

TRANSHUMANISM IN *BRAVE NEW WORLD*, *NEUROMANCER*, AND *HER*: THE CREATION OF ILLUSIONARY FREEDOM IN SOCIETY

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ABSTRACT

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This study explores what "transhumanism" is in its modern use, and how and why transhumanist technologies are used in Aldous Huxley's *Brave New World* (1932), William Gibson's *Neuromancer* (1984), and Spike Jonze's *her* (2013). These works will be analysed as science fiction works employing transhumanism to create their fictional societies. Michel Foucault's theory of punishment, Antonio Gramsci's concept of hegemony and Jean Baudrillard's theory of simulation will constitute the main theoretical background of this study. Donna Haraway's concept of cyborg will also be used to highlight the inequalities between genders in the created societies. It will be argued that in these worlds human beings are strictly controlled in a subtle way by means of advance science and technology that can be categorized under transhumanism. So transhumanism does not present a liberating environment for individuals or the society in real sense in the chosen works; instead it disguises the control mechanism by providing partial benefits for the inhabitants.

Keywords: Transhumanism, Hegemony, Control, Simulation, Gender Inequality

ÖZ/ÖZET

CESUR YENİ DÜNYA, NEUROMANCER VE HER ADLI ESERLERDE TRANSHUMANİZM: TOPLUMDA ÖZGÜRLÜK YANILSAMASI YARATMAK

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Bu çalışma, "transhümanizm"in bugünkü anlamıyla ne olduğunu ve Aldous Huxley'in *Cesur Yeni Dünya* (1932), William Gibson'ın *Neuromancer* (1984) ve Spike Jonze'nin *her* (2013) eserlerinde transhümanist teknolojilerin nasıl ve neden kullanıldığını araştırır. Bu eserler, kendi kurgusal toplumlarını yaratmak için transhümanizmi kullanan bilimkurgu eserleri olarak incelenecektir. Michel Foucault'nun ceza kuramı, Antonio Gramsci'nin hegemonya kavramı ve Jean Baudrillard'ın simülasyon kuramı bu çalışmanın temel kuramsal çerçevesini oluşturacaktır. Donna Haraway'in siborg kavramı da, yaratılan toplumlarda cinsiyetler arasındaki eşitsizlikleri vurgulamak için kullanılacaktır. Yaratılan bu dünyalarda insanoğlunun, transhümanizm olarak ele alınabilecek ileri bilim ve teknoloji aracılığıyla nasıl örtük bir biçimde kontrol edildiği tartışılacaktır. Dolayısıyla transhümanizm, seçilen eserlerde gerçek anlamda bireyler veya toplum için özgürleştirici bir ortam sunmaz; bunun aksine, kısmi yarar sağlayarak kontrol mekanizmasını gizler

Anahtar Kelimeler: Transhümanizm, Hegemonya, Kontrol, Simülasyon, Toplumsal Cinsiyet Eşitsizliği

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TABLE OF CONTENTS

STATEMENT OF NONPLAGIARISM	ii
ABSTRACT	iv
ÖZ/ÖZET	v
ACKNOWLEGEMENT	vi
TABLE OF CONTENTS	vii
INTRODUCTION	1
CHAPTER I THEORETICAL FRAMEWORK	20
1.1 TRANSHUMANISM	20
1.1.1 Transhumanism, Posthuman and Posthumanism	23
1.1.2 Oppositions and Defence of Transhumanism	28
1.2 FOUCAULT'S THEORY OF DISCIPLINE	35
1.3 GRAMSCI'S CONCEPT OF HEGEMONY	39
1.4 JEAN BAUDRILLARD'S CONCEPTS OF SIMULACRA AND	
SIMULATION	42
1.5 HARAWAY'S CONCEPT OF THE CYBORG AND DISCUSSIONS OF	NC
GENDER	44
CHAPTER II BRAVE NEW WORLD	48
2.1 DESIGNING MANAGEABLE BODIES THROUGH GENETIC	
ENGINEERING AND ARTIFICIAL WOMB TECHNOLOGY	52
2.2 THE CONSTANT CONTROL MECHANISM THROUGH HYPNOPA	AEDIA,
EMOTIONAL ENGINEERING AND SOMA	61
CHAPTER III NEUROMANCER	71
3.1 COMPUTER CONSTRUCTED IDENTITIES/HUMAN ENHANCEM	ENT IN
NEUROMANCER	73
CHAPTER IV Her	96
4.1 THE CONCEPT AND HISTORY OF ARTIFICIAL INTELLIGENCE	(AI). 99
4.2 THE AI TECHNOLOGY IN her	101
A 3 I ETTER WRITING IN her	115

CONCLUSION	123
REFERENCES	130
CURRICULUM VITEA	138

INTRODUCTION

Transhumanism, a philosophy that champions the idea of the direct use of science and technology to boost the current intellectual, physical and psychological developments of human beings, has gained popularity in both academic circles and popular culture as a result of rapid developments in different fields of science and technology. The core idea of this philosophy is based in three pillars; maintaining super-intelligence, super-longevity and super-wellbeing, so advocates transhumanism claim that these three supers will present a better and a freer environment for humanity by eradicating the shortcomings of human beings in these three realms. Today, it covers a variety of subjects and applications like artificial intelligence, eugenics, gene-editing, robotics, cryonics and so on. Transhumanists focus on both the development of these technologies and the possible benefits they will provide for human beings.

This study explores what "transhumanism" is in its current use, and how and why transhumanist technologies are used in Aldous Huxley's *Brave New World* (1932), William Gibson's *Neuromancer* (1984), and Spike Jonze's *her¹* (2013). Although transhumanism is a philosophy that aims to create a better environment for individuals by surpassing physical, intellectual and psychological constraints through direct intervention to human body/mind and social environments, in the chosen works, transhumanist technologies² are treated critically because it is suggested that these technologies create restrictive circumstances for their inhabitants in a subtle way. There is just an illusion of freedom created through transhumanist technologies by providing human beings with partial advantages such as disease-free citizens, super-enhanced bodies or mood boosting AI technology. In each work, human beings' interaction with science/technology, and the structure of the three societies

¹In this dissertation, the name of the movie will be written in lower case as it is used in the original poster except for the literature review part where quotations are taken from other critics' articles. This is done on purpose because the use of lower case supports the main idea of this analysis.

