



***EFFECTS OF CYBERTECHNOLOGY ON BODY AND IDENTITY IN  
SELECTED AMERICAN CYBERPUNK AND POST-CYBERPUNK FICTIONS***

**ELAHEH SOOFASTAEI**

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By

**ELAHEH SOOFASTAEI**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in  
Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

**August 2019**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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**August 2019**

**Chairman : Hardev Kaur, PhD**  
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Science fiction is a famous genre of literature by which writers try to visualise scenes of the near or far future where many technological aspects are seen in human life. Media and computer technology have played an undeniable role in illustrating different science fictional images in stories. From the late twentieth century onwards, human life and culture have been on the periphery of the cybertechnological revolution. Since then, many writers have illustrated the dream of humans living in a place without biological boundaries, time and/or place limitations: with the advent of cybertechnology, this dream is about to come true. Post/cyberpunk fiction as one of the sub-genres of science fiction, would illustrate the aspects of fictional human life through this progressing technology. In post/cyberpunk, characters' bodies usually interact with the computer and network. In this study, my textual analysis will focus on four American novels from the late twentieth to twenty-first centuries, namely *This Perfect Day* (1970) by Ira Levin, *Neuromancer* (1984) by William Gibson, *Feed* (2002) by M.T. Anderson, and *Ready Player One* (2011) by Ernest Cline. These texts will be studied from the perspectives offered by critics, such as Tim Jordan, Katherine Hayles, Jean Baudrillard, Dani Cavallaro, Donna Haraway, Woodrow Barfield and Megan L. Musgrave through the concepts of cyberspace and cyborg under the umbrella term of cyberculture. This study aims to examine various factors of body formation, including jack-in, simulation, uniformity and consumerism in the selected novels; it also aims to investigate the consequences of matrix body and materialized avatar body through the concept of cyberspace, and hacked body and consumer body through the concept of cyborg. All the objectives will be examined within the concepts of cyberspace and cyborg in the selected post/cyberpunk novels. More specifically, the protagonists - Case and Molly in *Neuromancer* become matrix forms through jack-in with an immersive identity, and Wade and Art3mis in *Ready Player One* turn into materialized avatar bodies through simulation with an on/off identity. In addition, Chip and Lilac in *This Perfect Day* become hacked bodies through uniformity with a double identity, and Violet and Titus in *Feed* turn into consumer cyborgs through consumerism with a mindless identity. This

study contributes to the general decaying of humanity in the characters of the stories through new forms of body and different identities which are made by cybertechnology. The analysis of the selected novels in this study have some findings which help future literary studies to have a better understanding about the effects of cybertechnology on human body, life, and society. Such literary researches can be helpful for humans' real life in not-too-distant future. In the end, I look at the consequences of effects of cybertechnology on body and identity.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

## **KESAN SIBERTEKNOLOGI KE ATAS BADAN DAN IDENTITI DALAM FIKSYEN PASCASIBERPUNK DAN SIBERPUNK AMERIKA TERPILIH**

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Fiksyen Sains merupakan sebuah genre kesusasteraan terkenal yang mana pengarang cuba menggambarkan babak jangka hadapan dan jangka jauh di mana banyak aspek teknologikal dapat dilihat dalam kehidupan manusia. Teknologi media dan komputer telah memainkan peranan yang tidak dapat dinafikan lagi dalam mengilustrasikan imej fiksional Sains yang berbeza dalam penceritaan. Dari lewat abad kedua puluh dan seterusnya, kehidupan dan budaya manusia telah wujud di atas periferi revolusi siberteknologikal. Selepas itu, ramai pengarang telah mengilustrasikan impian manusia hidup dalam suatu tempat tanpa sempadan biologikal, masa dan/atau limitasi tempat: dengan kemunculan siberteknologikal, impian tersebut dijangka menjadi kenyataan. Fiksyen pasca/siberpunk sebagai sebuah subgenre fiksyen Sains, berupaya mengilustrasikan aspek fiksional kehidupan manusia melalui teknologi yang berkembang maju ini. Dalam pasca/siberpunk, badan perwatakan biasanya berinteraksi dengan komputer dan rangkaian. Dalam kajian ini, analisis tekstual akan memfokuskan empat novel Amerika dari lewat abad kedua puluh sehingga abad kedua puluh satu, iaitu *This Perfect Day* (1970) oleh Ira Levin, *Neuromancer* (1984) oleh William Gibson, *Feed* (2002) oleh M.T. Anderson, dan *Ready Player One* (2011) oleh Ernest Cline. Teks tersebut akan dikaji dari perspektif yang ditawarkan oleh ahli kritik, seperti Tim Jordan, Katherine Hayles, Jean Baudrillard, Dani Cavallaro, Donna Haraway, Woodrow Barfield dan Megan L. Musgrave melalui konsep ruang siber dan serangan maklumat di bawah payung istilah budaya siber. Kajian ini bertujuan untuk meneliti pelbagai faktor pembentukan badan, termasuk pemasangan, simulasi, uniformiti dan konsumerisme dalam novel terpilih; ia juga bertujuan untuk menyelidiki akibat badan matriks dan badan avatar yang menjadi kenyataan melalui konsep ruang siber, dan badan godam dan badan konsumer melalui konsep serangan maklumat. Semua objektif tersebut akan diteliti dalam lingkungan konsep ruang siber dan serangan maklumat dalam novel pasca/siberpunk terpilih. Lebih khusus lagi, protagonis - Case and Molly dalam *Neuromancer* menjadi bentuk matriks melalui pemasangan dengan identiti imersif, dan Wade dan Art3mis dalam *Ready Player One* bertukar menjadi badan avatar melalui simulasi dengan identiti wujud/tak wujud. Tambahan pula, Chip dan

Lilac dalam *This Perfect Day* menjadi badan tergodam melalui uniformiti dengan dwiidentiti, dan Violet dan Titus dalam *Feed* bertukar menjadi serangan maklumat konsumer melalui konsumerisme dengan identiti tanpa fikiran. Kajian ini menyumbang kepada kemerosotan kemanusiaan dalam karakter cerita melalui bentuk badan yang baharu dan identiti yang berbeza yang dicipta oleh siber teknologi. Analisis novel terpilih dalam kajian ini mempunyai beberapa dapatan yang dapat membantu kajian literari masa hadapan bagi memperoleh lebih pemahaman mengenai kesan siber teknologi ke atas badan manusia, kehidupan, dan masyarakat. Penyelidikan literari tersebut dapat membantu kehidupan sebenar manusia dalam masa terdekat. Kesimpulannya, kajian ini meneliti akibat kesan siber teknologi ke atas badan dan identiti.



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# CHAPTER 1

## INTRODUCTION

*[W]e are already immersed in digital technology, such as cellphones and laptop computers. Devices such as Google Glass Promise to bring the internet into more direct contact with our bodies, and it is probably a matter of less than fifty years before sophisticated internet connections are wired directly into our brains.*

– Schneider 227

### 1.1 Background of the Study

Today, we live in a computerised world where technology is progressing at an alarming rate. As such, technology continues to play a very important role, and its impact on mankind is undeniable. If we look back upon the years before the invention of the computer, human life was simplistic and pleasant. But with the advent of computers, and especially after the arrival of the Internet, we are confronted with an unavoidable reality of technological control in our lives. This new technology touches all aspects of everybody's life around the world. Needless to say, it is a needed tool as like as the telephone or the letter, though, it might be considered as a terrifying technology.

Cybertechnology has had progression of the advancement since a few decades back have changed our lives and also connect us to one another as never before, to the extent that our primary desire for creating a global village gets closer to reality. With state-of-the-art cybertechnology, we are able to create a virtual identity in the unlimited Internet universe which enables us to communicate with the world and do whatever we need to do. Before long, we will have a non-physical body in virtual space which is transported in a second; moreover, our everyday chores in such space are done without the physical presentation, such as online shopping and virtual education. The imagination of the Internet or virtual world could be a double edged sword, yet harbours this hope that the Internet and online life will bring a cyberpunk world with different and new forms of body, such as matrix, avatar, cyborg, and so on. Advances in cybertechnology have brought different inventions in our lives to the extent that “we rely heavily on computers, laptops, tablets, smartphones, the internet, Wi-Fi, LTE, and GPS” (Calvin 128). The merging of cybertechnology with our life are being portrayed in different cyberpunk and post-cyberpunk fictions for a few decades through machines, robots, computers, and so on. Cybertechnology has obviously seen as a significant factor in human life in science

fiction literature. Different science fiction writers, such as Isaac Asimov, Philip K. Dick, John Scalzi, Charles Stross, Neal Stephenson among others, have portrayed the amalgamation of cybertechnology into human life well.

