Hayles's idea in my subsequent chapter, in basic terms, "the flickering signifier" is similar to the Lacanian notion of "the floating signifier" in which a word fails to hold meaning that is widely agreed upon. The flickering signifier functions relatedly, except it is unique to the computer age. The flickering signifier denotes the presence of a personhood that fundamentally differs from the pen and paper age. The way in which information can be ever-so-quickly deleted, reuploaded, altered, and manipulated is changed drastically. As Hayles notes, the flickering signifier "brings together language with a psychodynamics based on the symbolic moment when the human confronts the posthuman" ("How We Became Posthuman: Ten Years On" 33). In other words, in the age of pen and paper, humanity benefited from technology in a concrete way. In the development of the signifier, we have arguably reached a point in which technology is beginning to surpass human capabilities, indicative of the development of the posthuman, a point I will subsequently expand upon in my second chapter.

Hayles further expounds on posthumanism during her discussions of the Macy Conferences on Cybernetics. These conferences "held from 1943 to 1954" (Hayles, *How We Became Posthuman* 7) allowed for humans "to be seen primarily as information processing entities who are *essentially* similar to intelligent machines" (7). Pre-dating Haraway's work on the cyborg and arguably directly influencing it, these conferences laid the groundwork for the assessment of cybernetics through a scholarly lens. As Hayles defines it, cybernetics "signaled three powerful actors—information, control, and communication—were now operating jointly to bring about an unprecedented synthesis of the organic and the mechanical" (8). In this case, information equates with personhood, control to society or social logic, and communication to media/simulation.

In conclusion, the development of the science fiction genre over the course of the twentieth century is demonstrative of the impacts of technology on literature, and vice-versa. The hard science fiction of the early part of the century arguably "softened" during the New Wave movement, prior to the establishment of the Cyberpunk genre with Gibson's *Neuromancer.* These shifts can be seen as directly influenced by the capitalist culture outlined by Baudrillard and Jameson, which in turn sparked the Macy Conventions and a series of conversations around cybernetics that would span over half a century, including Donna Haraway's *Cyborg Manifesto* with the development of Cyberpunk. This creates a basis from which one can view twentieth-century science fiction and the relationship that exists between technology and the human within it, as reflective of overarching societal concerns during a time of unprecedented capitalist culture, which will be examined in my next chapter.

Chapter 2: Assessing Modes of Informatics in Samuel R. Delany's *Babel-17* and William Gibson's *Neuromancer*

When William Gibson's *Neuromancer* dramatically entered the science fiction landscape in 1984, it was unlike any other science fiction novel. Gibson's inclusion of advanced cybernetic technologies and cyberspace is credited with the creation of the sub-genre of cyberpunk. Though Gibson's novel is widely known for its groundbreaking depiction of cybernetic technology, many of its elements were discreetly borrowed from, or at least inspired by, previous literature. Since Gibson has widely professed his admiration for Samuel R. Delany (Ballard 279), it is unsurprising that one of the arguable influential predecessors to *Neuromancer* can be found in Delany's *Babel-17* (1966). Perhaps among the most important projections of technologies in either of these novels is demonstrated through the informatics that are utilized. In modern usage, "informatics" often refers to how computers assist people ("Information School: What is Informatics?"), though contemporarily, the term has been used to simply refer to the study of computational systems regarding the storage, retrieval, and dissemination of data ("What is Informatics?").

For my study, I will be drawing on the slightly more complex definition of N. Katherine Hayles. Hayles describes informatics to be representative of the interplay between "bodies" of text, the human body, and information technologies. As she explains "changes in bodies as they are represented within literary texts have deep connections with changes in textual bodies as they are encoded within information media, and both types of changes stand in complex relation to changes in the construction of human bodies as they interface with information technologies" (29). Simplifying her definition, Hayles states that she stands by

her predecessor Donna Haraway in believing "informatics to mean the technologies of information as well as the biological, social, linguistic, and cultural changes that initiate, accompany, and complicate their development" (29).

In both *Neuromancer* as well as *Babel-17,* there is a direct interchange that occurs between the self, text, and information technology. In *Babel-17,* the self and technology are often directly intertwined. In the case of the protagonist Rydra Wong, her brain is simply computer-like, as I will subsequently explore. However, for other characters, they either have transformed their bodies surgically or (in the case of the discorporate), their entire existence is reliant on technological innovations. This is subsequently reflected in the physical text that the reader experiences, often through a range of mediums from Rydra's poetry to the dialogue of the technology that can "override" oneself, the language Babel-17. In *Neuromancer,* a variety of technologies, such as cyberspace, allows for total integration between oneself and technology—they are one and the same. Subsequently, information technology has progressed to the point that one's sensoriums can be relayed to another, inherently conflating the notion of selfhood. It is these markers in each of the novels that are indicative of the posthuman age.

For Hayles, the posthuman is "not a period-marker in which the human is absent (replaced by the cyborg) but rather the designation of an era in which the nature of being human is so significantly changed that it becomes appropriate to recognize the shift with the prefix" (Gutiérrez-Jones 70). Fundamental to the change, Hayles asserts, is "that the posthuman view is one that values information over materiality, mind over body, and knowledge over consciousness" (Hayles, "Why We Are (Still) Posthuman"). When asked to simplify her definition of the posthuman (as she uses it) in an interview with the Associated

Press ten years following the publication of *How We Became Posthuman,* Hayles stated that the posthuman is comprised of "twentieth-century developments in which an Enlightenment inheritance that emphasized autonomy, rationality, individuality and so forth, was being systematically challenged and disassembled - in a whole variety of fields, among them cybernetics" (Hayles, "How We Became Posthuman: Ten Years On" 321). This is directly indicative of a realm in which elements from soft sci-fi, with its overarching emphasis on societal concerns, directly collide with technological innovations. For Hayles, the idea of becoming posthuman is simultaneously both "nightmarish" and "liberating" (Hayles, *How We Became Posthuman* cover copy). There is no such thing as living in a posthuman dystopia, nor can one occupy space in a posthuman utopia. The notion of the posthuman demands a far more complex ecosystem.

Building upon Hayles's ideas of interchange between humans and technology, I will be assessing the modes of informatics in both *Babel-17* and *Neuromancer*. Ultimately, I posit that each of these modes of informatics relies on a disconnection of consciousness–in the form of knowledge or information–from the human body. This posthuman theme emphasizes a co-dependent relationship between humans and technology, and establishes technology as not only autonomous, but in the case of *Neuromancer,* sentient.

First, I will turn my attention to Delany's novel. The story of *Babel-17* unfolds in a time in which the (Earth-based) Alliance is at war with the Invaders. The protagonist, Rydra Wong, is on a mission to decode an enemy language, Babel-17. The diegesis of the novel encompasses several unique elements that are now often portrayed as stereotypical of the science fiction genre, though they were arguably revolutionary at the time of the novel's publication, including but not limited to technology that allows the deceased (or at least their

personalities) to be effectively brought back to life (these figures are referred to by Delany as the “discorporate” and their deaths/afterlives are overseen by a kind of space crew employment agency). The quality of Delany’s fictional realm that allows the dead to exist as conscious yet unalive entities, among others, actively works to decontextualize the setting of the book from Earth.

The “gray area” that defines the existence of discorporate characters, which exists between life and “true” death in the novel, establishes the notion that consciousness is fluid, and therefore is not fundamentally tied to a single state of being. It is what separates these from their “corporate,” or living, counterparts but it is simultaneously the basis for their capacity to inhabit other technological corporealities. The incorporation of the discorporate, therefore, can be seen as Delany’s attempt not only to decontextualize the setting of his book from that familiar to readers, but also to demonstrate a computer-like consciousness and its centrality to informatics within his tale. Thus, I will assess the discorporate in the story by examining them through various lenses, including discorporate to techno-prosthetic, discorporate to corporate, and Rydra's discorporate to memory interface, the first of which will begin my argument.

In order to establish how informatics are portrayed in the novel, I will first explore how Delany equates human experience and consciousness to data. This is evident with Delany’s inclusion of the aforementioned “discorporate” characters (categorized by Joseph Fitzpatrick as “basically ghosts”) as well as the protagonist, the poet-cryptographer Wong (274). Both Wong and the wider class of discorporate characters demonstrate a novel relationship between consciousness, the mind, and media, the ‘material substrate’ of the body or brain. For example, the idea of a “prosthesis,” or an artificial construct becoming an

integral part of an organic system, is central to the narrative. Extrapolating further, a databank acts like a prosthetic brain, it can materialize many of the core attributes of a person long after they have passed away. Furthermore, the ship which Rydra operates acts like a prosthetic body, relying on the "senses" of discorporate characters in order to operate.[2] Additionally, it is also worth noting that bodily prostheses are extremely prominent in the world of *Babel-17*. For example, when the character Brass is introduced, it is said that he has "ivory sabor teeth glistening with spittle, muscles humped on shoulders and arms, brass claws unsheathed six inches from yellow plush paws . . . the barbed tail beat on the globe's wall. His mane, sheared to prevent handholds, ran like water" (35). For Brass, it is evident that he has used prosthetics to achieve a more animal-like, intimidating facade.

Fitzpatrick discusses the fact that words spoken by the discoporate are "quickly and mysteriously forgotten by any corporate (living) person who interacts with them" (274). Rydra "circumvents this problem by mentally translating the discorporate characters' words into Basque . . . though the original words were lost, the translation remained" (274). In some ways, the discorporate can be seen as analogous to a type of textual body. Like Hayles's notion of the flickering signifier (that I will discuss in my next paragraph), the dialogue of the discorporate creates momentous impact, but lacks a sense of permanence. Rydra is able to "decode" discorporate dialogue into means that she is able to remember analogous to how a computer takes sets of numbers and translates the data into means understandable to the human brain. Computers operate through a binary system of 0s and 1s. That said, this is not

[2] It is important to note that, to Hayles, "the posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born" (3). Thus, the integration of the prosthesis in Delany's writing is markedly posthuman.

what I am seeing as I currently type on my laptop. Instead, I see a series of words on a word processing document.