² Current transhumanist technologies cover a bunch of applications and advancements, including genetic engineering, information technologies, artificial intelligence, bionics, whole body prosthetics, mind uploading, etc. For more information see, https://humanityplus.org/ 2.05.2019.

seem different. However, I argue that the main goal shared by these seemingly differing systems is to control, shape and manipulate human beings through advanced science and technology: the methods are diverse, but the aim is to have over-controlled societies despite presenting pseudo-free systems and inhabitants.

Although the concept of transhumanism in its modern use started to spread in the second half of the twentieth century, the idea of enhancing human beings in various ways—spiritual, biological, intellectual—has always attracted human beings, and there are various historical or literary examples of individuals or societies searching for ways to go beyond the limits. One of these examples is the Sumerian work, The Epic of Gilgamesh, in which the king searches for the plant of immortality. Gilgamesh starts a journey to find the key to eternal life after feeling deep sorrow upon his friend's death. He finds the plant that will bring him immortality, but a snake devours it. Though the king cannot achieve his goal, and the story has other teachings for him about the meaning of life, what is significant about it is the presence of the idea of eternal life, and also the possibility of it via a magical plant (Assyrian International News Agency Books Online). Another attempt to achieve eternity is the alchemists' search for the Elixir of Life. The fundamental aim of this practice is to turn base metals into valuable ones, especially gold. As this obtained substance would have a high level of purity, it was supposed to be used to make the elixir that promises an eternal life (Ransome 1915: 214).

Apart from the search for immortality, there are various mythical stories about how human beings challenge gods because of the wish to go beyond their limits. One of the best known is the myth of the famous craftsman, Daedalus and his son Icarus. To escape King Minos' tyranny, Daedalus makes wings for himself and his son and warns Icarus against flying too high as the sun will cause the glue in the wings to melt. However, ignoring this warning, Icarus flies close to the sun, and falls into the sea and drowns (Hamilton 1942: 193). Another Greek myth tells of Prometheus, who is punished by Zeus upon giving fire to humanity (Hamilton 1942: 87). In both stories, the message given is similar; trying to go beyond limits, or challenging gods—Icarus' flying too high, Prometheus' helping humanity to enhance themselves by giving the fire against Zeus' will—results in disaster. These stories also show that humanity has always been in search of enhancement.

During the Renaissance, as scientific developments began to challenge religious authority, literary works focused on the subject of science, or going beyond limits by using knowledge: Christopher Marlowe's *Dr. Faustus* (1604), for example, takes a Renaissance humanist and a doctor who is not satisfied with the medical knowledge he has, attempts to transcend not only his physical limitations, but also the limits of science by acquiring supernatural powers after making a deal with Lucifer. Another example, Francis Bacon's *New Atlantis* (1627), presents an ideal state where philosophy meets with science. In this society, the clergymen are both scientists and philosophers. Bacon, in his utopia, especially emphasizes the power and importance of science to maintain a well-ordered society. Of course, these texts all stem from early religious views with a religious message, but they challenge religious dogma.

There are also other fictional examples about creating artificial beings, or making machines with human-like features both cognitively and physically. For instance, in the myth of Pygmalion and Galatea, a creation story through inorganic ways is told: Pygmalion, a very gifted sculptor, becomes uninterested in women, and spends all his time and energy for his work. He, then, creates a statue of a woman made of ivory. His work which he named Galatea is so flawless and beautiful that Pygmalion falls in love with it: he brings presents for it, kisses and talks to this lifeless being. Upon the sculptor's love for this ivory woman, Aphrodite, the goddess of love, gives life to this woman, and the couple leads a happy life (Hamilton 1942: 145-150). Another Greek myth tells of "Talus", a giant bronze warrior created by Hephaestus, the god of blacksmiths, to protect the island of Crete (Hamilton 1942: 174).

In the history of science-fiction, there are also various examples of creating anthropomorphic beings. For instance, Mary Shelley's *Frankenstein* (1818) describes a creature composed of different body parts by Dr Frankenstein by using the method known as galvanism. What is crucial about this work is "precisely *to give a voice* to the monstrous outsider" (Roberts 2006: 95); Frankenstein's creation tells its own story. Similarly, the Czech author Karel Capek's play, *R.U.R* (*Rossum's Universal Robots*) (1920), introduces robots with a human appearance as well as the capacity to think. In this work, the robots are produced to serve humanity by freeing them from

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³Karel Capek is the first person who introduced the word 'robot' to the public in his science-fiction play *R.U.R.* Contrary to popular belief, this word was not coined by Karel Capek; the originator of it was Capek's brother Josef Capek. He first offered the word 'roboti' which comes from the Old Church Slavonic 'rabota' that means 'slavery, forced labour, bondage', and it became 'robot' in the English language.

"the drudgery of labour" (Roberts 2006: 168). For the human beings in the factory, these robots are soulless mechanic beings, but the "essential humanity of the robots" is highlighted in the play (Roberts 2006: 168), and these mechanical beings supersede their masters. Another significant figure in the history of science fiction is Isaac Asimov, who created The Three Laws of Robotics⁴, "the unbreakable code of ethics written into an Asimovian robot's 'positronic brain'" (Jones 2003: 166). Asimov's short fiction mainly focuses on

"human antipathy against machinery, considering it as a reflexive xenophobic repulsion directed against anything new or strange—which he subsequently labelled the Frankenstein complex.5" (Stableford 2006: 38)

So, Asimov mainly wants to promote a more positive vision on artificial beings in his fiction. Although these examples differ in various ways, each focuses on the idea of creating an entity close to human beings through artificial methods, and they can be seen as early fictional examples of current science and technology.