Many literary writers portray possible consequences of advanced computer technology and online life on the human body. In this way, literature encompasses various genres in which science fiction is one of the most popular literary genres. Science fiction is hard to define due to its variety of themes, approaches, and techniques unveiled by the genre. This genre called 'sci-fi' or 'SF', is a multidisciplinary genre of fiction that generally concentrates on imaginative content, such as the future or alternate setting<sup>1</sup> which usually takes a historical story setting, (fictional or non-fictional) and changes it in some way (by adding more Super Natural or Science Fiction elements) which set in a different time/place, scientific and technological advances in human life which portray a world vastly different from our present. Science fiction, in my view, is a literary genre in which everything is possible. According to Lev Grossman, "science fiction has become a crucial tool by which an age shaped by and obsessed with technology can understand itself" (Henthorne 4). Thus, science fiction has an important role in the presentation of different possibilities and influences of advanced computer technology and the Internet on mankind and human life. In addition, Science fiction owns the power to make unknown things clear for us and our societies by portraying in wonderful literary structures. The nature of this sort of fiction is systematically discussed by science fiction writers through telling us its rules and regulations.

Recent science fiction displays a fascination with the human body as shaped by scientific, medical and information technologies and interventions. The scientific philosophy transhumanism posits that we are in an early phase of the technological evolution of the human body, and features in science fiction through artificial realities, limbs, cyborgs and amborgs (ambiguous human hybrids). (Ellis 67)

Furthermore, science fiction is the literature of ideas and philosophy with many elements which include speculation of human's future, and technology's influences on human life, psychology, culture, and society. In this regard, a new way of looking at human beings is seen in this study where it is to be seen primarily as information-processing entities that are essentially similar to intelligent machines. In the rapidly emerging field of artificial aspects of life, computer programs are designed as 'creatures' which are not considered models of life but something similar to it. If we see the universe as a place which is under control of information, it makes sense that these 'creatures' are "life forms because they have the form of life, that is, an informational code. As a result, the theoretical bases used to categorize all life undergo a significant shift" (Hayles 11).

There are some science fiction narratives which were written centuries ago such as *Voyage to the Moon* (1661) by the French novelist Cyrano de Bergerac (1619-1655) with the theme of metaphysics, and *Frankenstein* (1818) by the British writer Mary Shelley (1797-1851) in which enhancement of human powers happen through science and

dehumanization via technology, both of which predecessors of modern science fiction. These narratives are known as classic fictions which deal with metaphysical tasks, supernatural explorations, and dream-like visions. Therefore, the origin of science fiction traces back to much earlier periods, but basically, science fiction is considered a twentieth-century phenomenon in some of the most popular interpretations and rooted in a mainly western technological growth.

[Science fiction] is a tool to *help* you think about the present— a present that is always changing, a present in which change itself assures there is always a range of options for actions, actions presupposing different commitments, different beliefs, different efforts [ . . . ] It presents alternative possible images of futures, and presents them in a way that allows you to question them as you read along in an interesting, moving, and exciting story (Delany “The Necessity of Tomorrows” 34)

Since science fiction addresses societies are non-existent, perhaps it is not unexpected to describe a virtual land to a tangible place where characters have a different form of life. In this regard Csicsery-Ronay believes that;

SF is increasingly employed to construct virtual futures disseminated through the media scape. These fictions can easily be made to seem more coherent and creational than contemporary social existence, whose representation is concurrently dispersed and de-realized. The transfer of assent to a virtual future that *makes more sense* than present reality requires broad cooperation of Technoscience and mass media. Together these inspire a sense of the technical possibility and plausible habitability of science-fictional futures that creates the feeling of historical fatedness: concrete inevitability. We have called this sf’s empirical prophecy; extended to the world, Baudrillard calls it hyperreality. (137)

Science fiction owns the power to portray varied forms of fiction to make familiar, things which are unknown to us and our societies. The nature of the fiction is systematically discussed by science fiction writers through its own rules and regulations. Considering the impact of technology on everyday human lives portrayed in this genre, the stories have been considered as important harbingers of the new wave in science fiction where science meets technology. This is a prelude to the prominent authors in this area, such as Brian Aldiss, J.G Ballard, William Gibson, Neil Stephenson and Rudy Rucker among others. They focus on different dystopian (negative and unpleasant) issues such as ecological depletion, urban congestion and the relationship between technology and drug addiction, sexuality, crime, etc. Consequently, these issues are considered as an introduction to one of the most recent sub-genres of science fiction called 'cyberpunk' which has had a great influence on science fiction.

The science fiction genre most involved in imagining cyberspace is called cyberpunk ... Like all intellectual movements cyberpunk is both a set of ideas and styles and a particular group of people writing and thinking at a particular time. As a movement of individuals, cyberpunk emerged in the early 1980s and was quite possibly over by the late 1980s. (Jordan 25)

Cyberpunk emerged through new technologies such as computer, media, IT, and more importantly, the Internet in the late twentieth century. However, in fact, it primarily appeared in the 1940s when the earliest computer was made. Cyberpunk was coined by Bruce Bethke for his short story called "*Cyberpunk*" and published in *Amazing Science Fiction Stories* in November 1983. One year later in *the Washington Post*, the term was employed by Gardner Dozois to describe the works of cyberpunk writers such as Bruce Sterling, Pat Cadigan, and William Gibson. In brief, "[w]ithin the broader science fiction genre, cyberpunk as a subgenre emerging during the 1980s takes up the critiques of the social model while introducing a further critique of the information age itself" (Ellis 78). More specifically, Hubble and Mousoutzanis state,

Cyberpunk fictions often include representations of transglobal cultures, massive interlinked data networks, virtual realities and marginal characters who exist on the outskirts of established society and culture. Flows of information hold a privileged position in the genre, and they often occur simultaneously as environments (in the case of virtual cyberspaces into which a user can project her disembodied consciousness) and as characters (in the form of artificial intelligences). (Hubble & Mousoutzanis 126)

As a whole, cyberpunk portrays the future world where computers and super-computers are everywhere in human society and there is no social order through manipulation, control, surveillance, and so on. Accordingly, Dani Cavallaro maintains that, "cyberpunk is a bleak vision of a future in which people are subjected to ruthless communications networks, are totally disconnected from one another and long to leave the body behind" (xv). Moreover, cyberpunk is described differently by some scholars such as Douglas Kellner who argues that, "cyberpunk shows an entire universe in a state of advanced disarray and moving rapidly toward a frightening future where everything is possible and survival becomes increasingly challenging" (302). On the other hand, Michael Heim defines cyberpunk as "a postmodern literary-cultural style that projects a computerized future" and Lawrence Person observes it as an omnipresent datasphere of computerized information (Blackford 211). In total, "Cyberpunk and cyberpunk-influenced narratives showed technology interfacing directly with the brain or otherwise penetrating the body" (Blackford 111). In another description, McCaffery states that,



[T]he cyberpunks were the first generation of artists for whom the technologies of satellite dishes, video and audio players and recorders, computers and video games (both of particular importance), digital watches, and MTV were not exoticisms, but part of a daily 'reality matrix'. (qtd. in Cavallaro 18)

To Kellner, 'cyber' is connected to 'cyborg' and "describing new syntheses of humans and machines and generally signifies cutting-edge high-tech artifacts and experience" (301-2). This also refers to the "science of cybernetics" (Cavallaro 12)<sup>2</sup>. Consequently, people themselves become part of the machine. This is the 'cyber' aspect of cyberpunk. The 'punk'<sup>3</sup> originates from "the punk rock movement, signifying the edge and attitude of tough urban life, sex, drugs, violence, and anti-authoritarian rebellion in lifestyle, pop culture and fashion" (Kellner 301). Moreover, Cavallaro argues in his book, *Cyberpunk and cyberculture*, the 'punk' element, alludes to an opinion based on urban street culture. The characters in cyberpunk fictions are marginalized individuals such as misfits, outsiders and psychopaths struggling for survival. Therefore, the marriage of high-tech with street cultures takes place through the combination of 'cyber' and 'punk'. Consequently, these two terms are components of cyberpunk which constantly act on each other in order to represent the relationship between the world of high technology and the world of low life. In a similar way, Blackford states that,

Cyberpunk writers depicted direct interfacing between human minds and advanced computers, events in computer-constructed virtual realities, and the activities of powerful artificial intelligences. All of this provided the "cyber" aspect of their writing, with blurring lines between reality and virtuality, and between human and machine. The "punk" aspect involved portrayals of street life, youthful rebellion, tough-guy attitudes and dress codes, and certain specific images, such as chrome, reflective glass, and architectural ruins. (Blackford 36)

Furthermore, in cyberpunk, there is a system which dominates many aspects of human life which are run by corporations. These systems are increasingly influenced by 'information technology' i.e. computer, the mass media and so on. Consequently, cyberpunk, as a subcultural phenomenon embraces the new technology such as brain implants, clones or genetically engineered organs, prosthetic limbs, and culture and is ready to rebel against established structures and authorities in order to gain new experiences and put new technologies to work.