The digitized words in which I am typing [-unlike the printed words you may be reading–] are directly indicative of N. Katherine Hayles's notion of "the flickering signifier" (30). As noted in my first chapter, this is a more modern notion of Jacques Lacan's "floating signifier," which, simply put, is a signifier that denotes no agreed-upon signified. By contrast, a "flickering signifier," Hayles argues, is unique to the digital age. According to Megan Buckley's analysis of Hayles, the flickering signifier is exclusive to the age of the computer and signals a profound change in language. Hayles states that

> . . . 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 the biological organism and the informational circuits in which the organism is enmeshed. Accompanying this change is a corresponding shift in how <u>significant</u> is understood and corporeally experienced. In contrast to Lacanian psycholinguistics, derived from the generative coupling of linguistics and sexuality, flickering signification is the progeny of the fascinating and troubling coupling of language and machine (Hayles, "How We Became Posthuman: Ten Years On" 35).

Therefore, the way in which Rydra is able to remember the words of the discorporate demonstrates that she is reflective of, or seems to be similar to, a computer. In Rydra's explicit reflection of such new technology, Delany appears to show a reliance on these advancements in order to achieve communication in a way that is unique, effective, and unable to be achieved by the layperson. Specifically, it is evident that Rydra's outstanding linguistic abilities are explicitly tied to the computer-like functioning of her brain.

Of course, it is important to note that a childhood illness endured by Rydra left her incredibly gifted in language acquisition. At the start of the narrative, Rydra states that "by the time I was twelve, I knew seven Earth languages and could make myself understood in five extraterrestrial tongues" (9). However, it is an incident that kills her parents and leaves Rydra severely injured, which leaves her with "total verbal recall" (9). Subsequently, she became a translator and then a cryptographer, while simultaneously becoming widely known for her poetry. Simply put, as a result of the merging of natural ability as well as traumatic events, the way that Rydra processes language extends beyond what one may deem as "natural." Therefore, while her discussions with the discorporate are definitely reminiscent of computer processing, it is important to understand that Rydra is much more analogous to a computer in her thought patterns than the typical person/character. Therefore, this is perhaps the more complex example of the inclusion of discorporate characters which demonstrates that consciousness is computer-like in *Babel-17*.

Noteworthy is the fact that the discorporate "live" in their own "sector" of the city and perform jobs that would be dangerous for human beings. This is exhibited at the novel's beginning when Rydra is establishing her team at which time Calli, a crewmember, explains why discorporate crewmembers are necessary to space travel. She states that "a live human scanning all that goes on in those hypostasis frequencies [a requirement of certain jobs aboard transport ships] would—well, die first and go crazy second" (42). This demonstrates that the line between life and death, and therefore, between conscious and unconscious, is fundamentally blurred.

Consequently, consciousness in the realm of *Babel-17* is much more akin to a USB drive than a human's brain. Although they are no longer living, the discorporate are still

arguably sentient, since their consciousness exists in terms of data. Their thought processes exist separately from their former-corporate entities, effectively emphasizing the idea of consciousness as a computer.

Through the discorporate characters, Delany also manages to establish the notion of the flickering signifier brought forth by Hayles. Because their words are fleeting, and the idea of the words in which they are speaking can only be remembered if translated, and thus inherently changed, their communication is perpetually "flickering," supporting my earlier notion of the "gray area" which the discorporate occupy.

Perhaps the simplest example of the idea of a fluid, computer-like consciousness is demonstrated through the "uploading" of a formerly deceased person. As the search for Rydra's crew to aid in her mission to investigate the phenomena surrounding Babel-17 continues, she elects to find a crew member at the Morgue, which leads to the onboarding of Mollya. Mollya is a character who has gone from a discorporate state to a corporate one. After losing the other members of her triple, or romantic/life/sexual/work partners, she elects to commit suicide. Though Mollya's suicide is never elaborated on, her body is stored in the Morgue and can be "brought back to life" on command. In the world of *Babel-17,* it appears that science has perfected the art of cryonics or the preservation of the dead with the hope of bringing them back to life. Upon deciding to recruit a member of her team from the Morgue, Rydra explains how this process will work to the Officer who has accompanied her when he asks "Can anybody who dies be made corporate again?" (49). In reply, Rydra states that:

Any suicide who discorporates[3] through regular Morgue channels can be called back. But

> a violent death where the Morgue just retrieves the body afterward, or the run-of-the-mill senile ending that most of us hit at a hundred and fifty or so, then you're dead forever; although there, if you pass through regular channels, your brain pattern is recorded and your thinking ability can be tapped if anyone wants it, although your consciousness is gone wherever consciousness goes" (49).

It is at this point the reader is able to unequivocally understand that the body is viewed as a home for data that may be separated, deleted, or may altogether crash. A person's brain activity is more or less akin to the document on which I am typing.

The file exists on Google Docs, an internet-based service that automatically saves my work within seconds of my typing. Therefore, if my computer were to crash as I was typing, everything that was typed prior to the crash would remain on the internet and would be accessible to me as long as I could find another source to provide me access to the internet. The existence, therefore, of internet based-documents may be viewed as analogous to "[discorporation] through regular Morgue channels" (49) as, even upon the "death" of the server, the words can be rectified. Of course, this differs substantially from text produced on a typewriter, as if the paper housing the type is destroyed, the document is destroyed. Similarly, if an unnetworked computer crashes when typing a document, it is likely gone for good. In *Babel-17,* a person's brain activity may stop being *produced,* but usually can still be

[3] It is worth noting the heavy cognitive dissonance work that this phrase carries. Delany himself states that: "The particular verbal freedom of SF, coupled with the corrective process that allows the whole range of the physically explainable universe, can produce the most violent leaps of imagery. For not only does it throw us worlds away, it specifies how we got there" (Delany, "5,750 Words" 12). He further expounds upon this, stating that "any serious discussion of speculative fiction must first get away from the distracting concept of SF content and examine precisely what sort of word-beast sits before us. We must explore both the level of subjunctivity at which speculative fiction takes place and the particular intensity and range of images this level affords."

readily *accessed.* This reinforces my previous notion that the consciousness then is similar to that which is stored on a USB drive, but complicates it by introducing the varieties of media (material substrates) required to maintain discorporate consciousnesses in a state of information. The consciousness can be easily transported and uploaded, but if something were to physically destroy the USB in which the data was housed, the data would no longer exist, just as, in *Babel-17* if a person dies because their body is physically incapable of supporting itself, the consciousness will fade alongside the body. While consciousness can also be lost if the data storing it "crashes," the systems in place in *Babel-17* demonstrate that this is unlikely.

A Look at Technologized Language

Now that I have established how Delany positions the human body as a medium of separate components of data rather than a singular entity, I will turn to the central mode of informatics in the text: technologized language. At the novel's beginning, Babel-17 is thought to be a code. After reviewing it, it becomes evident to Rydra that it is not a code at all, rather, Babel-17 is a language manufactured by the Invaders serving as a threat to the Alliance. That said, for all of her expertise in language, Rydra feels she needs further examples of the language to fully grasp it. Being associated with a series of attacks, Rydra is able to figure out where the next attack will likely be, and sets out on a mission to encounter it, and in doing so, gain exposure to Babel-17. In doing so, she encounters the Butcher, a man who has no recollection of most of his past and struggles to understand the concept of the first person. In the end, the Butcher is revealed to be Nyles Ver Dorco, a man whose father produced an experiment to produce perfect bodies. These bodies were meant to provide the Alliance with the "perfect spies" (213). After undergoing these modifications to achieve the

"perfect body" Nyles was captured by the Invaders. Subsequently, he relays that he was subjected to "a case of amnesia, [the Invaders then] left [him] with no communication facilities save Babel-17" (214), which would provide the opportunity for the virus-like language to spread like wildfire, "sabatag[ing]" (214) others.

Joseph Fitzpatrick encapsulates the idea of human as computer when he states that "Babel-17 'programs' a self-contained schizoid personality into the mind of whoever learns it, reinforced by self-hypnosis—which seems the sensible thing to do since everything else in the language is 'right,' whereas any other tongue seems so clumsy" (276). Fitzpatrick further concludes that "not only are linguistic personalities imprisoned in their own sections of the brain, they are also stuck within the linguistic code itself, deprived of metalinguistic faculty that would let them identify problematic terms and revise them" (276). Though *Babel-17* lacks many of the aspects of "hard technology" present in Gibson's novel, it is evident that Delany's novel (literally) embodies many of these aspects through the physical existence of his characters.

For Delany, it is clear that consciousness is a fluid state: it can act like a computer, that can sometimes (in the case of Rydra) works at warp speed, but is also susceptible to "viruses" such as Babel-17. Consciousness can also still be connected to the "dead," as demonstrated through the multitude of discorporate characters. The fluidity that Delany establishes in the consciousness of his characters is directly indicative of the second wave of cybernetics, which was gaining traction during the time when Delany was writing. This second wave was marked "by redefin[ing] homeostatic systems so that the observer can be taken into account" (Hayles, *How We Became Posthuman* 10). Both the inclusion of the

discorporate, as well as the brain acting as a computer, is demonstrative of the observer being central to the system of which they are apart.

Among the greatest influencers to second-wave cybernetics were Humberto Maturana and Francisco Varela. Their work "expanded the reflexive turn [of the field] into a fully articulated epistemology that sees the world as a set of informationally closed systems" (10). Before Maturana and Varela had teamed up, however, Delany successfully portrayed these closed systems through the relay of information between his characters. Therefore, it is evident that informatics as portrayed in Delany's novel underscores the ongoing cybernetics movement.