In short, from the very early ages, human beings have been interested in outperforming their organic bodies and going beyond their inherited worlds in differing ways. So the idea of human enhancement and creating human-like artificial beings through science and technology has always interested human beings, and these ideashave been echoed in fictional writing.

For this study, BNW^6 , a novel written at the beginning of the 1930s, is brought together with *Neuromancer* written in the late twentieth century and *her*, a 2013 film. When compared to the other two works, the scholarship on BNW is extensive; it has been the focus of interest of both the academy and the public due to its rich subject matter—criticism of rapid mechanisation, consumerism, ⁷ Christian values, and science and technology which cause the dehumanisation of people. BNW is categorized as a dystopia, which is about

⁴ Isaac Asimov has a positive attitude towards artificial human-like beings, and in *I*, *Robot* he tells how they can evolve from simple robots to advanced machines just to protect and serve human beings. To guarantee this, he formalises three laws of robotics.

⁵For Asimov, human beings have always been sceptical about human-like artificial beings, and developed a fear which is called "The Frankenstein Complex". It is the anxiety of losing control over these mechanical beings, and it stems from Mary Shelly's well-known work, *Frankenstein*.

⁶ In this study, BNW is used as the abbreviation of Brave New World.

⁷ Christopher Cosans focuses on Hans Jonas and Aldous Huxley's criticism of material consumption which causes environmental pollution, and also human unhappiness. For him, replacing material consumption with experiential goods will create a better atmosphere for the environment and humanity as a whole.Is this necessary?

"oppressive societies, either because of the tyranny of the 'perfect' system over the will of the individual, or because of the difficulty of stopping individuals or elites from imposing authority over the majority, or, indeed, over minorities." (James 2003: 220).

It has been compared with other dystopias of its time⁸, and mostly with George Orwell's *Nineteen Eighty-Four*⁹(1949); both works present futuristic societies where human beings are controlled in differing ways. After reading an early copy of Orwell's novel, Huxley writes:

"The philosophy of the ruling minority in Nineteen Eighty-Four is a sadism which has been carried to its logical conclusion by going beyond sex and denying it. Whether in actual fact the policy of the boot-on-the-face can go on indefinitely seems doubtful. My own belief is that the ruling oligarchy will find less arduous and wasteful ways of governing and of satisfying its lust for power, and these ways will resemble those which I described in Brave New World." (Letters of Note 2012)

Despite their similarities in terms of oppressive rule, in *BNW*, when compared to *Nineteen Eighty-Four*, a softer and subtle control mechanism functions from early stages of life, so instead of coercion, happiness and stability are maintained through manufactured consent. Richard A. Posner focuses on the comparison between Huxley's and Orwell's novels and states that though they approach privacy differently in their fictional societies, they can be both "viewed as a warning against the dangers that technocratic modernism poses to privacy and freedom" (2000: 1). Both works depict restrictive environments for their inhabitants, but *BNW* has a more technology intensive governmental system than *Nineteen Eighty-Four*. Accordingly, the technologies used in the World State brings "mindless contentment, including guiltless promiscuous sex, [and] [t]hey induce complete intellectual and cultural vacuity, and complete political passivity" (Posner 2000: 10). Similarly, Gregory Claeys compares them saying: "Huxley's is clean, efficient, complacent, defined by

⁸ Eylem ALTUNTAŞ. *The Theme of Alienation in Two Dystopian Novels: Brave New World and Fahrenheit 451*. M.A. Thesis. İstanbul Aydın Üniversitesi, 2013.

⁹ Melek D. BEYAZOĞLU. *Zamyatin, Huxley, and Orwell: Utopian Ideals and Dystopian Worlds*. M.A. Thesis. Doğuş Üniversitesi, 2010.

Ali GÜLEÇ. Free Will vs. State Will: An Inductive Comparison of Nineteen Eighty-Four and Brave New World. M.A. Thesis. Kütahya Dumlupınar Üniversitesi, 2021.

Mustafa M. KASAR. The Lust for Absolute Power in Dark Utopias: Nineteen Eighty-Four, Brave New World, We. M.A. Thesis. Fatih Üniversitesi, 2000.

Recep YILMAZ. The Other in the Ideal States: A Comparative Analysis of Nineteen Eighty-Four, Brave New World, and Fahrenheit 451. M.A. Thesis, Fatih üniversitesi, 2015.

pleasure, Orwell's clumsy, crude, brutal and focused on pain" (2010: 125) to highlight how these novels that belong to the dystopian tradition differ as a result of using different methods to control human beings despite their some common points.

BNW has also been read as a warning about the dehumanising outcomes of using science and technology to create human beings, an idea which I also make use of in my analytical chapter on the novel. The scientific advancements mentioned in the novel are generally criticised, because

"the whole drift of contemporary society towards technology involved a deplorable loss of primitive 'naturalness' and contact with the organic, non-technological and spiritual." (Roberts 2006: 158)

Likewise, Leon Kass, a bioethicist, is critical about the possible consequences of advancements in science and technology, and by basing his argument mainly on *BNW*, he says:

"In an age in which we are so easily seduced by utopian promises of perfection through technology... we need to be reminded of the deep connection between our natural limitations and our highest human possibilities." (2008: 7-8)

Kass argues that "Brave New Man is so dehumanized that he does not even realize what has been lost" (2008: 6). Kass points out the dehumanizing effects of advanced technologies, which are generally presented positively, and for him, human beings should be more careful about novelties in these fields not to become machine-like beings.

In *BNW*, stability is maintained, but there is no room for creativity in the World State because "the stable and secure path never leads anywhere new or deeply interesting" (Barr 2010: 856). Barr draws a parallel between *BNW* and current government systems, and suggests that it "offers a cautionary tale, describing a society that, in a state of fear similar to our own, turns to the government to offer a sense of security" (2010: 853-4), thus by presenting security together with stability, governments limit the freedom of a society. He believes that the promise of security offered by the authority after creating a fear of instability diminishes liberty.