Fictional worlds of cyberpunk are described by specific features such as darkness, violence, chaos, paranoia, and anarchy. Cyberpunk stories are mostly narrated by characters who are connected to the cybernetic equipment or wear mirrored sunglasses, black leather, implants, and computer chips or receive injection and generally refer to the interaction between real humans and Artificial Intelligences (AI), androids, cyborgs, and computer-simulated bodies. In addition, the distinction between biologic/non-biologic and artificial/real is very hard to determine in cyberpunk fictions. Besides,

cyberpunk focuses on the values of enlightenment, the new and the old, the rational and the irrational, the mind and the body, by integrating the highest structure of technology with the anarchy of street subcultures. As well, cyberpunk terminates conventional ideas of corporeality through the concept of cyberspace. However, the physical dimension is often marginalized by digital technology, both the biological and non-biological body present clearly material qualities through their vulnerabilities (Cavallaro 67). It also refers to a social decay due to an unavoidable switch towards the complete use and/or control of computers, to such an extent that the difference between humans and computers becomes indistinguishable and humanity is endangered.

Many cyberpunk fictions are mostly characterized by an emphasis on computer, information technology, and everything related to the computer and the Internet. In this way, the diffusion of information and communication into social and cultural structures in the net, are considered the new paradigm of the information age. It is in sync with the significant and rapid cybertechnological changes where cyberpunk writers change their outlook when writing their stories. Subsequently, it brings about new writing with different settings and characters as can be observed in cyberpunk fictions. This new writing and the way in which writers look at the world compel us to think about the term 'post-cyberpunk'.

The term post-cyberpunk derives from cyberpunk and which contains less dystopian features; its fictional aspects focus more on an omnipresent datasphere of computerized information and augmentation of the human body. The post-cyberpunk era entered into science fiction in the late twentieth century with *Island in the Net* (1988) by Bruce Sterling, and it flourished significantly in the twenty-first century. Like cyberpunk, post-cyberpunk uses the world of high technology, but it illustrates characters with more advanced technologies and slightly different settings, with a basically different outlook for the future. For instance, characters in post-cyberpunk, far from being alienated and marginalized in cyberpunk, are members of this society (i.e. they have jobs, families and so on) and mostly look for ways to thrive, or even reinforce their existence. As stated by Lawrence Person, characters in post-cyberpunk are "anchored in their society rather than adrift in it" (1998). Furthermore, they are not often pessimistic about technology, although, rapid technological changes and ubiquitous computerized infrastructure have a significant influence in their lives.

The role of technology in both cyberpunk and post-cyberpunk is undeniable. Indeed, previous generations of science fiction writers could only daydream or speculate about the birth and growth of technology while cyberpunk and post-cyberpunk writers have observed it, and they try to expand their dreams. Bruce Sterling for instance, writes in an introduction to his seminal anthology *Mirrorshades* (1986) that technology in cyberpunk writing is not "outside us, but next to us. Under our skin; often, inside our minds" (1). This definition of technology reveals the fusion of man and machine in cyberpunk fictions, and reflects a new perspective on technology. Technology in cyberpunk and post-cyberpunk genres is known as cybertechnology or computer technology which involves the Internet.

Technology modifies not only the human body but also all mental activities, and shapes a new form of embodiment in human. Bodies in cyberpunk fiction are fluid and permeable. Their completeness is constantly challenged and violated by pollution, disease, cruelty and monstrosity. These issues are highlighted by cyberculture through emphasis on the relationship between technology and mythology. They both share their attitudes related to the maximizing and minimizing body through different figures (Cavallaro 90). This study looks at the different body forms that the characters undergo as a result of manipulation by cybertechnology through drugs, online games, injection, and implants in the selected cyberpunk and post-cyberpunk fictions. In these stories, the body is exploited mentally and physically by corporations and hackers.

The nineties were undoubtedly the cyber hype years in which cybertechnology was continually advertised and discussed in newspapers, television, and other media. “One of the main structures of signification that cybertechnology insistently challenges is the one that pivots on the relationship between *original* and *copy* in cyberspace area” (Cavallaro 309). Thus, the difference between original and copy in the world of cybertechnology could be significant to the extent that this study pays a precise look at it. Above mentioned scientists, philosophers, and writers have already paved the way for the development of cyberculture or digital culture in fictions. In this sense, Musgrave states that;

[W]ith the rise of digital culture and its emphasis on image, Jameson recognizes “the emergence of a new kind of flatness or depthlessness, a new kind of superficiality in the most literal sense, perhaps the supreme formal feature of all the postmodernisms” (1991: 8–9). Drawing from Baudrillard’s *Simulacra and Simulation*, Jameson identifies this as an example of the culture of simulacrum (1991: 18), or a culture that has shifted from producing *things* to producing *images of things*. (xx)

Consequently, the rise of digital culture shows that in contemporary western cultures, people are surrounded by an increasingly wide range of computerized devices which connect them into the virtual world. This culture has not only significantly influenced on communication but also on body and identity. And as one of the literature's features that have always been trying to touch fresh and novel ideas in each area, this subject consequently entered to literature. Cyberculture or computer/Internet culture is a culture that has emerged from the use of computer networks. So, in this culture there is a debate regarding online and off-line life where Bell maintains that; “[t]he debate is controversial in that it highlights the tensions between different standpoints on the promises and limitations of cyberculture. It is also controversial because it has at its heart an argument about the relationship between online life and off-line ‘real life’ (RL)” (92). This study uses cyberculture as an umbrella term. It started, indeed, from the 1970s where the primitive ideas for the computer and Internet emerged. The interaction between human and digital technologies happens in ‘cyberculture’.

It is also portrays a culture which is affected by cybertechnology and consequently computers and the Internet are technologies that have intervened with and affected people's lives. In this case, Cavallaro maintains that cyberculture is "an environment saturated by electronic technology and its fictional representation in cyberpunk compel(s) us to reassess drastically ideas of time, reality, materiality, community and space" (xi). In addition, cyberculture makes vast amounts of information readily available by means of computer networks and related virtual technologies.

Embedded in cyberculture is a sense of instability; as long as the abstract formulae of cybernetics are translated into commodities which, in the logic of capitalism, are required to undergo constant (if minimal) transformations, there can be no real permanence. At the same time, cybernetics is rendered unstable by its openness to diverse readings: as a philosophy based on precise calculations about the nature of organisms and mechanical constructs; as an esoteric form of knowledge comparable to black magic; as the technological underpinning of corporational economies and their value systems. (Cavallaro 19)

For this study, cyberculture is considered as a social phenomenon which is related to computers and the Internet, and other forms of network communication in the selected novels. Computer-based communities are examples of cyberculture as depicted in the novels. Cyberculture in this study also points to the culture of virtual and non-virtual environments, and it encompasses a series of cyber-topics or concepts, such as cyberspace and cyborg. Cyberspace has been conceived as a net, matrix, metaverse and universally, as a place made out of information. According to Jordan, "the place of cyberspace appears as a non-place because it is where physically separated individuals meet and it is made tangible in cyberpunk fiction." (26). This study considers it a virtual world where humans escape from their everyday reality, a place without law and physical limitation. According to Jordan, "two ideas in particular were prefigured in cyberpunk science fiction that has had a lasting effect on cyberspace: the organization of information as virtual space and the nature of virtual bodies" (25). Cyberspace as the first concept of this study is observed as an imaginal and fluid space behind the computer or VR headsets: here, the actions, bodies, feelings, behaviors and everything else of the left-behind being emerge in different forms. In this respect, Daniel Dinello states that cyberspace is a place "imagined by Gibson as an alternative virtual world" (147). For example, in two of my selected novels *Neuromancer* (1984) by William Gibson (b.1948) and *Ready Player One* (2011) by Ernest Cline (b.1972), characters that immerse in the virtual environment can indeed move and experience the realistic feeling of living in that world. These two novels are selected to be examined under the concept of cyberspace.