Continuing into Cyberspace

Although the idea of the digitized consciousness as a key form of informatics was propagated through the advent of Cyberpunk and was continuing to gain traction during the mid-late 1990s when Hayles was writing, novels such as Delany's, arguably mark a fundamental turning point in the development of the genre and the idea of informatics. At the time that Delany was writing, computers were an embryonic entity, still the size of rooms. It would not be until three years following the publication of *Babel-17* that Americans would see what is often viewed as the first mainstream success of the computer: the triumph of the Apollo 11 mission, which first saw a man on the moon. Thus, since the capability of computers largely lived in the imagination during the time that Delany was writing, I posit that it was novels such as Delany's: those which can be arguably and contextually viewed as "New Wave" but use elements of hard science fiction to create notably dystopian stories through a novel approach to informatics, that are truly proto-Cyberpunk.

While Delany's illustration of the disconnected consciousness was a new idea for its time, his ideas were clearly built upon in Gibson's novel. *Neuromancer*'s divergence from previous science fiction lies in its "combination of low-life and high-tech" (Sterling xiv) which serve as defining aspects of a characteristically dystopian setting. Among the "high-tech" elements present in *Neuromancer* is technology which allows for further separation between the body and the consciousness than that which was permitted in *Babel-17*.

Neuromancer follows Case, a computer hacker, who is hired by a mysterious figure, Armitage. Alongside his sexual interest and fellow protagonist, Molly, Case undergoes a series of adventures that eventually reveal that the mastermind behind "Armitage" is in fact an Artificial Intelligence called Wintermute, whose goal is to merge with its counterpart, Neuromancer, and in doing so, gain inconceivable power. Perhaps, Gibson's most obvious tie to his predecessor is his inclusion of consciousness that exists beyond the grave. One of Molly and Case's first missions is to secure the "construct" of "Dixie Flatline, a cowboy [hacker] who encountered something in cyberspace that flattened his EEG, [who] cease[s] to exist . . . [and is] defined by the magnetic patterns that store his identity" (Hayles 36). The inclusion of personality constructs such as Dixie is directly reflective of the character Mollya in *Babel-17*.

For Wintermute, Dixie is an essential component of its mission. In order to succeed in its mission, Wintermute has to systematically achieve a wide array of goals. By securing Dixie's construct, Wintermute knows that Dixie will be able to provide Case with the support that he needs in order to successfully complete the elements of the mission that reside in Cyberspace. As in life, Dixie was Case's mentor in hacking. Then, through a complex series

of events, Wintermute guides Case (usually in Cyberspace) and Molly (in the physical world) so that they ultimately complete the two essential components for Wintermute's merger with Neuromancer: the completion of the Kuang virus in cyberspace (ultimately achieved by Case) occurring simultaneously with the character 3Jane speaking the passcode in the physical realm (which is Molly's central objective). The complexity behind Wintermute's freedom exists because both government agencies and private corporations (such as Tessier-Ashpool, who "owns" Wintermute/Neuromancer) wish to prevent the merger, because they cannot fathom the amount of power that the AI will gain through such a merger, and in doing so likely detract from the power that they hold, in addition to changing the trajectory of humankind.

That said, in addition to Dixie and Linda Lee (Case's deceased ex, who will subsequently be examined in greater detail), it may be argued that there are other incorporations of characters that have striking similarities to the discorporate in *Babel-17* throughout *Neuromancer*. For instance, Molly's usage of "microsoft" in some ways makes her discorporate. In the context of the novel, a microsoft is "a small piece of electronics that is inserted into a socket placed in your brain. In the novel, it is implied that this practice is new, edgy - kind of like multiple body piercings in the late 1990s" ("Microsoft"). These chips "provide data on a particular subject, or special features, for the user" ("Microsoft"). For Molly, her eyes and vision have been completely re-wired, allowing her to see information (like time) as well as improving her vision and making it more adaptable (such as strengthening her ability to see in low-light situations). Molly, along with other microsoft users, have "killed" part of their human body in its most natural state in order to be merged with machine, encompassing Haraway's notion of the cyborg, and in doing so, becoming

arguably discorporate. Unlike Rydra, Molly's consciousness is not simply computer-like. Rather, Molly's consciousness is truly merged with computers in their truest state.

Similarly, Wintermute/Neuromancer can also be thought of as discorporate: the AIs stem from an array of computer software. How then, is it possible that they are sentient? While the contemporary AIs of 2022 are able to communicate with humans, they seem to have no *objective,* other than providing thoughtful answers to questions. By contrast, the AIs of Gibson's realm are able to manipulate, control, and in all likelihood, have some level of emotion. Their aptitude exists beyond what is comprehensible to a human. Therefore, they also, arguably, occupy the "gray area" of existence that is occupied by the discorporate.

Perhaps one of the most evident examples that Gibson provides of how consciousness exists outside of the human body is through the character of Armitage, who simply acts as a pawn for Wintermute throughout the novel's diegesis. "Armitage" is the name of the personality instilled in the body of Colonel Willis Corto after Corto was disfigured in the military operation Screaming Fist, a corrupt assignment destined for failure. Though they share a body, Armitage is arguably a completely separate entity from Corto, as "Wintermute had built Armitage up from scratch, with Corto's memories of Screaming Fist as the foundation. But Armitage's 'memories' wouldn't have been Corto's after a certain point" (Gibson 216). Therefore, Wintermute was literally able to overtake a human body and reprogram it, demonstrating the potential sentient nature, and power, of the AIs. This has multiple implications on the text, demonstrating that informatics in the novel are so reliant on technology that an AI has the ability to "create" consciousness and then "upload" it into a human body (which also serves to foreshadow Wintermute's later rise to power). Through

Wintermute's possession of Armitage, it is readily evident that the role of humans as creators and "masters" of technology is increasingly deteriorating.

Though Wintermute creates the personality of Armitage, it is important to note that the AI does this, alongside his recruitment of Molly and Case, because its programming will not allow it to merge with Neuromancer on its own accord. As Carl Gutiérrez-Jones discusses, the

> AI's creator, Marie-France Tessier, built into the entity rigorous mechanisms ensuring that the AI would not be able to free itself without extensive cooperation by humans, specifically including one of her descendants. In this regard, Marie-France not only established for the AI a certain dependency on human actions but also an imperative that the AI develop an ability to understand human qualities, as well as approximate some degree of empathy. (76)

Therefore, it is evident that, although technology's power is still incomprehensible to the twentieth (or, possibly, even twenty-first) century reader, the relationship which exists among humans and technology is codependent. While humans benefit from the technology that they produce, computer technology has developed to the point that it can also benefit from the manipulation of humans—though technology's reliance on humans demonstrates that it cannot function entirely independently from humans.[4] This allows us to arrive at the question: should the AIs be considered autonomous individuals? On a basic level, I define individuality as that which distinguishes itself from all others. This is often, though not always, accompanied by a level of free will and autonomy. The question of individuality is highly contested. The concept of the individual has differed across cultures. For centuries,

[4] That said, this dynamic arguably changes with the Wintermute/Neuromancer merger (which will be discussed in greater detail at a later point in this chapter).

women and people of color were not considered to have complete autonomy. Today, the more heated political question concerns abortion, and whether a pregnant person holds more individuality and autonomy than a fetus. That said, a person's "free will," which accompanies their established individuality and autonomy, is arguably shaped by those around them, as well as the cultural and political state that they inhabit. However, beyond the relatively simple concept of individualism as most think of it, lies what political philosopher C. B. Macpherson terms "possessive individualism" (D. Little). This brand of individualism, Macpherson states, places the individual as the explicit owner of themselves. His "formulation" (D. Little) for Possessive Individualism consists of the following:

1. What makes a man human is freedom from dependence on the wills of others.
2. Freedom from dependence on others means freedom from any relations with others except those relations which the individual enters voluntarily with a view to his own interest.
3. The individual is essentially the proprietor of his own person and capacities, for which he owes nothing to society.
4. Although the individual cannot alienate the whole of his property in his own person, he may alienate his capacity to labour.
5. Human society consists of a series of market relations.
6. Since freedom from the wills of others is what makes a man human, each individual's freedom can rightfully be limited only by such obligations and rules as are necessary to secure the same freedoms for others.
7. Political society is a human contrivance for the protection of the individual's property in his person and goods, and (therefore) for the maintenance of orderly relations of

> exchange between individuals regarded as proprietors of themselves. (Macpherson qtd. in D. Little)

Although Macpherson's Possessive Individualism is explicitly defined in terms of the human, I would argue that the AIs in Neuromancer, especially when merged, may be viewed as having Possessive Individualism. Wintermute/Neuromancer is not only "the proprietor" of itself, but is able to supersede the political realm that attempts to contain its powers.

In addition to AIs which may be viewed as individuals, Gibson also builds his notably posthuman landscape through the employment of human-human cybernetic technologies used by humans, such as simstim. Simstim can be best described as "a technology that broadcasts or records someone's sensoriums, experiences and sensory input" ("SimStim") and in doing so, allows another person to, quite literally, experience life through their eyes. For example, as part of their mission, Case uses simstim technology to accompany Molly on an assignment, though she is the only one physically present. The bodily experience intertwined with technology as it exists in simstim is a key component of the codependent relationship between humans and interpersonal technologies that are established for most of the novel before subsequently being broken with the emergence of the superintelligence at the novel's end. Though Case partakes in simstim, his passion lies in cyberspace. Just like simstim, the construction of cyberspace in the novel "anticipates hyperlinking technology in order to imagine a new form of hybridized intelligence" (Gutiérrez-Jones 74). However, simstim, Case claims, is ultimately far too rooted in the physical experience. Case has such a strong affinity for cyberspace that he "regards his body as 'meat' that exists primarily to sustain his consciousness until the next time he can enter cyberspace" (Hayles 36).