There is stability in *BNW*, but there is no presence of military policy which can be a sign of brute force. It lacks "the rigid discipline, the self-surrender, the massed marches" because Huxley is into

"the new science and biological assembly—the manufacture of more or less identical human beings who will automatically fall into line without the need for an imposed military discipline." (Parrinder 2015: 139)

Thanks to advanced science, Worldians are produced in accordance with the State's ideology, so there is no need for military and brute force in this futuristic world.

Religion is also a significant issue in *BNW*; the old Christian values are wiped out from the World State, so it seems to present a secularized society. Brad Congdon draws attention to this subject, and states that the main criticism of Huxley is not technology or science; he criticizes Fordism, which has become the religion of this future society (2011: 85). He furthers his discussion by suggesting that Huxley was impressed by the idea of eugenics like his brother Julian Huxley, who was a supporter of eugenics despite his worries about the subject, and Huxley's positive ideas on eugenics is reflected in *BNW* (Congdon 2011: 102).

This novel has mainly been compared to the novels of its time, but it has also been read as a work that has parallels with Plato's *The Republic*¹⁰. For instance, depending on similarities like division of the society, common parenting, or the governors with authorization, Matthew J. Franck defines *BNW* as the "modern counterpart to the 'city in speech' built by Socrates and his young interlocutors in Plato's Republic" (2013: 74). In his concluding remarks, Franck says that as with novel advances in science and technology, *BNW* has become a current issue again, and human beings should think and decide who will be in charge of in the decision-making process of these latest technologies (2013: 88).

Peter E. Firchow, a Huxley scholar, reads *BNW* as a satire of its time, saying: "Huxley's satirical point in the novel is that if the present continues to 'progress' as it is 'progressing' now, then the inevitable result must be a brave new world" (1966-67: 451). Although this work represents the dehumanising effects of technology, Huxley's "aim is not so much to foresee what will happen to machines as to foresee what will happen to man" (Firchow 1975: 302). For Huxley then, the future is a projection of the present, and he expressed his anxieties about what would happen to human beings based on what he saw in his current society. Similarly, Gorman

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¹⁰ Mustafa MENCÜTEKİN. Platonic Influence on Utopian Literature: Republic and T. More's Utopia (16th cen.), J. Swift's Gulliver's Travels (book IV) (18th cen.), A. Huxley's Brave New World (early 20th cen). M.A. Thesis. Fatih Üniversitesi, 2000.

Beauchamp looks at the function of technology in different examples of dystopian literature, and argues

"[t]he greatest threat posed by technology . . . is not that man's mechanical creations will come to rule over him like some alien power but rather that he will so completely introject the ethos of technology that his highest aspiration will be to become a machine himself." (1986: 62)

In close relation to the above mentioned readings of *BNW*, William W. Matter says: "[Huxley] implies that wholesale industrialization creates men like machines, [so] he rebels against the idea of progress and mechanization" (1975: 148). For Matter, Huxley is against the utopian assumption that the ideal society can be achieved through scientific advancement.

With the latest advancements in science and technology, *BNW* has become central to the current discussions and studies on transhumanism. ¹¹Francis Fukuyama focuses on *BNW* while explaining why biotechnology, if not controlled, will be the end of human nature:

"The people in Brave New World may be healthy and happy, but they have ceased to be human beings. They no longer struggle, aspire, love, feel pain, make difficult moral choices . . . or do any of the things that we traditionally associate with being human." (2003: 6)

He is critical about biotechnology because it may change the human nature as portrayed by Huxley, and Fukuyama also suggests that *BNW* "*mixes obvious benefits* with subtle harms in one package" (2002: 7), so if human beings welcome every novelty biotechnology brings, it will be detrimental to humanity.

Despite the common readings of *BNW* as a warning about the negative impact of technology on human beings and society, in a recent analysis of *BNW*, Joanne Woiak suggests an alternative reading of the novel focusing on the groups that use the power of science and technology for their own goals, and says:

"[Huxley] offers a sophisticated critique of how scientific knowledge emerges from and in turn serves social, political, and economic agendas of those in power... His analysis focused on how the capitalist powers who controlled science and technology were using them to destroy the environment, build more and more devastating weapons, and oppress the people through methods of mass production and mass persuasion." (2007: 124-5).

¹¹Eda ÇAYIR. A Transhumanist Approach to Brave New World and We: Synthetic Happiness. M.A. Thesis. İstanbul Aydın Üniversitesi, 2019.

Woiak highlights how new scientific and technological advancements can be a medium to manipulate and control the masses simultaneously in the hands of capitalist powers.

Apart from the direct criticism of the destructive effects of technology in *BNW*, Margaret Atwood, in the "Introduction" to the 2014 publication¹² of the book, suggests it is

"either a perfect-world utopia or its nasty opposite, a dystopia, depending on your point of view: its inhabitants are beautiful, secure, and free from diseases and worries, though in a way we like to think we would find unacceptable." (ix-x)

Claeys, saying that neither utopia nor dystopia is the right category for *BNW*, classifies the work as an example of hedonistic dystopia, in which "[f]ear is present... but not in the usual combination of cruelty, pain, mass murder, and slave labour... [Huxley] chose to minimize and disguise [fear]"(2017: 388).

David Pearce attempts to make a more neutral reading of the novel by giving both the pros and cons of technology:

"In Brave New World, things do occasionally go wrong. But more to the point, we are led to feel the whole social enterprise that BNW represents is horribly misconceived from the outset. . . It is an alien world, but scarcely a rich or inexhaustibly diverse one. Tellingly, the monotony of its pleasures mirrors the poverty of our imaginations in conceiving of radically different ways to be happy. Today, we've barely even begun to conceptualise the range of things it's possible to be happy about. For our brains aren't blessed with the neurochemical substrates to do so. Time spent counting one's blessings is rarely good for one's genes." (1998: 5)

For Pearce, the world has been going through rapid changes, and to explain novelties by our past experiences or thoughts may lead us to false interpretations. Therefore, instead of seeing technology and science as the causes of probable future disasters, human beings should adapt themselves to novelties in these fields as science has the potential to improve the current human condition. He also adds that in *BNW*,

"scientific progress . . . was apparently frozen", so instead of interpreting it as a warning against science and technology, it should be more appropriate to take it "as a warning of what happens when scientific inquiry is suppressed." (Pearce 1998: 6)

This argument is open to discussion because scientific studies are still conducted especially to compete with the other sections of the world. For instance,

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 $^{^{12}}$ All the quotations of *BNW* used in this dissertation are also from this publication of the book.