As a result, in this study and under the concept of cyberspace, I demonstrate the relationship between cybertechnology and the embodiment of characters, since postmodern culture blurs the distinction between reality and the imaginary world in which reality is replaced by images and data. To Dinello, "Cyberspace offers a perfect tool in this effort— not only do violent acts of revenge and terrorism get planned and

promoted there, but its users leave traces of information that can be collected, processed, cross-referenced, and stored. Cyberspace equals Database” (166). More simply, as soon as cables are plugged and wires are connected to computers and phones, the universe of cyberspace is created which is a virtual universe where there is no physical reality, but also virtual identity and embodied life. According to Katherine Hayles, “fracture lines appear that demystify the program(s) and make it possible to envision other futures, futures in which human beings feel at home in the universe because they are embodied creatures living in an embodied world” (244). This embodied world of data is the same time when a person is sitting at computer and experiences data-based things without time and space.

In total, cyberspace is not merely a territory of the mind. We may possibly not go there physically but we undoubtedly have bodily desires there. In cyberspace everything can easily transform such as sex and body. On the other hand, virtual space is in contradiction with non-physical space. And virtual societies refer to the reinvention of all that is acquainted. Virtual societies have become more and more important because they capture the central functions of real or existing societies and creating their own. In order to understand the meaning of cyberspace many parallels between real and virtual societies have been tendered. This matter makes a two-side society: online and offline. The power between online and offline societies refer to the social aspects in cyberspace. The major fact of cyberspace is that “it is made possible by forms of technology that are constructed according to social values, but are used and experienced by those online as inert things” (Jordan 6). Power here refers to the ability to act within networks of technology, and this ability is determined by expertise. In my selected fictions cyberspace deals with both online and offline life. In the stories, the life of offline users is identified and influenced by online elites. In cyberspace, a specific form of information management and control is shaped, “called the informational space of flows” (Jordan 6). There is a social cyberpower which is like a battle field for online people, who change the demands of offline people.

Cyborg as another concept of this study is defined as the fusion of the machine (cybernetics) and the body, and the intertwining of biological organisms with non-biological ones. More precisely, the merging of cybernetics and punk seems “an unholy marriage” due to the combination of control and chaos, though this merging does not completely oppose each other. This word cybernetics for the first time was coined by the mathematician Norbert Wiener (1894-1964) in his book, *Cybernetics, or Control and Communication in the Animal and Machine*. Cybernetics can be shown as “data” and “tangible products” - like prosthetic limbs and implants - for the consumption of society. These products are not valued as much for their importance as “desirable adjuncts to the human body and even as defining markers of identity” (Cavallaro 19). In this study, cyborg is not a robot or an android, but also the characters connected to the computer world by injection or implant. As for the difference between robots and android, Dinello thinks that robots are generally mechanical and electronic pieces, typically similar to human or animal while androids can be robots that similar to humans, or genetically engineered. In this case, androids are not a combination of organic and inorganic, while cyborg is cybernetic organism which combines the biological and mechanical (67). So, cyborg in this study is a human-machine form through implants and injections as

mentioned in the last two novels. Donna Haraway warns that "cyborgs can become parts of the 'informatics of domination'" (qtd. in Bell 81). Based on Haraway, in the world of informatics, science of processing data, cyborg has a direct relationship with computer science and knowledge. In the following selected novels, *Feed* (2002) by M.T. Anderson and *This Perfect Day* (1970) by Ira Levin, characters become cyborgs through bio-implants and injections. More specifically, Dinello states,

We are immersed in a cyborg society that includes not only the Terminator and Robocop but anyone with an electronic heart pacemaker or an artificial joint. Implanted corneal lenses, synthetic skin, and other technological innovations blur the definition of a natural body. (115)

In general, science fiction novels dramatize the formation of characters in the world of cyberspace and cyborg. This study examines how computer technology is incorporated into the human body and how it impacts the identity and formation of characters' bodies. These bodies will be examined through four selected fictions, namely Gibson's *Neuromancer* (1984), Cline's *Ready Player One* (2011), Levin's *This Perfect Day* (1970), and Anderson's *Feed* (2002) respectively. My thesis applies the views of Hayles, Jordan, Baudrillard, Barfield, Haraway, Musgrave, and Cavallaro among others. There are some important terms used in this study. Jack-in is connection of the characters to the virtual world of cyberspace. Simulation is the virtual situation where different events and conditions artificially created and weakness and misery of characters can be hidden. Uniformity is the status of unifying characters in which they are totally uniformed. Consumerism is the condition of living in a consumer society for the characters. Matrix body is a body which appears in the virtual world of the internet (cyberspace) like an image/reflection in the mirror. Materialized avatar body is also a virtual body like matrix which can change to different forms in the world of the internet (cyberspace). Hacked body is the body of characters which is already hacked by different people/corporations. Finally, consumer body is the body of characters which lives under the shadow of consumerism in a society. All these above-mentioned terms are borrowed from critics and previous studies which will be explained in detail later in Chapter Three.

## 1.2 Problem Statement

Twentieth century history experienced the outbreak of two destructive wars. After the Second World War, the world stepped into a much different era through the creation of computers. Since then, and in the early part of the twenty first century, human life has been influenced by rapid cutting-edge technological advances, especially in supercomputers and the Internet. Needless to say, the computer, and also the Internet have factored in many achievements in this century, and could become a debatable reason for some dystopian consequences in the near future such as virtual control and surveillance, cybernetic manipulation and so on. Science fiction writers mostly try to visualize such consequences and their impacts on human life, body and society. In doing so, the relationship between dominant technology, cyber-crime, drugs, sexuality and

their impact on the human mind and body raised several concerns among quite a numbers of cyberpunk writers who then decided to write about such issues in their stories. These stories reflect a human being's anxieties about the negative impacts of computer technology on future human life, body, and culture. Many cyberpunk and post-cyberpunk works, have opened a new window to more violence, chaos, and new crimes, but only a few critical studies examine the significant issue of different forms of human body in cyberpunk, which is overlooked.

In literary research on the cyberspace concept, Brenda Laurel views it as a place where people grow their interactivities. In this sense, she offers "telepresence" as a medium of interaction through digital technology (53). In line with Laurel's views, Winfried Noth, perceives cyberspace as a malleable or plastic structure that is an interactive piece of art which users activate (203). In contrast, Hayles describes cyberspace as a place for the displacement of the physical human body –this issue will be perused in this study. Scott Bukatman, however, points out this digital space as an imperceptible space or an intangible space where individuals experience an ultimate screen while communication would happen somewhere beyond everyone's ultimate screen (117), while Jordan considers cyberspace as a tangible space from another perspective, Victoria Pitts asserts that cyberspace is a place where everyone can change his/her sexuality and appear in new form. She maintains that cyberspace is an environment of denaturalizing gender with new forms of embodiment (158). This is a gap of knowledge where the new forms of body in characters in the selected novels will be addressed.

Cyberspace is revealed through Howard Besser and Iain Boal's views which describe data as a "ten-lane highway" (63) which connects our homes to the Internet and which invades our bodies and minds. Hayles postulates cyberspace as the embodiment of data which is yet to be explored. However, the data are also shown as "precarious and ghostly"; in fact, they do not create "a solid body of knowledge", to the extent that they would disappear in sequence at the same pace as they are consumed. Cyberspace is categorized under cyberculture which "makes vast amounts of information readily available by means of computer networks and related virtual technologies, thus conveying a sense of reality and presence". Consequently, a piece of information that might be available any minute may become disappeared any minute later. (Cavallaro 198)

Moving on structural pattern and being away from presence is seen in contemporary fictions as dematerialization. It impacts on human and body in two levels at the same time, "as a change in the body (the material substrate) and as a change in the message (the codes of representation)" (Hayles 29). Likewise, Gabriella Giannachi asserts that liquid architecture in cyberspace is "architecture without doors and hallways" (99). This study will corroborate Jordan's view about the materiality of space and also Hayles' postulation about the physical entity of cyberspace through matrix and avatar which have been neglected thus far.