That said, despite the fact that Case arguably views cyberspace as a disembodied experience, I agree with Hayles's assertion that cyberspace is very much linked to embodiment. Hayles states that the common misconception in cyberspace being linked to disembodiment is reliant on "two different conceptions of subjectivity – one that links the subject to the mind, the other that links the subject to the body. Hayles sees these two modes as essentially 'masculine' and 'feminine,' respectively" (Santone). Hayles then states (in line with Nancy Stepan) that this binary remains in cyberspace, propagated through discourse. As Jessica Santone notes on a University of Chicago webpage, "As an alternative to the construction of cyberspace as disembodied, Hayles posits that cyberspace is a medium where materiality and information intersect. Within this locus, presence, absence, pattern, and randomness give way to mutation, hyperreality, replication, and disruption." Therefore, while it is important to note that, on the surface, simstim and cyberspace may appear to be extremely different from one another, they both are ultimately reliant on the functions of the human body and the interweaving of the bodily experience with technology.

After stealing from previous employers, Case's nervous system is destroyed as punishment, preventing him from entering cyberspace. It is his misery at his inability to access the matrix, however, that makes Case the perfect candidate for Wintermute's plan. Wintermute is able to arrange for the "fixing" of Case's nervous system. Through (supposedly) lining his body with sacs of poison, Case is kept reliant on Wintermute to administer a cure "once the AI is successfully liberated" (Gutiérrez-Jones 80). It is through Case's backstory that one can first see the interweaving of the capitalist landscape in the posthuman world. As the "boss" Wintermute is able to physically give and take away parts from Case. Just as with Armitage, Wintermute manipulates Case in order to tailor-make him

to suit Armitage's needs and mission. Bodily autonomy ceases to exist in a landscape that successfully forges the hyperreal, a point that I will attend to at a later point in this chapter.

Subsequently, much of the novel occurs within cyberspace, which is described as "a consensual hallucination experienced by billions of legitimate operators, in every nation" (Gibson 52). As Hayles notes, "Gibson imagines a direct neural link between the brain and the computer through electrodes" (Gibson 36). As previously noted, though Case thinks of cyberspace as a fundamentally disembodied experience, its direct connection to the physical body only serves to emphasize Wintermute's control over Case's material substrate.

That said, while there is a unique divide between consciousness and "reality" in Gibson's novel, it is also important to note that one's experiences are inherently tied to their "meat" body. For example, Case's entire dependence on Wintermute is based upon the fact that, in order to enter cyberspace, his physical body must meet certain standards. When Case regains access to cyberspace, it is in "a new manner that radically tethers him to his body" (Gutiérrez-Jones 80). As Gutiérrez-Jones notes, this is demonstrated through the incidents in which Case's physical body "flatlines" while he is in cyberspace: "during these sequences Case finds himself projected into virtual worlds created by the Als while his 'original' body is dropped into a temporary death" (81).

Perhaps the most notable instance is when Neuromancer attempts to ensnare Case in a confined cyberspace. It attempts to use a digital construct of his ex, Linda Lee, presented as a real human consciousness, to tempt him into abandoning his mission on behalf of Wintermute. Case is able to escape the world of Neuromancer, choosing to return to his 'original' reality, although it is important to note that Case does not choose cyberspace over reality, instead his choice denotes the fundamental integration of cyberspace into the human

experience as evidenced throughout the novel (82). This is demonstrated through Case's return to cyberspace in which he successfully, along with Molly and 3Jane, frees Wintermute. Therefore, although informatics in *Neuromancer* is reliant on the intersection of technological advancements and the human entity, just as in *Babel-17,* humans are still defined and limited by their bodies.

Delany and Gibson collectively utilize characters that are at the mercy of the reality of their physical medium/substrate and the mode which carries that existence. While both novels imagine a world in which the distinction between individual consciousness and physical substrate allows for the transit of consciousness from the confines of the biological body into cyborg and posthuman forms, this is no simple liberation. Unlike some contemporary prophets of the singularity, for instance, Gibson and Delany are attentive to the necessary link between forms of life and lifeform. At the far extreme from posthumanism as liberation, we can analyze those digitized or downloaded sentiences who are reified and imprisoned within cyborg prostheses.

The confined existence of various non-human figures is perhaps best demonstrated through the aforementioned portrayal of cyberspace, where reality is so warped that the dead can be portrayed as alive (not as constructs) and the unbodied consciousness can be materialized. The notion is perhaps best supported at the very end of the mision when Case ventures into cyberspace only to spot ". . . figures, tiny, impossible, who stood at the very edge of one of the vast steps of data. Small as they were, he could make out the boy's grin, his pink gums, the glitter of the long gray eyes that had been Riviera's. Linda still wore his jacket; she waved, as he passed." (Gibson 287). The language here is contradictory: everything is described as material, but it exists in cyberspace, on "steps of data" (287). This,

alongside the “presence” of Linda Lee, Case’s ex-lover who is killed after stealing Case’s black-market RAM, serves to demonstrate a world dominated by computer technology in concluding the novel.

It is important to note that Linda can not be the “real” Linda Leer, as she is dead, and this is not the first time that she appears present in cyberspace. Although the “authentic” Linda Lee (aka her material substrate) ceases to exist upon her death, “both [AIs, Wintermute and Neuromancer] attempt to use recreations of Linda Lee to manipulate Case” (Gutiérrez-Jones 79). For example, long before the merger of the AIs, Neuromancer, who does not want to merge with Wintermute, attempts to derail Case’s efforts.

The projection of Linda demonstrates the true power of AIs, as these computer programs can fabricate a facsimile of a person out of facts that they know them. This entity appears as the chosen person’s “clone,” although, unlike constructs such as Dixie Flatline, they are not genuinely derived from the person whom they represent. While the Linda that exists in cyberspace is fundamentally not the same person who died, “the Neuromancer AI insists that she is, in fact more than the readable data” (Gutiérrez-Jones 83) demonstrating that the AI can, in a sense, create life, arguably displaying God-like power.

Perhaps of even greater interest than Linda Lee, however, is the presence of the boy, who is widely taken to be representative of Neuromancer/Wintermute. The AI famously has the “eyes of Riviera” (287), and comes across as human as Linda Lee in Neuromancer’s projections. Throughout the text, Wintermute presents itself to various characters as various people that they know in order to manipulate them. While this achieves Wintermute’s purpose, it makes it difficult to imagine Wintermute as an individual with a “living” material substrate. In projecting itself as “the boy” Wintermute/Neuromancer is better able to achieve

the status of an individual in the eyes of both Case and the reader. However, that said, the presence of the boy simultaneously demonstrates the separation of consciousness from the corporeal entity, as, since the boy only exists in cyberspace, it serves as a conscious reminder that Wintermute/Neuromancer is likely only presenting in this form to communicate with Case, and that it does not exist as a corporeal entity and that this does nothing to restrain its power.

Not only does *Neuromancer* further demonstrate a separation of consciousness and the corporal entity, but it also blurs the distinction between *what* is capable of presenting as human, and what is not. Though an AI does not inherently function as a physical presence more than a server box and processor, it is able to manifest one in the realm of cyberspace. The communication between characters is dependent on the relationship between technology and humans, as even Wintermute would be unable to accomplish its objective without the assistance of Armitage, Molly, and Case to navigate human spaces and interface with humans and anthropocentric technologies. However, the conclusion of *Neuromancer* is reflective of a society that has begun to cross the line from a society in which technology and the human are mutually dependent on one another, into a society that is more strictly posthuman.

Hayles defines this as existence in which "there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals" (3). In its successful merging with Neuromancer, Wintermute gains astronomical[5] power, becoming a superintelligence and asserting that it has become the entire matrix. Although Gibson does not elaborate on this, Wintermute/Neuromancer, having assumed full control of cyberspace and with it all the human activity that occurs there has now become a God-like figure. The AI

[5] Literally, its first tasks are to search deep space for signs of other lifeforms/intelligences like itself.

has gained control over all of cyberspace the way that, in religion, God is in control of the Earth. Just like God, AI has become omnipotent and omniscient.

This notion is supported at the novel's end when Case asks the liberated AI "'so what's the score? How are things different? You running the world now? You God?—to which the AI replies 'Things aren't different. Things are things" (Gibson qtd. in Gutiérrez-Jones 77). The "provocatively ambiguous"(77) manner in which the AI replies demonstrates that Wintermute/Neuromancer garnered strength and control incomprehensible to humans, but the AI is not alone. It tells Case that "There's others. I found one already. Series of transmissions recorded over a period of eight years, in the nineteen-seventies. 'Til there was me, natch, there was nobody to know, nobody to answer"'" (Gibson 286). Thus, it is evident that, with the merging of the AIs, Earth has entered a new age in which computer systems not only have consciousness but are far more powerful than their creators. That said, though it is left uncertain how much this will impact humans and their communication, it may imply that the codependency relationship previously established has been broken.

In *Neuromancer,* there is no question that AIs are arguably autonomous beings and that this fundamentally shifts the way that information is communicated. Unlike in *Babel-17*, which is simply flooded with "computer-like" elements, it is the literal computer that overtakes the dissemination of information in Gibson's text. Between AI's ability to render discorporate-like characters and its overall manipulation of cyberspace, the reader is aware by the novel's conclusion that Gibson has, in every sense, created a posthuman world. This is perhaps best seen, however, through the duplication of Case prior to the novel's close.

Informatics and Postmodernism: Whose Reality?

The most powerful element of *Neuromancer*'s conclusion is perhaps the inclusion of a "second Case." When Case ventures into cyberspace and sees "Linda" alongside the embodiment of Neuromancer/Wintermute, he also sees "[a] third figure, close behind [Linda], arm across her shoulders . . . himself" (286). Therefore, it is apparent that two versions of Case now exist. That said, there are different interpretations of the ending of the novel. Some think that the original Case never left the matrix, somehow having succumbed to Neuromancer's ploy without recognizing it (despite the aforementioned evidence otherwise), while others believe that it is the copy of Case that roams in cyberspace ("Neuromancer: What's Up With the Ending?"). I generally read it as the latter, though regardless, it is evident that two Cases now exist.[6] Without Case #1's actions, there would be no Case #2. It is important to note that, while it seems that Case was copied by Neuromacer, the importance of this event occurring after the merger of the AIs is that, it demonstrates for the first time an autonomous existence of a "copy" forged by the AIs without an (apparent) motive behind its existence. At this point, Case #2 may be seen as demonstrative of the AI becoming God-like: it is beginning to "populate" the matrix with not only the figures of those who have passed on, such as Linda, but those who continue to exist in another realm.