Henry Foster, an Alpha superintendent says: "I'm working on a wonderful Delta-Minus ovary . . . We'll beat them yet" (BNW 6). It is understood that there appear developments in science, but it is used just to sustain the established control mechanism.

The second work chosen for this study is William Gibson's cyberpunk novel *Neuromancer* (1984). The word "cyberpunk", coined by Bruce Bethke in his short fictional work of the same name, "Cyberpunk" (1983) is now used to define a subgenre of science-fiction. Bethke says, while creating this name, he just wanted to find a name that blends high technology with punk attitudes, so he found this combination of cyber (of cybernetics) and punk (Cyberpunk Project). Although this term was first used by Bethke, it was popularised with Gibson's *Neuromancer*, and is still associated with it. This book has also gained popularity, as it is the first novel that has won the science-fiction triple—the Hugo, the Nebula and the Philip K. Dick Memorial Awards for science-fiction literature. This success has made *Neuromancer* a genre-definitive work for years.

Cyberpunk is "about the information explosion of the 1980s" and it pictures "a dense, urban, confusing new world in which most of us will find that we have been disenfranchised from any real power" (Clute 2003: 67). In this genre:

"On one level contemporary technoscience seems to perpetuate the rationalist approach preached by the Enlightenment. On another level, the Gibsonian configuration of cyberspace as a hallucinatory experience alludes to science's involvement with the irrational [. . .] One of its contributions . . . lies in its fusion of mythological and technological motifs." (Cavallaro 2000: 52-3).

As suggested here, cyberpunk is the result of assembling distinct features: the rational represented by science and technology, and the irrational portrayed through the hallucinatory. This amalgam makes cyberpunk fiction blurry in various ways: the line between real/hallucinatory, organic/inorganic, human/machine, alienation/familiarity is not clear-cut, they are all intermingled.

Gibson's *Neuromancer* is dark, urban and personal, and the line that distinguishes real from illusionary is blurry. From the very beginning of the text, its title depicts the ambiguity present in cyberpunk fiction: the combination of "neuro – "which means related to nerves or the neural system and the suffix "–mancer", one who practices a kind of divination, suggests the nested depiction of science and

magic in the work. This double depiction can be found in the title as it also refers to the AIs—Wintermute and Neuromancer—that try to manipulate people's senses and minds both literally and metaphorically: one of the character's personality is reconstructed by Wintermute to make him serve itself, and the AIs create visions (visual realities) to manipulate people's actions.

The inhabitants of this futuristic world can have somatic modifications, they can experience the boundless excitement of the matrix, they can travel to other orbital cities, they have the opportunity to clone themselves; in fact, this world is an embodiment of different types of scientific and technological advancement. In this futuristic world, the understanding of freedom is shaped personally through technology; for instance, the hacker Case feels free when he jacks in the matrix, but for Molly, the cyborg character somatic enhancements bring liberation as her body was once exploited. Cavallaro suggests that in cyberpunk "[r]eality and identity are rendered unstable by their reduction to the status of commodities" (2000: 14-5).So, despite the so-called freedom rooted in variety, individuals are controlled by a group of people who hold the power of science and technology.

Claire Sponsler, in her article "Cyberpunk and the Dilemmas of Postmodern narrative: The Example of William Gibson", discusses that science fiction has become a predominant genre in postmodernist literature as it reflects the changes in society stemming from technological advancements (1992: 625). Accordingly, Gibson sees the latest developments in science and technology, and presents "what he sees as their inevitable consequences" so his stories convey "what our reality might all too soon be like and experiment with narrative modes of enacting these changes" (Sponsler 1992: 626). It is understood that Gibson presents the possible future outcomes of the current technologies in his works.

Likewise, the close connection between postmodernism and science fiction has always been investigated. As Andrew M. Butler states, cyberpunk was conceived as a "truly postmodern cutting edge" (2003: 146). In a similar vein, Veronica Hollinger discusses the relation between cyberpunk and postmodernism highlighting the deconstructive feature of the genre. She says that cyberpunk is "about the breakdown of [the] oppositions" (Hollinger 1990: 30). In Neuromancer, this idea is reflected from the very beginning of the novel with Gibson's dead channel metaphor as the "distinction between the organic and the artificial" is blurred (Hollinger 1990: 31).

One of the significant results of rapid technological development is the issue of identity. Accordingly, mind/body dichotomy is reassessed, and this issue is often echoed in cyberpunk. There are different readings of the novel in terms of mind/body relation, which I will also make use of while discussing how human beings are exposed to body and mind control in a subtle way through technology in the analytical chapter on Neuromancer. In his reading of Neuromancer, Seán McCorry comments that "Case finds himself confined to the 'meatspace' of the physical environment, barred from the digital networks that would liberate him" because "for the cyberspace elite, the lived environment has lost its autonomy" (2020: 321). Accordingly, Douglas Kellner suggests that after completing the mission, Case, who always values existing as pure consciousness, "seems to have achieved a form of immortality as a computer construct, living forever in cyberspace" (1995: 313). Despite these readings on body/mind relation, Benjamin Fair discusses that "[f]or Case, the body eventually becomes a place of security and belonging-selfacceptance—in contrast to the insecurity and alienation of cyberspace" (2005: 99). Likewise, Sparrow-Downes argues that in a technology dominant environment, where Case is initially after the excitement of existence as pure consciousness, he realizes that he cannot be totally separated from his physical body (2020: 101). However, Kihan Lee brings a fresh perspective and argues that there is not an eitheror situation, saying: "Case has achieved some sense of harmony between his embodied and disembodied existence" at the end of the novel (2006: 45).