From another perspective, Jordan states that “[s]ome fear cyberspace will make possible the total surveillance of individuals and create the ultimate totalitarian society” (Jordan 7). But critics such as Dinello have optimistic views about cyberspace as a utopian digital land where there is no restriction on the body, and individuals are free of all forms of communication and community (Dinello 67). As a result, this study applies the negative view held by Jordan in its analysis of the selected novels: the issue of unstable identity not has been tackled in any of the studies done thus far. According to previous studies on the cyborg concept, Andy Clark holds a positive and liberating view in which the abilities, capacities, and faculties of bodies are improved through the combination of flesh and wires. Stelarc believes that the human body is obsolete due to restrictions of the biological body and it should become “the hyper-efficient cyborg machine worker” (Zylinska 158). Oppositely, this study wishes to discuss the negative views on the cyborg body through some postulations by Woodrow Barfield who sees the cyborg as a hackable form.

From a similar viewpoint, David Kreps observes the cyborg as a warning and threat to culture and society, and Vernor Vinge believes that cyborg is a metaphor for pollution as a result of the fusion of the organic and artificial. Zylinska refers to the abjection which may result through prosthetic attachment. This integration of human body with technology has become a criterion for new meaning of human beings (36-37). Although, these views are close to what this study aims to shed light on, they do not cover the specification of threat which may arise from the cyborg technology. This is a gap which will be filled in detail in this study. More specifically, this study is going to examine the cyborg from the perspective of control and manipulation where the characters’ bodies become consumers dependent on technology. Therefore, in my study, the fusion of technology and the human body leads to a new form of body which spells the physical/ and mental collapse of the characters as a result of such technological dependency.

To authenticate my study I have to mention that though cyberpunk is a new science fiction subgenre, there are some scholars who have already worked on different aspects of it, such as Leonard Patrick Sanders who examines the cultural aspects of cyberpunk; Alex E. Wedemeyer who studies consciousness and the synthetic merge, as well as the differentiation of artificial and organic forms. It is to be noted that, there is a dearth of studies on effects of cybertechnology on body and identity in cyberpunk and postcyberpunk fiction, so this study attempts to fill this gap by examining the different cyber-bodies in the selected novels. Furthermore, previous research and reviews on the selected novels will be examined in the Literature Review. Thus, this study contributes to effects of cybertechnology on the bodies of humanity.



### 1.3 Conceptual Framework

#### 1.3.1 An Outline of Body Formation in Cyberculture

*By the middle of the twenty-first century, “virtual reality” will also be far more realistic and immersive than now, and as such, humans, cyborgs, artificially intelligent machines, and intelligent virtual avatars (sometimes referred to as virtual human or digital person) will spend time living in virtual reality where they will form governments; produce, buy, and sell products; and engage in many of the social activities that occur in the real world.*

– Woodrow Barfield 18

The term ‘cyberculture’ was used for the first time in 1963 by Alice Mary Hilton. She defined it as “that way of life made possible when an entire process of production is carried out by systems of machines monitored and controlled by one computer” (Baker 217). In *An Introduction to Cyberculture* (2001), Bell offers various forms of practices and meanings of everything related to the culture of computer and Internet. One of the most hotly debated topics in cyberculture is the body. According to Nemura;

[A]lthough early cyberculture describes a utopia of the near future where escape from the body is realized by technologies (as seen in Gibson’s *Neuromancer*), expressions of new experiences of bodies in our everyday life have become an important part of cyberculture nowadays. Contemporary cyberculture like some kinds of gameplay or cyborg performances contains the actualization of new experiences of bodies in our society with the spread of the electronic environment. (Nemura 2014)

The body as an important and unavoidable subject in the world of computers and supercomputers is highlighted by many critics such as Gertraud Koch and Matthew E. Gladden. But according to the critics of this study such as Hayles and Jordan, when the human body is intertwined with digital technology, it flutters between existence and non-existence, between organic and inorganic, finite and infinite, materiality and immateriality, and finally, between reality and virtuality. The body flutters “both everywhere and nowhere”. As a matter of fact, the body in social and cultural theory has turned into a multitude of bodies and explored in many ways. Such a deep focus on bodies makes it more difficult to understand because it makes some paradoxical outcome, as Williams and Bendelow (1998) argue:

As a consequence of these developments, the body is both everywhere and nowhere in social theory today. This is perhaps most graphically illustrated in recent post-structuralist thought where bodies are radically reconfigured as fluid, multiple, fragmented and dispersed. In this respect, a central paradox emerges, namely that, along with a range of other social and technological developments at the turn of the century, the recent upsurge of interest in body matters undermines still further our sense of what, precisely, the body is, and perhaps more troublingly, what it may become. (1-2)

In this study, cyber body has a kind of informational structure to the extent that the organic body links to its prosthetic extensions and which is seen in *Neuromancer*. This presents an idea of “information as a (disembodied) entity that can flow between carbon-based organic components and silicon-based electronic components to make protein and silicon operate as a single system” (Hayles 2). After that, when information loses its body, humans and computers become equal in a material way in which thinking mind looks nonessential to its essential nature. In this regard, Barbara Brook draws our attention to the body's place in social and cultural theory.

[‘T]he body’ is not the way you would immediately designate yourself, nor is it possible to come up with a picture of what ‘the body’ is, since that single term strives to encompass all the multiple ways human material is formed and arranged not only within space but also through time. (Brook 1999:1)

The present study attempts to focus on some arguments pertaining to the body and its form, through the concepts of cyberspace and cyborg in the selected novels. As mentioned earlier, cyberspace and cyborg are two key concepts of cyberculture. According to Bell, “there has been an explosion of bodies across the humanities and social sciences” (138). Cyberculture which is used as an umbrella term in this study is described by Cavallaro as follow;

Cyberculture reconfigure radically our grasp of history and time, with profound repercussions on both individual and collective memories. As we have seen, cyberculture articulates a deep sense of instability. Definitions of cyberculture itself are fundamentally unstable due to their openness to a sometimes baffling variety of interpretations. Additionally, our understanding of both cyberculture and its fictional constellations in cyberpunk is unremittingly destabilized by intimations that technology, despite its scientific matrices, is steeped in fantasy and myth. (317)

In this study, such explosion presents through different cybertechnological forms of the body. The body is equal to embodied consciousness in a virtual world and it is also equal to machine through merging or connecting with computer technology in the real world. This compels us to think about the role of the body in the context of cybertechnology. In the following section, I will give a brief overview on two concepts of cyberspace and cyborg.

### 1.3.2 Cyberspace

Cyberspace is a term which Gibson coined in 1983 when he wrote his short story, *Burning Chrome*, but it was his novel *Neuromancer* that propelled the word into popular culture. Gibson's *Neuromancer*, as one of my selected texts, describes cyberspace as "a consensual hallucination experienced daily by billions of legitimate operators" (Cavallaro 11). Cyberspace, in fact, is considered as a lived culture. It is also made from people, machines and stories. So, it, definitely, can be considered as a culture because it is merged with person's everyday life. In this regard, Paul Edward (1996) maintains;

It seems relatively straightforward to see cyberspace as cultural, in that any and every thing around us is the product of culture— look at the shape of your computer, for example, and consider why it is turned out that way. The story of how computers ended up on our desk tops, and ended up connecting us to each other, is a profoundly cultural tale. (qtd. in Bell 2)

Thus, it is an imaginary perception which is experienced by anyone who connects to the computer network or virtual universe. Sometimes, the distinction between internal and external world of cyberspace and virtual reality by users become blur. In this regard, Featherstone believes that, "[t]he new technological environments of virtual reality and cyberspace confuse the boundaries between internal and external worlds, creating the illusion that internal and external realities are one and the same (144). Cyberspace also refers to a place where there is input of data into a body. Hayles argues that, "Cyberspace is created by transforming a data matrix into a landscape in which narratives can happen" (1996, 269). Whereas Michael Benedikt, in *The Cybercultures Reader* defines cyberspace as,

A new universe, a parallel universe created and sustained by the world's computers and communications lines. A world in which the global traffic of knowledge, secrets, measurements, indicators, entertainments, and alter-human agency takes on form: sights, sounds, presences never seen on the surface of the earth blossoming in a vast electronic light. (qtd. in Bell 7)

Besides, cyberspace clearly shows the essential connection between the human and the computer. For example, Hayles in *How We Become Posthuman* argues that there is "a level playing field on which humans and computers can meet on equal terms" (38). Cyberspace also can be defined as a global network of computers that simplify – forms of the connection and interaction between remote actors and gamers. It is described as an imaginary space where characters create new selves and also new worlds. Jordan states that, "Some fear cyberspace will make possible the total surveillance of individuals and create the ultimate totalitarian society" (Jordan 7).