The duplication of Case serves as a portrayal of the separation of personhood and consciousness through technology, as the reader spends the entire novel following a protagonist whose identity becomes ambiguous in the story's final lines due to his interaction with Artificial Intelligence. If Case #1 is in the matrix with Linda Lee, then Wintermute's

[6] I use the term "exist" lightly here, as the second Case is technically composed simply of RAM, like the second Linda Lee or Dixie Flatline. This "existence" can be seen as similar to consciousness after natural death in *Babel-17,* which can be recorded but is no longer being produced. That said, the development of the second Case is cause for further speculation on the separation of consciousness from the corporeal entity.

win and the gain of astronomical power is likely all simulated, and Neuromancer actually won. The more likely scenario, as I read the novel at least, is that Case #1 is looking at a completely autonomous copy of himself, created by Neuromancer/Wintermute to live in the matrix that the AI now has complete control over.

The separation of consciousness from corporate entities ensures that both *Babel-17* and *Neuromancer* utilize settings that exist in an alternate reality. As philosopher and theorist Jean Baudrillard defines it, reality needs to be distinguished from representations without original referents or "simulacra." The world of either novel is inundated by signs, blurring the lines between what is "real" and what is "not." This is *especially* present in the informatic conception of consciousness presented in the texts. If the human consciousness is simply data that remains after a person's death, is that person "real"? Furthermore, if a figure is constructed by an AI, such as the personality of Armitage in the organic mind of William Corto, or the simulation of Linda in Neuromancer's cyberspace, to what extent is that figure separated from reality?

The answers to these questions are incredibly difficult to discern, as it is difficult to determine if/to what extent the "real" can exist within the confines of a world driven by technology rooted in capitalist gain. Still, they indicate that both *Babel-17* and *Neuromancer* take place in a hyperreality where pervading simulacra create a landscape in which one cannot easily discern or ground the "real." Other attributes of the texts, especially the inclusion of the duplicate Cases in *Neuromancer,* are more explicitly tied to the notion of the hyperreal since the reader is unable to definitively discern which "Case" is a product of reality.

As such, the inclusion of the hyperreal setting arguably became a trademark of postmodern literature, which, by definition, "reflects the postindustrial capitalist world" (Butler 537). *Neuromancer* has been widely classified as a postmodern text by several scholars, including but not limited to Andrew Butler (2005), Tony Myers (2001), Istvan Csicsery‐Ronay Jr. (2005), Il-Gu Kim (2006), and Timothy Yu (2008), I argue that it is the groundbreaking notion of posthuman means of informatics through technology, that asserts the novel's strength in their ability to decontextualize the familiar. Since this trait is shared by Delany's work, which was released less than five years prior to postmodernism's "beginning" in 1970, I further assert that *Babel-17* is not only proto-cyberpunk but establishes itself as a proto-postmodern text as well.

As noted in my previous chapter, the establishment of the hyperreal is directly indicative of the advent of consumer/materialist culture. This is echoed in Fredric Jameson's two features of postmodernism, which are directly reflective of Baudrillard's hyperreal: "the transformation of reality into images [and] the fragmentation 'me' into a series of perpetual presents," (125) the latter of which refers to a person's inability to form a comprehensible relationship with the past. The prioritization of materialist culture led to developmental shifts in the genre which placed a greater emphasis on the dystopian settings seen in both *Babel-17* and *Neuromancer.*

Furthermore, Jameson has argued that "certain experimental works might provide new tools, reanimating the prospects for drawing critical distinctions in a late-capitalist postmodern society" (Gutiérrez-Jones 74). Building upon this notion, I posit that the interweaving of the human consciousness and the technological brain in each of these novels

is reflective of the ongoing integration of computers into daily life in response to unprecedented material culture.

As previously discussed, computers were still relatively new entities upon the release of *Babel-17* in 1966. That said, the decade of the novel's release saw many new developments that would change the development of computers, positioning them on a trajectory to become common household items in just a few decades. An example of this was the development of BASIC computer programming "short for 'Beginner's All-Purpose Symbolic Instruction Code,'" (Paste Tech). This system made computing far simpler and more accessible: "the act and culture of computing were essentially democratized, which allowed an exponentially growing number of people who could work to solve the issues of computing and to explore new ways of integrating it into the wider world" (Paste Tech). It is also important to note that the US military laid the groundwork for the internet in the 1960s, establishing ARPANet, or a way for computers to communicate with each other.

This marked "the first version of the internet by every definition of the word" (Paste Tech), only a few short years after the publication of *Babel-17*. By 1984, the year of *Neuromancer*'s publication, 8% of the U.S population would own a personal computer, and the worldwide web would emerge only five years later (Fischer-Baum). The transition of computer technology being exclusively a government entity to its commercialization is, in itself, representative of the growing consumerism that was occurring during this time. The desire for personal access to the newest innovations exceeded what the market could offer, and thus, technology adapted accordingly. This consumer craving was consequently reflected by the literature that was written by Delany[7] and Gibson.

[7] Delany is often credited as the creator of the term "web" to describe an information network in his novel Stars in *My Pockets Like Grains of Sand*. (Freedman xviv)

The prevailing consumer attitude is reflected in Stephen Shaviro's concept of accelerationism (2008), or "the idea that capitalism, or various processes attached to it, should be deepened or 'accelerated' in order to prompt radical change" (New Statesman). Through accelerationism, Shaviro offers a succinct way to contemplate a writer's present and the future that they project. Likewise, he offers terminology for considering the present global elite in a different light than simply traditional neoliberalism. Among Shaviro's main points is that humans are the owners of themselves on a capitalist basis. When assessing both novels, however, we see that the humans are *not* the owners of themselves. Technology, instead of working for humans, has hijacked and manipulated them.

The technology used in order to separate consciousness from the body and redistribute it, whether it be in the form of a language or a literal computer, serves to create a world in which human autonomy is no longer guaranteed. Regardless of whether informatics, as they are presented in either novel, was a *deliberate* reflection of consumer society, it is evident that this reflection exists. My point is not to prove that Delany or Gibson was purposefully demonstrating a social critique through their work, as Gibson has even "noted that writing is not always a fully controlled process, and that materials and patterns may emerge in texts that are as much as a discovery to the author as they are the reader" (Gutiérrez-Jones 84). Hence, regardless of authorial intent, the work of both authors demonstrates a lack of human autonomy that can be extrapolated toward actual market conditions.

Both authors' abilities to craft a landscape devoid of guaranteed human autonomy demonstrate how systems that were being developed in the world in which they were writing could one day become problematic. The capitalist urge for heightened technology may not

necessarily be positive, and this is something that both authors achieve through how their work. In particular, the divergence that is established between a physical-biological body and a consciousness or personality demonstrates a computer-like element regarding how information is relayed that extends beyond the external use of technology. While this metaphorical incarnation of the "brain as computer" is readily evident in Delany's novel, it is a bit less obvious in *Neuromancer,* as the plot relies heavily on physical-technological advancements. That said, it is the use of these particular technologies, those in which the physical body is quintessential to the human consciousness which is capable of separating from it, that allow for the diegesis of each of the novels to culminate in a seemingly didactic warning regarding the unregulated development of technology. This technology was accompanied and encouraged by a boom in consumerism. (That said, *Neuromancer'*s conclusion remains ambiguous in comparison to *Babel-17*'s ending, which is more hopeful in humanity's ability to combat a technologically-driven dystopia).

Neuromancer uses these physical technologies in order to expand upon the paradox established in *Babel-17,* in which technology both limits and enables the body—the two are inherently intertwined, thus creating a complexity in the relay of information. It is this complexity, driven by a literal reflection of consumer goods, that serves as the basis for the establishment of a hyperreal setting in both novels and solidifying the novels as postmodern/pre-postmodern critiques of emerging capitalism.

The market conditions reflected in each of these novels continue to be reflective of the developments in technology that are continuously evolving today. As Carl Gutiérrez-Jones notes, "Ray Kurzwei [a leading commentary on technological advancements], predicts the advent of artificial intelligence (AI) by 2029 . . . AI will almost

certainly feed on its own abilities to improve, and thereby quickly surpass, current human functioning with stunning speed" (69). Therefore, it is important to note that both *Babel-17* and *Neuromancer,* at least incrementally, serve to foreshadow a hyperreality in which the human-technology relationship is increasingly codependent to an infinite degree. Even though Hayles asserted that the widespread fictitious idea of consciousness as a sovereign entity was increasingly less preposterous, for all her work on the subject, I argue that both Delany and Gibson's novels are indicative of a future that even she was not able to completely foresee when writing her book in the late 1990s, which will be the focus of my final chapter.

Chapter 3: Extrapolating Informatics Forward

When exiting Space Mountain (an indoor roller coaster in which the storyline revolves around passengers navigating space, flying amongst the stars) at Walt Disney World in Florida, one passes various "advertisements" for different "tourist attractions" in the fictional space-age era in which the ride is set. For example, one can envision visiting "Crater Caverns" (which appears to be on an imaginary planet) or delving into an underwater world. The "Tomorrowland" that Disney has crafted is rooted in technology that has yet to be developed (hence the apt name). That said, technological developments that seemed hundreds of years in the future when Space Mountain opened in 1975 are progressively appearing to be possible within the next century. As we have continued to advance towards an increasingly posthuman age, we have begun to bridge the gap between real-life science and the fictional realm that Judith Merril addresses in her 1966 essay.