The issue of body is also analysed by looking at the cyborg character Molly, whose body is a mixture of the organic and the artificial. Due to the somatic enhancements, Molly has a male-like physical strength, and this makes her "appear boldly transgressive" of traditional gender identities (Davidson 1996: 194). Likewise, Sherryl Vint highlights why Molly wants to distance herself from her organic body, saying: she believes that "[she has] agency when [she] uses the body as a technological tool" (2007: 108). As a result, Molly is freed from the confinements of her organic body through the interaction with technology.

Neuromancer has also been compared to other cyberpunk fiction¹³ and due to the spread of the philosophy of transhumanism, it has been analysed from this

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¹³Özlem ŞAHIN SOY. Cyberpunk Fiction: The Works of William Gibson and Bruce Sterling as Examples of the Post-1980s Science Fiction Tradition. PhD Dissertation. Ankara Üniversitesi, 2012.

perspective along with other American writers' fiction in the cyberpunk tradition.¹⁴ These readings of *Neuromancer* are limited to its genre. But in this dissertation, there will not be a genre-based reading. *Neuromancer* will be analysed in terms of transhumanism and control along with the other two works.

The third work chosen for this study is Spike Jonze's *her* (2013), which is about a love relation between a human being and an artificial being. Today, one of the most debated technologies is AI technology, so recent films have focused primarily on the intimacy between human beings and robots with human-like features, or AIs with high cognitive skills. They handle the emergence of AIs in various ways, and they make spectators question the nature of organic and inorganic beings from different angles. ¹⁵ All stories question the authenticity of these artificial minds that are programmed to think, feel or speak like human beings while portraying their interaction with humanity.

As *her* is a current film, the scholarship is not extensive when compared to the novels analysed in this study. In a recent study, this film was compared to other American science fiction films with an emphasis on gendered technology. ¹⁶ Zara Dinnen and Sam McBean also make a comparative analysis of Scarlett Johansson's three movies including *her*, focusing on the connection between technology and embodiment. In their article, they highlight the significance of the actress' face, and how its absence has a crucial impact in the film. Gyula Barnabás Baranyi in his article, "Conflicting Cinematic Languages and the Problem of Female Objectification in Spike Jonze's *Her*", discusses the novelty of the film is not objectifying the female body. Different from these readings, Andrea Sabbadini

¹⁴Hazal ÇOMAK. *Trans/posthumanist Themes in American Science Fiction Novels*. M.A. Thesis. Ege Üniversitesi, 2016.

¹⁵ For instance, *Blade Runner* (1982) in which one of the highly developed "replicants" (a copy of a human being) makes his hunter question the meaning of being a human; another is an Alex Garland film, *Ex Machina* (2015), which is about how Caleb, a computer programmer, is attached to Ava emotionally though he knows that she is a gynoid. Ava tries to escape from the place she is kept by manipulating Caleb. Ava is not a narrow AI, she evolves continuously. At the end of the film, she succeeds in escaping from the prison-like place by killing her creator, and leaving Caleb trapped. Although this last scene feeds the fears of people, in fact, what Ava does for her freedom is very human. Ava's act also forces the audience to question the difference and similarity between an artificial and a human mind. Similarly, in a TV Series, *Humans*, anthropomorphic robots called "synths", especially the ones who have consciousness, interact with human beings socially and emotionally, and various ethical issues like their social and legal rights are questioned. In all these movies and series, the AIs have such an ability to interact with human beings—they understand and feel like human beings— and have human-like appearance that they make human beings establish a bond despite being aware of their artificiality.

¹⁶Aylin PEKANIK. Female Coded Artificial Beings in Selected American Science Fiction Films, 1960s-2000s. M.A. Thesis. Hacettepe üniversitesi, 2019.

focuses on the possibility of such a relationship in terms of human psychology and states that this new type of intimacy can have a therapeutic effect on human beings. As a quite popular film, it has attracted the attention of the public, and there are various online articles on the idea of the future of love as presented in the film.¹⁷

For this study, these specific works have been selected due to their focus on the interaction of the body and the mind with science and technology. As BNW is categorized as a dystopian novel, it has been analysed within dystopian literature and compared with other examples of this tradition. Similarly, readings of Neuromancer have generally been limited to the cyberpunk genre with a focus on postmodern elements, and this novel has been analysed comparatively with other examples of American cyberpunk fiction. her has also been compared with other films with obvious resemblance in subject matter and portrayal. This study brings different subgenres of science-fiction together to see how they engage with each other on subjects like transhumanist technologies by highlighting issues such as human freedom, control and gender inequality. While extending the criticism on BNW to the other two works, this study brings these three works together with a novel terminology through the theories of Michel Foucault on discipline and punishment, Antonio Gramsci on hegemony, Jean Baudrillard on simulation, and Donna Haraway on the cyborg. Although there exist some readings of these texts from a transhumanist perspective, they are commonly limited to their genre, time or nation. This dissertation expands the reading of these literary works to a non-literary cinematic work to see how the analysed issues in the novels are echoed in a product of popular culture of the twenty-first century. The works in this study, covering nearly a century time span, have not been analysed comparatively, so this study aims to contribute to the scholarship on Huxley, Gibson and Jonze by bringing together these works from different periods.

The chapters are organized chronologically to show how the kind of anxiety related to the use of science/technology for the enhancement of human beings still

¹⁷Lisa Payne. "Spike Jonze Film Reimagines Digital Future" January 23, 2014, https://www.stylus.com/djnchz 12.8.2020.

PRINTMAG (2014), "Age of Spike Jonze's Her" https://www.printmag.com/featured/designing-for-love-in-the-age-of-spike-jonze-s-her/ 16.8.2020.