In this study, cyberspace is applied as a fictional space in which characters make their new selves, such as matrix and avatar, within the world of computers. As such, information/data in cyberspace is incorporated into the human body through the computer network. In this study, data is equivalent to the body as a computerized simulation in the virtual world. In other words, data becomes embodied through which new forms/selves materialize; these forms then become immersed in a virtual environment, and turn the characters' bodies into a matrix body and/or avatar as will be examined in *Neuromancer* and *Ready Player One* respectively. In the first chapter analysis, this study will analyze *Neuromancer* and *Ready Player One* through the concept of cyberspace, as a malleable or flexible space where the characters gain new forms in the virtual domain and get a matrix or an avatar body. Bodies in virtual reality are fluid and changeable in cyberspace: Bell believes that in a virtual environment, the body appears in different shapes and forms, such as informative and communicative.

Hayles considers information to be more important than materiality in cyberspace. In this regard, Edward Fredkin and Stephen Wolfram as the two prominent theorists claim that "reality is program run on a cosmic computer" (qtd. in Hayles 11). In this view, a universal informational code provides the structure of matter, energy, and space-time or in other words, everything that exists. Hayles argues that we can keep the body aside because we are basically information. Central to this argument illuminates a conceptualization that sees information and materiality as separate entities. This separation welcomes to the construction of hierarchy in which information is given the superior position and materiality runs a distant second. Accordingly, Cole Perriman believes that information plays a more significant role than materiality where the body is considered obsolete and useless. He maintains that, "in the not-too-distant future, body will be left and replaced with information [and] one of these days the human race is gonna vacate the physical-temporal world of 'meat' existence altogether. Then, we'll become pure information and live in these things – call it virtual reality, cyberspace or whatever" (qtd. in Hayles 257). This shows how information loses its body, or in other words, how "information as an entity separates from the material forms in which it is thought to be embedded" (Hayles 2). It means that the physical body will be turned into materialized data or embodied consciousness in a virtual environment where meat is not available anymore.

Hayles ponders consciousness as the seat of human identity. She also thinks of the body as the original prosthesis which is manipulatable in order to extend or replace the body with other prostheses. Last but not least, her view configures human being so that it can

be integrated with intelligent machines. In this case, she doesn't see many differences between bodily existence and computer simulation. In total, she perceives the separation between information and the body but she tries to rejoin them by postulating the body as data in cyberspace. Therefore, in the age of virtuality, there are entities who live only in computer simulation. This statement shows the range of what counts as the virtual body or on the other hand matrix body in *Neuromancer* and materialized avatar body in *Ready Player One*. As a result, in the selected fictions, the virtual body of characters takes on new life through jack-into and immersion.

Based on the views of Baudrillard and Cavallaro, this study looks at the body in cyberspace which could be formed in a hyperreal status that is not real, but simulated. In this sense, Baudrillard explains that there is no 'real' and "reality loops around itself" (145). Similarly, Cavallaro also believes that everything we see in hyperreal is simulated and not real. He states,

In hyperreality, there is no reality behind the flux of codes that generate it. These codes, moreover, are not visible in themselves. We only see them in their simulated manifestations: clothes, furniture, weapons, popular icons and food, for example. (211)

Consequently, in hyperreal environment, the real no longer exists because the line between reality and simulation is blurred. As such, in analyses of *Neuromancer* and *Ready Player One*, the features and formation of the body which is the same materiality in virtual reality will be studied through the concept of cyberspace. More specifically, through the concept of cyberspace, the issues of jack-in and simulation, two new forms of body such as matrix body and materialized avatar body as well as the consequences such as immersive identity and on/off identity will be scrutinized in these two fictions in Chapter Four. In this study, I will explain how the body is affected by cyberspace environment in the settings of *Neuromancer* and *Ready Player One*; how identity of the characters in a virtual world is defined by the concept of cyberspace in these novels. I will use the critical views of Hayles, Jordan, and Baudrillard among others.

### 1.3.3 Cyborg

Cyborg is a key concept in analyzing and understanding the body in cyberpunk and postcyberpunk fiction. It was coined by Manfred E. Clynes and Nathan S. Kline (1960), to describe "the kind of hybrid artifact-organism system" (Clark 14). Haraway defines cyborg in her "*Cyborg Manifesto*" (1986) as "a cybernetic organism" (149) which refers to an organism that operates like a communication network. In this study, hybrid of machine and organism refers to the merging of non-biological materials with the human body. To Cavallaro, "[t]he virtual interchangeability of human bodies and machines is a recurring theme in cyberpunk and intrinsic to its representations of cyborgs" (12). Gregory Bateson observes cyborg as the boundless body which goes beyond the skin and is embodied by information. He maintains that cyborg "is not bounded by skin but

includes all external pathways along which information can travel" (qtd. in Cavallaro 48). So, the first question that comes into mind is that when and where information gets made as a disembodied medium? Some critics, such as Dinello, believe that humans and machines are brothers under the skin. Generally speaking, the arguments are spread out three stages. First of all, it is associated with "the construction of information as a theoretical entity"; Second of all, with "the construction of (human) neural structures so that they were seen as flows of information"; third of all, with "the construction of artifacts that translated information flows into observable operations, thereby making the flows 'real'". (Hayles 50)

Cyborg technology is the effective cultural portrait of the mid twentieth century, and some critics, such as Woodrow Barfield consider this technology as an enemy while Haraway believes in the liberating essence of cyborg. In *Simians, Cyborgs and Women* (1991), Haraway argues that we are integrated with technology as undistinguished cyborg selves. She states that, "our bodies, ourselves; bodies are maps of power and identity. Cyborgs are no exception" (180). Haraway does not define cyborg body as merely machine, but describes it as our 'selves'. She argues that, "The machine is not an *it* to be animated, worshipped, and dominated". To her, cyborg is the same machine that "is us, our processes, and aspect of our embodiment. We can be responsible for machines; *they* do not dominate or threaten us. We are responsible for boundaries; we are *they*" (qtd. in Cavallaro 48). According to her, the body must become a cyborg and move into a technological world to preserve its existence, to signify its transcendence or immolation. She assumes that "the cyborg body as a radical challenge to the myth of stable identities is due to its emphasis on the interpenetration of self and other" (qtd in. Cavallaro 49). She concludes that although, "prostheses enhance our bodies, but they also remind us of our failings, thus endowing us with a double identity: the better self and the failing self." (ibid)

In *The Haraway Reader* (2004), Haraway also argues that cyborg is all about "transgressed boundaries and potent fusions" (38). Transgression here refers to a kind of dualism which takes place between mind and body in the social practices associated with high technology. A cyborg body, as stated above, may bear double identity which enables cyborg to generate "antagonistic dualisms without end (or until the world ends); it takes irony for granted. One is too few, and two is only one possibility" (qtd. in Cavallaro 48). Cavallaro believes that cyborg is considered as the hybrid subjectivity and it depends on mechanical functions, relations, and information in a cyber body. In this direction, he states, the cyborg is the final symbol of hybrid subjectivity (Cavallaro 206).

Although, cyborg technology improves human's abilities, it changes characters' bodies to the consumer and hacked machines through which they allow corporations and hackers to have power and authority over them. Moreover, characters' bodies become so dependent on cyborg technology that they cannot exist without it. Barfield is one of the critics who argue that the cyborg body as a hackable embodiment by hackers – "hackers could attack devices implanted within the human body" (69) – may result in submissive people with a physical/mental collapse. He believes that turning into a

cyborg could result in a virus-infected machine man (126) that contains “potential negative outcomes” (110) leading to a “dystopic future” (128). Next, Latham believes that cyborg technology, like post-Fordist capitalism, is relevant to consumer culture (20) which might control people and culture (68) through a false promise of consumption (92).

In the end, this study examines the new forms of the characters’ bodies in the selected texts through technology of implantation in *Feed*, and injection in *This Perfect Day*. Therefore, this study embraces some issues such as uniformity and consumerism in these two novels. More importantly, this study investigates consumer body and hacked body in the selected texts through the views of Musgrave, Haraway, Cavallaro, and Barfield.