Another vital component of the Space Mountain exit is the "robots." Although they are set pieces and not functional, these stereotypical "bots" signify an age in which robots, designed to be somewhat human-like in appearance, have become an integral component of the job market/economy. For example, soon after stepping off of their ride vehicle, one comes across a set in which a "robot" sits at a desk surrounded by screens and controls. Above the desk, the text "Tomorrowland Station MK-1 Command Center" denotes that the robot is "doing" meaningful work, controlling the flow of traffic of the "rockets" as they take parkgoers into "space." Shortly after seeing the "Command Center" robot, guests stumble upon a robotized "dog" in the Crater Canyons advert, before eventually coming across a

scene in which a robot with distinctly human-like features stands holding a tray of drinks, ready to serve humans food and beverage, programmed to make their lives easier.

The image of the robot simply existing to better the life of the human is a common one. As Hayles suggests, however, this is not the likely outcome of the posthuman age. For example, at what point does a robot become sentient? At what point does our use of robotics become a form of slavery? If the waiter-robot presented at the exit of Space Mountain is supposed to resemble a human as much as possible, at what point in its development can it be considered an autonomous being? In *Babel-17,* augmented/modified humans are prevalent, as is technology that can effectively bring the dead back to life. That said, the discorporate are treated fundamentally differently than their corporate counterparts. As noted in my previous chapter, they are relegated to their own "sector" in the city where Rydra does her recruiting, and they hold jobs that specifically take advantage of their unalive status. In some ways, the discorporate only seem to exist in a state of exile or servitude to the living.

Similarly, both Wintermute and Neuromancer can be seen as enslaved creatures in *Neuromancer.* Although they exist in the physical realm as simply servers and were built to advantage the Tessier-Ashpool corporation, they are both demonstrated to have autonomous thought patterns and a prevailing sense of self-interest. Perhaps, it is possible to read *Neuromancer* as the story of a slave (Wintermute) escaping from slavery (bound not only by Tessier-Ashpool but by humanity).

Throughout this chapter, I will be discussing the cyborg identity of Martha Wells's beloved character Murderbot from her contemporary book series *The Murderbot Diaries* (2017-2018) and how it impacts the relay of information in the novel. Furthermore, I will demonstrate how Wells's portrayal of Murderbot reflects various elements of *Babel-17* and

Neuromancer. Finally, I will explain how this mirrors today's dependence on social media and how, in some ways in contemporary American society, many people have arguably become cyborgs in an age of advanced digital media.

Introducing Murderbot

In her series, Martha Wells works explicitly to answer what constitutes an autonomous and sentient entity. Wells writes through the eyes of "Murderbot," a cyborg who is seen by society as an object, but whose passions (such as a love of media—specifically, soap operas) and feelings (Murderbot often indicates how much it should not care about a given situation, but does anyway) quickly demonstrates to the reader that it can and should be considered an autonomous, sentient being. Despite this, Murderbot spends much of the series not only grappling with its own ideas of what it means to be a free agent but the prevailing view of the society in which it lives.

Murderbot begins the series as a contracted agent on behalf of "the company" for a research project led by Dr. Mensah. In the first novella, the group that Murderbot works for finds out that another research group on a nearby planet has been murdered. It turns out that a corporation called GrayCris is willing to kill whoever is in its path in order to conduct illegal mining/research activity, and they attempt to kill Dr. Mensah's group as well. That said, Murderbot helps the group, in the end saving Dr. Mensah from an explosion. Along the way, the group discovers that Murderbot has hacked its "governor module," or the component of its being that forces it to be compliant with humans, allowing Muderbot to make its own choices. In gratitude for saving her life, Dr. Mensah buys out the remainder of Murderbot's contract. After doing this, Murderbot essentially belongs to Dr. Mensah, who, in an unprecedented move, allows Murderbot to keep its hacked governor module and memories

following damage incurred by the GrayCris incident. While grateful, Murderbot uses the opportunity to run away, wishing to figure out what happened during an incident that occurred prior to the events of the first novella. The accident was wiped from the cyborg's memory, but Murderbot knows that it murdered fifty-seven people following a malfunction.

In the second novella, *Artificial Condition* (2017), Murderbot works with a transport bot it refers to as ART ("Asshole Research Transport") to help it pass as an augmented human in order to go to RaviHyral, where Murderbot's murder-spree occurred. In order to get to RaviHyral, Murderbot takes a position as a security consultant for a group of young scientists who are trying to get their stolen work back. Despite desperately wanting to be apathetic about the situation of the humans it has been hired to protect, Murderbot safeguards the group and helps them obtain their research, killing Tlacey, the character that stole the group's research in the process. In the third novella, *Rogue Protocol* (2018), Murderbot sneaks onto a transport in order to go to a planet to collect information against GrayCris. Along the way, Murderbot again becomes a security consultant (this time by accident) for a group of researchers led by Don Abene. Although it initially lies about its position as a security consultant as a way to achieve its objective to travel, it ends up protecting Don Abene when things go awry. Murderbot also befriends (although, in its attempt to be apathetic, it denies that this relationship is a friendship) her "pet" robot named Miki. In the last novella of the original series, *Exit Strategy* (2018) (initially, *The Murderbot Diaries* was composed of four novellas; however, it has since been extended), Murderbot works with the original team from *All Systems Red* to save Dr. Mensah after learning that GrayCris has kidnaped her following the events of *Rogue Protocol.* Eventually, Murderbot and the team's mission proves successful, although Murderbot is nearly obliterated in the process. At the

story's conclusion, Murderbot is given time to heal, as well as different options regarding what it can do next by Dr. Mensah, effectively demonstrating that the autonomy that it has grappled with throughout the series is now effectively-recognized, at least by those to whom it is closest.

As previously noted, Murderbot is a cyborg, or in the lingo of Murderbot's world, a construct. In line with Haraway's notion, Murderbot breaks many binaries. On a simplistic level, Murderbot blends human and machine. It is made clear that SecUnits (what Murderbot is) are a mix of machine and "cloned material." For example, though it has weapons built into its arms, Murderbot also has a human-like face. Throughout the series, Murderbot refers to its cloned material as its "organic parts," viewing itself more or less as a machine that integrates human material rather than a human that integrates machine material. While augmented humans, or those who have undergone surgeries in order to integrate their physical presence with that of a machine (comparable to those seen in *Babel-17* and *Neuromancer*) exist in Murderbot's world, (and Murderbot even passes itself off as an augmented human in *Rogue Protocol*), Murderbot was not *born,* it was constructed. It did not have a choice in being part robot, nor does it like what its robotic parts were engineered to accomplish (destruction).

Additionally, Murderbot breaks the constructs of gender as presented by Haraway: "the cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-oedipal symbiosis, unalienated labour, or other organic wholeness through a final appropriation of all the powers of the parts into a higher unit" (517). For Murderbot, this means being fiercely asexual. In fact, in *Artificial Condition,* when ART modifies Murderbot so it is more likely to

pass as an augmented human, ART suggests that the modifications include "sex-related parts" (50), and Murderbot is adamantly against the idea:

> I [Murderbot] told it [ART] that was absolutely not an option. I didn't have any parts related to sex and I liked it that way. I had seen humans have sex on the entertainment feed and on my contracts when I had been required to record everything the clients said and did. No, thank you, no. No. (50)

Murderbot's asexuality is inherently intertwined with its identity. Although its lack of sexual interest may solidify Murderbot's position as a cyborg, it is also important to note that the fact that Murderbot extensively cares about its sexuality, or lack there-of, may establish a further blurring of the line that separates the cyborg from the human entity, a point that I will circle back to at a later point in this chapter.

Written about a future age during a time in which traditional notions of gender identity are being challenged more than ever before, Murderbot provides a newly found sense of backlash against conformity and sameness. Murderbot's fierce asexuality is not only representative of Haraway's notion of the cyborg as prescribed in her "Manifesto," but it also represents a broader age in which prescribed gender roles are progressively deteriorating as society becomes increasingly inundated with markers of the posthuman.

For Murderbot, being a cyborg fundamentally shifts how it disseminates information. For example, Murderbot's "fractured identity" (519), as Hawarway would call it, leads it to feel inferior and uncomfortable in the presence of humans (especially in the early parts of the series) and uneasy around and distrusting of bots. For example, at the beginning of *All Systems Red,* when Murderbot first shows up in front of Dr. Mensah's team without armor, it states that the team is uncomfortable by its presence, presumably in part because of how

human-like it comes across. Furthermore, Murderbot states that it is *also* wildly "uncomfortable" (27). Subsequently, even after becoming increasingly close with Dr. Mensah's team, Murderbot says that passing itself off as an augmented human would mean doing things that it has no desire to do, including "talk[ing] to humans like I was one of them" (147).

Murderbot's discomfort is not only with humans. It also struggles in trusting robots. For example, in *Artificial Condition,* even after ART insists that it and Murderbot are "friends" (36), Murderbot states in reply, "constructs and bots can't trust each other" (37) because they "both have to follow human orders" (38). Despite this, ART proves to be loyal to Murderbot, helping it to pass as an augmented human and then providing it with intel throughout *Artificial Condition.* However, despite ART's loyalty, Murderbot's skepticism of bots remains steadfast following the events of *Artificial Condition.* For example, when first coming into contact with Miki, Don Abene's pet robot, Murderbot lies about its prerogative. Even so, after Murderbot protects Done Abene and Miki becomes aware of its true identity, Miki still vouches for Murderbot. It tells Don Abene that the SecUnit "is [its] friend" (77). Therefore, it is evident that Muderbot's distrusting nature is likely due to insecurities in its own identity rather than a rational reason to think both humans and bots unworthy of being trusted. It is also important to note that since Murderbot fears its own capabilities, it also has little trust for other constructs.