SPIDERUM (2017), "A Philosophy of love in digital era inspired by 'HER' –Spike Jonze" https://spiderum.com/bai-dang/A-philosophy-of-love-in-digital-era-inspired-by-HER-SPIKE-JONZE-5r9 16.8.2020.

Angela WATERCUTTER. "Her Imagines a World Where We Love Our Computers--Literally" December 19, 2013, https://www.wired.com/2013/12/spike-jonze-her-review/12.8.2020.

remains the same although each work appeared much later in history from one another. BNW, published in the first half of the twentieth century, portrays an overcontrolled society and beings due to advanced genetic engineering and psychopharmacology despite some advantages: a disease and aging-free society, soma drug for guaranteed happiness are just to name a few. In Neuromancer written towards the end of the twentieth century, the effect of cybernetics and human enhancement are analysed. As in Huxley's work, in this text, there seem to be partial benefits like morphological freedom or liberation from the physical world through matrix; however, this fictional society (both physical world/cyberspace) is controlled by science and technology, so it is not possible to talk about freedom at all. In Spike Jonze's her, the reflections of transhumanism are discussed in a highly popular nonliterary work. Different from the other two novels, in this film, technology is integrated into the daily routines of human beings smoothly; it seems to ease and enhance their lives. Unlike the former works, the tone of the movie seems to be rather neutral to the use of technology as the control mechanism becomes more and more invisible. However, in this fictional society, even emotions are controlled by advanced AI technology and letter-writing application because the control mechanism is personalised; each one is manipulated in accordance with his/her needs. As a result, these works, ranging from the early twentieth to the twenty-first century, portray how the anxiety about science and technology use has not changed much despite the time gap.

In my analysis, the definition of transhumanism as "developing and making widely available technologies . . . to greatly enhance human intellectual, physical, and psychological capacities" (More 2013: 3) will be questioned by analysing the chosen texts, BNW, Neuromancer and her. As it is understood from the definition, transhumanism aims at creating a highly developed environment where everyone has equal opportunity to go beyond his/her current situation through advanced technology. Besides, advocates of transhumanism champion freewill; for them, in an environment where transhumanist philosophy dominates, everybody will be freer regarding their bodies, ideas, feelings or choices. Despite this promise of a more liberating world, in the chosen works, the system established is just the opposite; everybody leads their limited lives.

As the focus of my analysis will be control of people's bodies and minds, I will make use of the theories of Foucault and Gramsci to form the main frame of my

argument on power and control in the selected works. While Foucault focuses on the body, Gramsci focuses on ideological control. They both argue that the masses are mainly controlled without the use of direct force; individuals are exposed to constant control and discipline throughout their lives, and they are shaped within prescribed ideas, beliefs or behaviour patterns. As a result, individuals are moulded in a predetermined way by the system although each individual believes that he/she is a free being. Transhumanism becomes a very significant component at this point because in the chosen texts, a rebellious act is nearly impossible due to transhumanist applications used in three fictional societies. In each created environment, there is a closed system in which individuals live in an illusion of freedom although their lives are shaped and controlled. Through transhumanist applications, they seem to go beyond their physical, mental and emotional limits, but this is quasi-freedom just to make individuals be content with their current situations, so they can be led and directed easily without coercion. To support this argument, Baudrillard's concepts of simulacra and simulations will be utilized in the analysis because the so-called freedom created by transhumanist applications will be accepted as real freedom though it is just an illusion, a simulation.

In addition to these theories, in each work there will be a discussion on gender to show how inequality between male and female characters continues in differing ways although transhumanist applications seem to provide partial freedom for female characters; still, in each work, patriarchal gender identities are at work. Advocates of transhumanism do not put special emphasis on gender equality, but, as they highlight autonomy and rights of all beings in all areas including the body, intellect and emotions in *Transhumanist Declaration*, it can be inferred that they promote gender equality. In parallel with this idea, there will be a discussion on Haraway's theory of the cyborg, which is a metaphor for the freedom of females from the gender-based biases and boundaries through technology, a very similar idea to what transhumanists suggest. However, my argument is that contrary to this positive view, in the chosen works, heteronormative societies, which cause hierarchy between genders, are sustained despite the governing idea—enhancement and freedom—of transhumanism. Advanced science and technology sustain injustices between men and women; like individual freedom, the idea of being equal is just an illusion created by the systems based on transhumanism in the selected works.

In the following chapter, the theoretical background of this study is formed. First, transhumanism is explored by looking at its governing idea, and the historical background of transhumanism, how it started and evolved, and today's understanding of transhumanism is discussed through the ideas of leading transhumanist advocates. There will be a part where I discuss the differences between transhumanism and posthumanism because some shared terminology and features of these two philosophies can cause theoretical confusion, so I will highlight the crucial differences between them. To form a better ground for this study, the opponents' ideas on how transhumanism may be a dangerous philosophy for human beings is also given. They say, although transhumanism seems to liberate human beings from their inherent boundaries like physical or emotional limitations just to name a few, it will take the freedom of choice from human beings by creating highly techno-science controlled societies. In accordance with this idea, in the following section of the theoretical framework part, Michel Foucault's theory on discipline and punishment, and Antonio Gramsci's theory on "hegemony" are reviewed with an emphasis on body/mind control and lack of freedom. Foucault highlights the effectiveness of collective control by maintaining a disciplined society through institutions. Likewise, Gramsci also emphasizes the importance of manufactured consent in governance by using state apparatuses. In fact, both Foucault and Gramsci stress how masses can be controlled—Foucault discusses mainly body control, whereas Gramsci focuses on mind—in a subtle way. Next, Jean Baudrillard's theory of simulacra and simulation will be explained by emphasizing its relation to freedom and control. In these technology-driven societies, instead of maintaining the public welfare, a dominant group uses science and technology to materialize their own benefits. The key point is to impose the idea of "being free" into the minds of the inhabitants; everybody believes that they are free to do whatever they want. They are in a simulation of freedom, and the system turns into an oppressive regime in each text. Lastly, Donna Haraway's theory of the cyborg will be explained in order to have a discussion about the relation between gender and technology. In the analysis of these texts in terms of transhumanism, women's issues are emphasized because there appears a male-dominated society in which hierarchical power relations still operate; female characters, either organic/inorganic or embodied/disembodied, are controlled and dominated by males. These three works support the idea of sustained inequality between males and females in terms of manipulating minds through

controlling especially the female body by using transhumanist applications. In this study, I try to show how gender identities stubbornly become persistent in these technology-driven societies.