#### **1.4 Scope and Limitation of Study**

Science fiction is a broad literary genre which covers many sub-genres. It mostly deals with imaginative contents, such as futuristic setting, science, technology, and extraterrestrial life. But the present study is limited to the relationship between cybertechnology and the characters’ bodies, and the new forms in four selected American cyberpunk and postcyberpunk fictions through the concepts of cyberspace and cyborg. Accordingly, my study only focuses on cybertechnological forms of body in cyberpunk and postcyberpunk, and not other similar subgenres of science fiction, such as biopunk and steampunk. Thus, this study is only limited to analyses about forms of body through cybertechnology limited to cyberspace and cyborg. In doing so, I use the views of Hayles and Jordan for cyberspace concept, and the notions of Musgrave, Haraway, Cavallaro, and Barfield for cyborg concept.

This study is narrowed down to two different scopes: two American cyberpunk fictions written in the late twentieth century and two American post-cyberpunk fictions written in the twenty-first century, namely: *This Perfect Day* (1970) by Ira Levin, *Neuromancer* (1984) by William Gibson, *Feed* (2002) by M.T. Anderson, and *Ready Player One* (2011) by Ernest Cline. Except for the analysis of body formation in these novels, this study does not reflect on other subjects such as gender relations, feminist issues, apocalypse and post-apocalypse, political and economic, among others. I have selected these novels from two different eras to have a better understanding of cybertechnological forms of body, and to investigate it within the wider latitude of space that is not limited to one country. This study looks at the dystopic consequences of the computer-based world and its impact on characters’ bodies and identities under the shadow of cyberculture in the selected novels. There are some other aspects in the realm of cyberpunk and postcyberpunk fiction, such as transhuman, posthuman, discrimination and so on, which my study will not focus on.

## 1.5 Research Objectives

This study considers scientific and literary writings together as interdisciplinary work in the four selected cyberpunk and postcyberpunk fictions. The main focus in these texts is on the computer technology and its impact on the characters' bodies. This study observes the body as a fluid object in cyberspace swamped by an overflow of abstract data, information, and representations where the body turns into data through immersion and jack-into. This thesis also considers the body as a hybrid object in the concept of cyborg, where the body integrates into machine through uniformity and consumerism. It is all about the intense dependence on cybertechnology which will be examined in Gibson's *Neuromancer*, Cline's *Ready Player One*, Levin's *This Perfect Day*, and Anderson's *Feed*. My research objectives comprise the following three steps:

- 1) To identify the issues which cause different body forms, including jack-in, simulation, uniformity and consumerism in the selected novels.
- 2) To investigate two forms of body, including matrix body and materialised avatar body through the concept of cyberspace and two other bodies, such as hacked body and consumer body through the concept of cyborg in the selected novels.
- 3) To evaluate the consequences of gaining new body forms in the characters through cybertechnology in cyberspace and cyborg era in the selected novels.

## 1.6 Research Questions

The research questions of this study are as follows:

- 1) Which issues cause different body forms in the selected novel?
- 2) How are matrix body in *Neuromancer* and materialized avatar body in *Ready Player One* as well as hacked body in *This Perfect Day* and consumer body in *Feed* described?
- 3) What are the consequences of gaining new forms of body in the characters in the novels?

## 1.7 Justification of the Text Selection

Although, science fiction inclines to concentrate on "mainstream, conformist types of characters who operate within established institutions and law-and-order" (Kellner, 302), post/cyberpunk fiction always draws attention towards the rebellion against corporations by "more marginal and even low-life characters" (ibid). Cyberpunk fiction evokes a real a fear that (mega-) corporations will produce computers to run our world or control humans. As discussed before, this study contains a textual analysis of four selected twentieth and twenty first century American cyberpunk and postcyberpunk novels namely, *This Perfect Day* (1970) by Ira Levin, *Neuromancer* (1984) by William Gibson,



*Feed* (2002) by M.T. Anderson, and *Ready Player One* (2011) by Ernest Cline. Each story has its specific content about character's form of embodiment. These novels have been selected because they all take place in an era of cybertechnology circa late twentieth century to present day, which lead to different formation of characters' bodies.

This means that the concepts of cyberspace and cyborg in these novels focus on effects of cybertechnology on body and identity of the characters. Consequently, the selected texts are quite suitable for this study due to the subjects of computer technology, corporations, hackers, and also consumerism. In my chosen science fiction novels, characters are shown as inseparable entities of the computer and its network. For instance, cyberspace not only ties the characters to the network, but also controls their identities. The virtual universe, constantly and inevitably gives rise to change in the characters' identity. Through these concepts, this study investigates how corporations and computer technology dominate the characters' bodies and minds in the selected texts. As a result, I have selected novels published in the late 20<sup>th</sup> and the early 21<sup>st</sup> century to discuss and compare my research issues from the genre of cyberpunk, and the concepts of cyberspace and cyborg. My study uses same notions discussed in these novels to describe new forms of the characters' bodies, thus proving the suitability of these novels for this study.

The first selected novel is *Neuromancer* by William Gibson where the protagonist lives in an invisible form of body (matrix) in cyberspace. This story is about the materiality of human beings in the virtual reality through jacking into a virtual atmosphere in the form of a matrix. Gibson's illustration details an unstable identity of the protagonist floating in this virtual world. Therefore, this novel is selected as one of the four novels which can be used in this study because I can explore the subjects of matrix body and immersive identity in it.

In *Ready Player One* by Ernest Cline, my second selected novel, details a 3D video game in 2045 where almost everyone logs into the virtual universe called the OASIS daily to escape their terrible lives. On/off identity in this story is described in a new form of body called avatar in the protagonist. The writer shows a universe where virtual reality loses the virtual part, and simulation becomes the main world the character lives in. The characters don't appropriate paraphernalia in order to connect with the video game universe and simulate in the OASIS. Hence, I have selected this novel because of the protagonist's avatar with an on/off identity illustrated in the story, which needs to be analyzed through the concept of cyberspace.

The third selected novel *This Perfect Day* by Ira Levin shows the world managed by a central computer called UniComp which has been programmed to control every character that is injected, hacked and manipulated as a cyborg. The writer highlights the reinvention of the character's body through cyborgisation process. It means that the injection given to the characters by UniComp is considered as a hacked form of uniformed cyborg. Therefore, I have chosen this novel due to the depiction of cyborg form and hacked body in the story which can be analyzed through the concept of cyborg.

And finally, the last selected text is *Feed* by M.T. Anderson which criticizes consumerism in a near-future where advanced science allows easy space travel, and most people have an implant called feed, a technological form of the Internet embedded in their skulls which connects them to the Net. The Media is always with the characters because of the feed which turns people into total consumer cyborgs. Thus, this story shows that almost everything is relevant to consumption. In *Feed*, everything is controlled by these powerful corporations, from birth to death. The writer tries to depict the physical or mental collapse of the protagonist which results from his consumer body. I have selected this novel because it highlights consumer bodies which are implanted forms after the cyborgisation process through a brain implant which will be analyzed by the concept of cyborg.

## 1.8 Methodology

In the first phase, this study will analyse effects of cybertechnology on body and identity of protagonists in the virtual worlds of *Neuromancer* and *Ready Player One*. In these two novels, information turns into a virtual body in cyberspace, where the characters have their matrix and avatar forms with their immersive and on/off identity. Therefore, the term of cybertechnological body in cyberspace clearly refers to data which changes into a new form of body such as matrix or avatar in the virtual world. In *Feed* and *This Perfect Day*, characters are considered as entities inseparable from the computer that sustains their life. Cybertechnological body in cyborg refers to the process of turning the characters' bodies into machine, as a hacked and consumer form of body with their double and mindless identity. This situation not only ties the characters' bodies to the computer or corporations, but also organizes their minds and activities.

This study pays attention to the challenging issue of cybertechnology domination over the characters where the distinction between virtuality, and reality and biological and the non-biological body become blurred. In the selected novels, the writers do not illustrate the positive aspects of cybertechnology, but instead point out the negative features which endanger characters' identity and humanity. I will apply the views of Hayles, Jordan, Baudrillard, Barfield, Musgrave, Cavallaro, and Haraway for the concepts of cyberspace and cyborg to assess the effects of cybertechnology on the characters' bodies and identities. In this study, I have also considered four American cyberpunk and postcyberpunk novels, including *Neuromancer* (1984) by William Gibson, *Ready Player One* (2011) by Ernest Cline, *This Perfect Day* (1970) by Ira Levin, and *Feed* (2002) by M.T. Anderson.