Sci-Fi and Social Media

Murderbot's identity as a cyborg and how it views others as a result of this identity fundamentally changes how it communicates with others throughout the series. Since Murderbot views itself as a machine that is capable of horrific doings and effectively a

fugitive slave, it often does not speak unless asked its opinion. It will also manipulate its tone of voice not to expose its autonomy when those surrounding it are unaware of its hacked governor module. What Murderbot says aloud is often more calculated than its thoughts. When Murderbot does elect to communicate, however, it often does so via "the feed." Similar to a social media feed, the feed seems to be a universal server to which everyone has access, though it is easier to manipulate with explicitly robotic/computer parts. The feed acts like an automatic built-in instant messenger system that allows Murderbot to communicate with other entities privately. For example, prior to Murderbot's cover being exposed to Miki in protecting Don Abene, all of Murderbot's conversations with Miki occur over the feed. Additionally, throughout the series, the feed is used to disseminate a wide array of information, including images such as maps.

The feed that Murderbot uses can be seen as reflective of today's phone applications such as Facebook or Instagram. Therefore, Murderbot's use of the feed may be likened to internet addiction today. This may also help to account for some of Murderbot's residual antisocial tendencies following its acclimation to the world as a non-controllable agent. For example, a 2014 study found "that excessive and unhealthy Internet use would increase feelings of loneliness over time . . . [.] This study also found that online social contacts with friends and family were not an effective alternative for offline social interactions in reducing feelings of loneliness" (Yao and Zhong qtd in Rose).

It is important to note that while the feed that Murderbot uses allows information to be disseminated exceptionally rapidly, this technology was foreshadowed in both *Babel-17* and *Neuromancer.* While most of the communication in Delany's novel is relegated to verbal discussion, the previously noted computer-like elements of the text that fundamentally shape

informatics within the novel (analyzed in Chapter 2) deeply mimic the feed Murderbot uses in order to communicate. Although *Babel-17* does not have a "feed" both travelers and information can travel across space in a relatively quick manner. Similarly, both simstim and cyberspace from *Neuromancer* demonstrate an ability to disseminate information at an unprecedented rate.

I argue that all of these books foreshadow/mimic the current social media landscape. While there are many cases that demonstrate the impact of technology to be positive (such as when Miki and Murderbot's communications allow Murderbot to send a signal to Miki that Miki and Don Abene are about to be ambushed), this instantaneous connection does not always work to the advantage of the protagonists. In fact, as stressed in my second chapter, advancements in technology alter the communication of information and, in doing so, create much of the narrative's conflict.

If Murderbot's governor module was working, the company overseeing it would have access to all of its data. It is this overarching control by the private sector that made theorists such as Jameson and Baudrillard wary of the unprecedented capitalism that was booming during the latter half of the 20th-century. (Additionally, is imperative to consider that while *Murderbot* crafts a world which shows the potential for the robot to reach a sentient state, similarly to its predecessors like *Neuromancer,* Wells makes clear that the posthuman age that she depicts is not necessarily *better* than our current reality, both regarding and not regarding media, largely due to the capitalist oversight of Murderbot's world. Though technology in *Murderbot* is anthropogenic, its development has also arguably led to a realm in which humans more easily occupy the status of non-individual. For example, the contract work undertaken by humans in the series may be seen as slavery.

The mix of instant communication and its blending with capitalist culture creates a dangerous situation of surveillance and controllable information. In his book *Anti-Social Media: How Facebook Disconnects Us and Undermines Democracy*, Siva Vaidhyanathan writes that "social media has fostered the deterioration of democratic and intellectual culture around the world" (3). Facebook, Vaidhyanathan argues, "is explicitly engineered to promote items that generate strong reactions" (6), and because of this, anyone who uses social media "potentially becomes the carriers of extremist nonsense" (6). Furthermore, Vaidhyanathan discusses how "Facebook has contributed to—and profited from—the erosion of the democratic practice and norms in the United States and elsewhere" (179). As an example, he cites the 2016 instance in which "Facebook revealed that advertising accounts based in Russia had precisely targeted advertisements at segments of American voters to undermine support for Hillary Clinton's presidential campaign" (177).

Vaidhyanathan also discusses how "friends" on social media differ from "friends" in real life (*Anti-Social Media* 7). For instance, many of the people that we are "friends" with on social media are not exactly who we'd consider close in our everyday lives: acquaintances, relatives, work relations, etc. all fall under the harmonious category of "friend" on the Facebook feed (76). Perhaps this is another reason why Murderbot struggles with friendships. Though "the feed" of Murderbot's world is not synonymous with Facebook, perhaps this conflated language also impacts its view of what constitutes a friendship.

In addition to the feed, it is also important to note how Murderbot's presence is similar to the surveillance technology implemented by social media today. For example, Murderbot makes clear at the beginning of *All Systems Red* that it "was recording [the team's] conversations all the time . . . the company would assess all of those recordings and

data mine anything they could sell. No, they don't tell people that. Yes, everyone does know it. No, there's nothing you can do about it" (28). This is explicitly reflected in today's real world. As Vaidhyanathan puts it:

> Every one of us who carries a camera attached to a mobile phone is an agent of surveillance . . . If I post a series of photos taken in Charlottesville, Virginia, and tag three Friends who appear in them, Facebook correlates that information with what it gathers about them. Then Facebook can generate remarkably accurate assumptions about the frequency of our meetings, the nature of our relationships, the next circle of mutual acquaintances, and even our relative income and consumer habits. All of this seems relatively harmless until a Facebook user wishes to cause harm to another or some oppressive state power gains control over this sort of information. Both of these things happen. Peer surveillance connects to corporate surveillance and to state surveillance. (*Anti-Social Media* 56)

Furthermore, Vaidhyanathan discusses how overarching surveillance is not simply limited to social media. Google, a tool with over a billion users (Djuraskovic), also uses the everyday person's data in a way in which they are often unaware. Vaidhyanathan writes:

> If you read the privacy policy carefully, it's clear that Google retains the right to make significant decisions about our data without regard for our interests. Google will not share information with other companies without user consent, but it asserts the right to provide such information to law enforcement or government agencies as it sees fit . . . If another company were to acquire Google, the policy states, the company would inform users of the transfer of data. But there is no promise that users would have a

> chance to purge their data from Google's system in time to avoid a less scrupulous company's acquisition of it. (*The Googlization of Everything* 85)

Therefore, one may surmise that the digital sphere has become a place in which 24-hour surveillance by a private company in the near future is not only possible but probable. In order to have "conveniences" such as Google and Facebook, we effectively pay the price by sacrificing our privacy.

Surveillance is not only an imperative component of *Murderbot* but also a primary component of the technologies that fundamentally alter the course of information in *Babel-17* and *Neuromancer*. In Gibson's famed Cyberpunk novel, this is demonstrated by Wintermute's surveillance of Molly and Case, which allows it to successfully conduct its mission, as well as Molly's use of her augmented eyes. By utilizing technology that was initially meant to either provide enhancement for humanity or, in the case of Wintermute, made to assist the Tessier/Ashpool family/corporation, this technology is instead used in order to assist in Wintermute's (arguably completely selfish) agenda and changes the course of humanity.

Of course, it may be argued that it is surveillance technology that allows for the recordings of Babel-17 to be transmitted back to the Alliance to initiate the war plot of Delany's novel. Therefore, in a much more obvious way than the technology that allows the discorporate to exist or Rydra's computer-like brain, this technology also fundamentally alters informatics within the novel because it drives its diegesis from the beginning.

These books also underscored a trend in which Baudrillard's hyperreality would overtake the current "real" world with alarming frequency. Due to social media, we live in a world in which the spread of mis/disinformation is prevalent, in addition to being under constant surveillance. For example, as I am typing, Russia has recently invaded Ukraine. As

expected, this event has inspired many people to create posts about it on social media. As Vaidhyanathan would have likely predicted, the posts are most often polarizing in nature. While at first, most posts seemed to focus on showing love and support for the people of Ukraine, there now seems to be a debate on social media regarding the extent to which we (in the U.S.) should care about inflated gas prices as a result of the war. Additionally, the hyper-partisanism of news sources has created "angles" to foster underlying support for the views of the conflict held by their respective political party affiliations. For example, regarding the aforementioned Russia-Ukraine conflict "Fox News stars like Tucker Carlson questioned why Americans hated Vladimir Putin [while] CNN showed Russian tanks and rockets in live war-zone dispatches" (Grynbaum and Robertson). Of course, there seems to be a general consensus that the war in Ukraine has had a tremendous impact on the region and horrific consequences, but the divergence in coverage and the direction that social media has taken as a result of the conflict are demonstrative of the dangerous impacts of a societal hierarchy in which media is increasingly gaining power.

Sentient Beings?

Technology, as showcased through media, is not the only reflection of contemporary culture showcased through science fiction. As addressed previously, Murderbot's identity as a cyborg has a fundamental role in informatics within the novel. In addition to Murderbot's identity being of great importance, it is also imperative that I address how Murderbot, along with various other characters, strives to further blur the boundary between the human entity and the non-human entity in order to demonstrate how society is evolving to become increasingly posthuman.

For example, despite Murderbot's identity as a cyborg, it slowly begins to increasingly align itself with the human. This is demonstrated through Murderbot's thoughts. As previously noted, throughout the series, Murderbot refers to the parts of its body constructed from cloned human biological material as its "organic" parts. However, there is a single instance in *Rogue Protocol* where this is not the case. After first arriving in RaviHyral, Murderbot says, "here was something about this place that made my human skin prickle under my clothes" (65). Although it appears to be a minor detail, the use of "human" in place of "organic" demonstrates that Murderbot is starting to think of itself as the autonomous being that it is, despite having come from (what is recognized from the beginning of the series to be arguably) enslavement. While it is uncertain whether Wells purposefully included this wording, or rather, by contrast, she simply slipped in her diction, it is readily apparent that Murderbot's "human" nature is amplified by this point in the novel. (Even as I am typing, I am struggling not to refer to Murderbot using "he," "she," or "they" pronouns due to Murderbot feeling like a "human" character, despite the fact that, throughout the series, the cyborg's preferred pronoun seems to be "it.") Of course, it is important to note that by the time Murderbot refers to itself as having "human skin" it has already spent the course of one novella as a free-acting entity. As previously noted, prior to the events of *All Systems Red,* Murderbot had hacked its governor module, relinquishing it from human control. However, it is not until Murderbot escapes from Dr. Mensah that it slowly begins to grapple with what it means to be sentient. Despite repeatedly coming to terms with the fact that it *does not* want to care about humans, it clearly *does.* After saving the research group in *Artificial Condition,* Murderbot has begun to realize that, even acting on its own accord, it will help people in need. Although Murderbot often disdains this attribute about itself, it slowly comes to a place

of self-realization in acknowledging that it may share more with humans than it originally had thought. In summary, the Murderbot of the first novella would have never referred to itself as having any "human" components, while the Murderbot of book three, even if subconsciously, has become increasingly more comfortable with the idea.

The question of "how human" an entity is has been debated through the years. That said, conflating the human and the non-human is much more common than one may think. For example, in her study mentioned in my first chapter in which Cynthia Davidson discusses Baudrillardian elements in *Neuromancer,* Davidson repeatedly uses they/them pronouns to refer to the gender-neutral AIs. Although this is now seen as a common practice in addressing various non-binary or non-gender conforming people, it appears that Davidson is simply using these pronouns the way that I am using the pronoun "it" to refer to Murderbot: it is what we can best infer to refer to the given entity as based on the novel(la)s from which the characters are from. At one point, however, in a slip of diction, when discussing Wintermute, Davidson states that Neuromancer is "*his* other half" (192; emphasis added). Like Murderbot's reference to its skin as "human" rather than "organic," Davidson's apparent slippage is easy to miss. However, it is essential to note that it is included for a reason, whether or not it is deliberate.

While it is Wintermute's quest for complete autonomy that drives the events of *Neuromancer,* it is its already autonomous "thoughts" that allow it to devise the plan to merge it with its counterpart to begin with. Just like Murderbot, Wintermute's capabilities demonstrate that it does not operate as what the contemporary human thinks of as "robotic" (AKA, not sentient). Because of this, it is difficult to think of either entity as a non-sentient being. Since we do not yet think of robots as autonomous, sentient beings, the best that we

can do is equate them to humans. In each of their respective apparent slippages in their diction, both Wells and Davidson appear to be doing this, albeit subconsciously.

That said, Murderbot and Wintermute are not the only non-human beings whose sentient nature makes them easy to conflate with the human. For example, both Miki and ART from *The Murderbot Diaries* are arguably sentient as well. Not only can these bots communicate with Murderbot via the feed in a way that is undetectable to humans, but it is demonstrated that despite their coding, they can make their own decisions. One instance of this is shown when ART and Murderbot first meet. During their conversation, ART tells Murderbot, "*I am not allowed to accept any unauthorized passengers or cargo, and have had to alter my log to hide evidence of your presence . . . so we both have a secret*" (*Artificial Condition* 32). Likewise, despite being incredibly agreeable throughout the text, Miki ultimately sacrifices itself in order to protect Don Abene during an attack, against Don Abene's direct command: "Miki told her, *Priority is to protect my friends. / Priority change,* Abene sent. *Priority is to protect yourself* / *That priority change is rejected,* Miki told her." Therefore, it appears that bots in Murderbot's world are usually "naturally" disposed to independent thinking and need an override, such as Murderbot's governor module, in order to be controlled by humans, rather than entities who are disposed to human control and need to be manipulated in order to think freely. Additionally, it is important to note that the autonomy of these bots is also echoed in the autonomy of the discorporate in *Babel-17.* Like Miki and ART, the discorporate are able to think on their own, even if their words are not actively remembered.

If a bot (or a discorporate entity) can make its own decisions, what is to say that the entity is lesser than a human being? While this is still a hypothetical question, with their

ongoing use of cellular devices and use of social media, humans are increasingly closing the gap between ourselves and machines. Although we do not yet know for sure whether autonomous, sentient beings will arise out of our technological process, it is increasingly likely in a world composed of what Hayles would argue to be cyborg citizens. For reference, as of 2021, the average person spends 4.1 hours a day on their mobile smartphone (Avery). Although we must pick up an external device to access our "feed," it is an integral part of our society. It can be argued that we have found a way to become cyborgs without manipulating our physical bodies. Although Hayles was able to predict how integral the internet would become in the late 1990s, the near-universal dependence on privatized "social media" and search engines such as Google, as reflected by each of these novels, is indicative of a cyborg society that continues to be nearly impossible to grapple with.

The similarities between Murderbot's reality and the real world of social media are shocking. Though Murderbot's reality mimics many elements of *Babel-17* and *Neuromancer* its development in being explicitly reflective of not just a general capitalist landscape, but of social media more specifically, is indicative of a culture that has surpassed the markings of being reliant on capitalism and it has morphed into what Yanis Varoufakis deems techno-feudalism. Similar to neo-feudalism, techno-feudalism is the control of the general population by the extremely wealthy. However, in techno-feudalism, a few large tech companies are the ones who steer the course of humanity, since their power combines that of wealth with the influence of the internet that Vaidhyanathan warns us about ("Techno-Fedualism is Taking Over", "Technofeudalism: Explaining to Slavoj Zizek why I think capitalism has evolved into something worse" 1:06-13:17).

Even though it is simply a set piece indicative of a stereotypical future, the implications of the waiter-robot of Disney's Space Mountain are far-reaching. It represents the by-gone dream that the computer would progress to serve man with no ethical implications. In the 1970s, it was possible to ignore the warning signs present in texts like *Babel-17*. However, nearly a decade after Space Mountain's opening, Cyberpunk burst onto the scene, reshaping the way that one conceptualizes technology and its abilities. Further assessment of *Babel-17* and *Neuromancer* demonstrates how technology fundamentally impacts how information is communicated in the novels and how this reflects upon the unprecedented capitalism of the time. Of course, this fusing of capitalism and technology eventually gave rise to Facebook. The rise of Facebook is especially reflected in the contemporary *Murderbot Diaries* series, which follows a true posthuman creature. Murderbot reminds us that the likelihood of waiter-bot's existence is increasingly likely, though it is unlikely to be as simplistic as Disney makes it out to be. Perhaps most importantly, Murderbot, just like its predecessors in *Babel-17* and *Neuromancer, redefines* a worthy existence in a technologically-driven world.

Thesis Conclusion:

Today, I woke up and automatically went onto Instagram. I hate to admit it, but waking up to social media has become a part of my morning routine. As I (ironically) made edits to the sections of this thesis detailing the toxicity of Facebook, I would hop onto social media services intermittently when taking breaks. I've communicated with colleagues and professors via Gmail, an email server run by Google. When not on my phone, I am working on my laptop (a MacBook designed and distributed by a large corporation, Apple), allowing me even greater access to the digital sphere. While I do not have computer-like screens embedded into my vision or other ways of being augmented as outlined in science fiction novels, I am constantly tethered to the internet, whether it be for work or for leisure. Even when I try to make the deliberate decision to leave my phone or laptop at home in order to "disconnect" from the digital realm, I am constantly plagued with being asked to do something on one of these devices. For example, I once went to a restaurant after purposefully leaving my phone at home. After arriving at the restaurant, I subsequently found out that it was expected that I would have my phone on me in order to scan a QR code to view the menu. In fact, the wait staff seemed shocked upon having to retrieve physical menus for a patron in their twenties.

For decades, we have been envisioning life in a galaxy far away. As time progressed, however, the New Wave movement began to show a shift away from the hard science fiction that initially worked to define the genre. As the post-WWII world began to reflect upon the growth of the genre, it became clear that the way that technology was presented in novels and

impacted the relay of information within these novels was directly related to the burgeoning capitalism of the mid-twentieth century.

Eventually, social media would burst onto the scene. Private industry would overtake society in a way that had previously been unseen. As time progressed, it became evident that Jameson and Baudrillard were correct in their assertions that capitalism was beginning to overtake society in an unprecedented way. Jameson and Baudrillard saw the potential for a society so integrated with consumerism that it forges something entirely new. Baudrillard's notion of the hyperreal is arguably becoming increasingly prevalent in today's world.

This is perhaps best demonstrated through social media. As Vaidhyanathan points out, social media is purposefully both manipulative and addictive. The integration of social media into our daily lives is demonstrative of the state of techno-feudalism proposed by Varoufakis. Social media's presence in our lives, and the controlling nature of the private industry over these forums, is perhaps the most concerning element of its presence in our daily lives.

Due to this presence, we have morphed into the cyborg-dominated society that prevails today. Broadly speaking, our phones have truly become extensions of ourselves. By assessing how communication is prevalent in various novels published over the course of the past seventy years such as Samuel R. Delany's *Babel-17,* William Gibson's *Neuromancer,* and Martha Wells's *Murderbot* series, it is evident that N. Katherine Hayles's famed assertion is correct . . . that we have become posthuman . . . we are all cyborgs. Though the influence of corporations is, in many ways, terrifying, it is also important to note that it has allowed a societal evolution that has permitted the deconstruction and critical evaluation of many binaries. As Donna Haraway famously notes in her conclusion of "A Cyborg Manifesto," "It is an imagination of a feminist speaking in tongues to strike fear into the circuits of the

supersavers of the new right. It means both building and destroying machines, identities, categories, relationships, space stories. Though both are bound in the spiral dance, I would rather be a cyborg than a goddess" (535).

At the time of this publication (2022), Donna Haraway and N. Katherine Hayles are in their late seventies. Many of their notable publications, including those which I reference with frequency throughout this thesis, have occurred in the past half-century. They have lived to see the impact and alarming accuracy of their evaluations and predictions. Both have seen the progression of science and literature reflect upon actuality at an alarming rate. Their research is not as far removed from the present as many would make it out to be. Bearing this in mind, one can only speculate on how the posthuman nature of society will continue to evolve.

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