In my chapter analysis, regarding the concepts and research objectives, I will take on a close reading of primary texts to seek out thematic issues of stories and connect them to the visions of selected critics. Furthermore, this study looks at the issues of jack-in, simulation, uniformity, and consumerism through cyberspace and cyborg in the selected stories. Moreover, I will embrace textual analysis regarding the relationship between human, machine, and the virtual world and its consequences on the human body.

## **1.9 Significance of the Study**

We live in the world of cybertechnology where the body and mind are involved with this fresh, unlimited universe which is hard to live without. From the second half of the twentieth century onwards, many writers and critics such as Francis Fukuyama have been worried about the negative aspects of cybertechnology on the human body, mind, life and even culture. These worries are obviously presented in the selected novels which will be analyzed in this study. In doing so, this literary study aims to examine the relationship between cybertechnology and characters' body as well as identity and the effects of such technology through the concepts of cyberspace and cyborg. More succinctly, this study encompasses these concepts as research tools to illustrate body forms through living and interacting with the cyber environment and computer-based atmosphere, and exploring the domination of cybertechnology over humanity by means of critics' views. It considers scientific meanings in literary writings as an interdisciplinary work in four selected American cyberpunk and postcyberpunk fictions. I have chosen this genre of science fiction literature because it focuses on one of the main issues i.e. effects of cybertechnology on body and identity. Consequently, it shows the significance of this study since it applies the concepts of cyberspace and cyborg to investigate sub-concepts such as matrix body, materialized avatar body, hacked body and consumer body. It must also be mentioned that previous studies on cyberspace and cyborg have yet to examine these areas analytically.

Furthermore, my original contribution is to portray the effects of cybertechnology as a restricted technology on characters' bodies and identities which are dependent on computer technology. Such dependence certainly describes the characters who are inseparable from the computer and network system. Thus, the main focus is on computer technology and its impacts on the formation of body in characters in the selected novels. Moreover, this study will investigate how the body is formed and manipulated in the virtual world under the shadow of cyberspace, or in non-virtual world as cyborg under total control of the computer/corporations, and how this poses grave problems for characters.

As a result, this study might open up new horizons for future literary researchers in cyberpunk and postcyberpunk fiction, due to its significance and originality. This can be one of the reasons that necessitate the reading of science fiction. I strongly believe that the study on effects of cybertechnology on body and identity in the selected fictions can help us to better understand our ambiguous future and the cutting-edge technological advances and its consequences on human life.

## **1.10 Conclusion**

(Post-) Cyberpunk fiction as an interdisciplinary literary subgenre helps us to visualize ourselves as different embodiments in the virtual world of data or the real world of computers. This subgenre portrays body issues through cybertechnology which may

change people's life and culture. This study looks at the body as the most important aspect of the characters under the domination of cybertechnology in the selected fictions, and how this leads to matrix and avatar forms of body; and/or hacked and consumer forms of body in characters through cyborgization. Consequently, the current study investigates the various formations of body through the use of two concepts of cyberspace and cyborg. Four American cyberpunk and post-cyberpunk novels from two different eras are selected for this study in which *Neuromancer* from twentieth century and *Ready Player One* from twenty-first century are examined under the concept of cyberspace which analysis criticize the body as a fluid object which is embodied in the world of data in a virtual world *This Perfect Day* from twentieth century and *Feed* from twenty-first century are examined under the concept of cyborg where these narratives are examined through the lens of body as a hybrid object, due to the merging of biological organism with non-biological forms in the virtual world of computers. Thus, this study aims to show the effects of cybertechnology on body and identity through connection to the virtual environment or living in a computer world.

### 1.11 Definition of Terms

**Cyberculture:** Cyberculture which is also called computer culture and Internet culture is a culture that has emerged from the use of computer networks. The prefix 'cyber' means the cybernetics which made popular by Norbert Wiener in 1948. The suffix 'culture' has been defined by Frow and Morris as "a network of embedded practices and representations (texts, images, talk, codes of behavior, and the narrative structure organizing) that shapes every aspect of social life" (316). By the merging of 'cyber' and 'culture', some views and issues present in a cyberspace world. In addition, the interface between the body and modern and advanced technology happens in cyberculture. According to Cavallaro, "cyberculture pivots on a contradiction: a growing fascination with the body, testified by all sorts of media, coexists with an increasing infiltration of the body by technologies that seem to take its materiality away." (75)

**Cyberpunk:** Cyberpunk has emerged through new technologies such as computer, media, IT, and the Internet in the 1980s. "The term was coined by the science fiction writer Bruce Bekpie and became a literary critical term with Gardner Dozois, the editor of Isaac Asimov's Science Fiction Magazine" (Heim 211). According to Cavallaro, cyberpunk fiction is a unwelcoming visualization of a not-too-distant future in which computers control society and in which characters are under the shadow of cruel communications virtual systems (xv).

**Post-cyberpunk:** Post-cyberpunk derives from cyberpunk. It presents a less pessimistic and more realistic vision of cybertechnology. According to Lawrence Person, characters in post-cyberpunk fiction in comparison with cyberpunk are linked to their own society rather than becoming isolated and purposeless in there (1998).

**Cyberspace:** A place of pure data. It is an imaginary perception which is experienced by anyone who connects to the computer network. It also refers to a place in which data is formed into body and stories can take place in it. Gibson postulates cyberspace as a place of alternative virtual world (Dinello 147).

**Cybertechnology:** Technology in cyberpunk genre is known as cybertechnology or computer technology which involves the Internet. Cybertechnology contains computers and the Internet affects and intertwines with the human life in cyberculture.

**Cyborg:** Cyborg is the fusion of machine and body or intertwining of biological organism with non-biological one. According to Clark, cyborg is a kind of “hybrid artifact-organism system” (14).

**Hyperreality:** Where consciousness is not able to distinguish reality from the simulation of reality. Baudrillard is of the opinion that no reality is available in hyperreal world; all is simulated. They are only seen in their simulated appearances (Cavallaro 211). To him, we live in a “hyperreal world that is more real than the original one”. In Baudrillard’s view, reality has been “substituted by simulation, so simulation becomes more important, reachable and secure than reality”. (*Simulacra and Simulation* 1981).

**Matrix:** Matrix is a world of people who send typed messages to each other. Matrix is a virtual world where information is equivalent to the physical object. This network place does not only leave the body behind the computer but also extend embodied consciousness in physical ways that would be incredibly unbelievable without mechanical prostheses (Hayles 291).

**Virtual Reality (VR):** Virtual reality refers to a world inside the computer where individuals can alter themselves and exist without biological boundaries. VR is a place where characters can experience and feel different things in a virtual kind through receiving “images and impressions when they are immersed in it”. It occurs by different technological devices which are linked to the characters’ bodies so as to get the “impressions of sound, sight, and touch”. In addition, cyberspace refers to the artificial space of virtual reality where “humans can enter into a computer or a virtual reality prosthetic” (Haney 34). Gibson first used the term ‘cyberspace’ in *Neuromancer* to refer to virtual, computer-generated space. (Chan 157-158)

**Matrix Body:** this is a body that is created in a virtual world or cyberspace along with virtual personas (Reid affirms 78). This kind of body is also a graphical image of the character in the virtual universe.

**Avatar Body:** It is another form of body in a cyber type which also is a graphical image of character in the world or environment of video game, internet setting, etc.

[C]yberbodies can be defined as bodies that are produced through, or imagined in, digital media or cyberspace. They include game avatars, virtual personas [matrix] ... and figures of artificial intelligence (AI). Cyberbodies appear in computer game spaces, virtual reality scenarios ... novels, and multiple Internet applications (Reid 78).

Thus, the body appears in a materialized form in online game which is called avatar body.

**Hacked Body:** When the body is being manipulated by hackers or companies through the Internet and computer technology, it will be called hacked body. Finally, the combination of character and technology results in alteration of the body. (Haraway 64)

**Consumer Body:** When the body is dependent to a person, company, and also technology to the extent that the body cannot live without it and being away of it makes the body decline that is the same consumer body. Consumption happens through the applying of mechanical devices where the body becomes an object under the control (Anne Balsamo 5).

**Jack-in:** It is a term used in Gibson's *Neuromancer* for entering of characters into the virtual world of cyberspace.

**Simulation:** The virtual situation shown in *Ready Player One* where different characters' bodies are shaped to different forms. As well, events happen in this world.

**Uniformity:** The status of being uniform and similar in a society where all people have same conditions and physical appearances. It is shown in *This Perfect Day*.

**Consumerism:** The status of having consumer situation in a society where everybody is like a potential consumer for companies and sellers. This term is used in *Feed*.

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