In the first analytical chapter, I focus on Aldous Huxley's *BNW*, which covers a wide range of technologies (artificial womb technology, genetic engineering and psychopharmacology- mood-enhancing drug, soma). Despite having been written nearly a century ago, these technologies have become up to date due to latest advancements such as CRISPR¹⁸ gene editing or IVF technology (in vitro fertilisation). Firstly, how human beings are disciplined both physically and mentally in this tech-driven society is discussed. It is emphasized that this control mechanism is welcomed by the Worldians due to the created illusion of freedom through transhumanist technologies. Then, the inequality between the males and the females is highlighted despite the seemingly peaceful and liberal environment established by an all-powerful authority.

The next chapter studies William Gibson's genre-definitive cyberpunk work *Neuromancer*, which presents a futuristic technology-driven society by dealing with information technology, morphological augmentations, and AI technology. Similarly, there is a discussion on how human beings are supervised in a subtle way by science and technology although there are partial freedoms presented by the same applications. It is highlighted that quasi-freedom is established to disguise the control mechanism; it becomes desirable in a sense as human beings are content with this so-called freedom. In addition, there will be specific emphasis on gender inequality sustained by transhumanist technologies.

The final chapter focuses on *her*, a Spike Jonze movie which depicts a society where advanced AIs become an inseparable part of the daily lives of human beings. Firstly, it is explained that the inhabitants of this futuristic society are controlled in a subtle way though it seems to present a utopian society. Then, there is a discussion on how an illusion of freedom is created by using transhumanist applications to disguise how and to what extent human beings are controlled by different companies that own the power of science and technology. Lastly, it is argued that traditional discourses on gender identities continue as heteronormative values are promoted in differing ways; they sustain the current inequalities though an innovative perspective is presented in terms of human relations. To strengthen the discussion of this study,

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¹⁸CRISPR stands for Clustered Regularly Interspaced Short Palindromic Repeats.

instead of choosing a literary work, I preferred a contemporary film to show the popular imagination on a current issue—psychological connection between human beings and artificial beings. Although *her* suggests the possibility of a romantic relationship between an AI and a human being, the body of the gendered AI is missing in the film. This absence of the body in a visual work supports the idea that the relationship is just an illusion created to control the male character. In addition, like the former two works, the advanced technology is just a tool to supervise the inhabitants of this fictional society.

This comparative analysis of *BNW*, *Neuromancer*, and *her* suggests that transhumanism, whose governing idea is to create a freer and a more liberated environment by supporting the direct use of science and technology, becomes a tool to supervise human beings. As transhumanism is a philosophy which combines humanist ideals and advanced technology, it is argued that transhumanism continues the dichotomies that are brought by humanism. Such a discussion implies that transhumanism does not bring freedom or equality in these fictional works. Instead, it deepens the control mechanism by providing partial advantages for some human beings. As a result, the inhabitants in these fictional societies are supervised subtly through different scientific and technological applications by creating illusionary freedom.

CHAPTER I

THEORETICAL FRAMEWORK

1.1 TRANSHUMANISM

The main goal of transhumanism is to better human beings through advanced science and technology, and the term "transhumanism" was first used by Julian Huxley in his *Transhumanism* (1957). He suggests that it is possible to transcend oneself and remain human. Therefore, for him, all the stages from prehistoric to modern man are part of a necessary evolution to reach a higher and a better condition. He explains his ideas on the subject saying:

"Up till now human life has generally been, as Hobbes described it, "nasty, brutish, and short"; the great majority of human beings . . . have been afflicted with misery . . . They have attempted to lighten their misery by means of their hopes and their ideals. The problem has been that the hopes have generally been unjustified, the ideals have generally failed to correspond with reality. The zestful but scientific exploration of possibilities and of the techniques for realizing them will make our hopes rational, and will set our ideals within the framework of reality . . . the human species can, if it wishes, transcend itself—not just sporadically . . . but in its entirety, as humanity. We need a name for this belief. Perhaps transhumanism will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature". (75-6)

Huxley argues that the only rational and probable way of enhancement can be achieved through science and technology. He believes that human essence will not be lost when human beings are enhanced because advancement is part of their nature.

The transhumanist movement, in its current understanding flourished later in the 20th century. In transhumanism, there have appeared various sub-groups whose focal points are different from each other. It is significant to note that these currents are not opponents of one another; they just highlight a different aspect of transhumanism, and they all "desire the development of enhancing technologies that will allow normal human beings . . . to improve physically and mentally, and to live

longer and happier lives" (Manzocco 2019: 34). It might be useful to mention some of these groups to better understand what transhumanism is.

Towards the end of the eighties, Max More, who served as the President of the Alcor Life Extension Foundation¹⁹ for nine years until 2020 created "Extropianism". This current "aims to overcome every limit, and, in particular, that of mortality" (Manzocco 2019: 41). Recently, More, who is currently the Ambassador and President Emeritus of this non-profit organization, has defined transhumanism as

"the philosophies of life (such as extropian perspectives) that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values." (3)

With his definition, he emphasizes that humanity should go beyond the existing human condition by embracing the idea of continuous development.

In the second half of the 20thcentury, technological singularity, in simple terms, the outperforming of human intelligence by artificial intelligence also became the focal point of many scientists and futurists. For some transhumanists (singularitarians), technology is expected to create superhuman intelligence within a very short time, given the acceleration of new developments in computer technology. They argue that human beings will be able to free themselves from "the slavery of work, which will be irrelevant for survival" by means of artificial intelligence and robots (Manzocco 2019: 41).

Nick Bostrom, a leading figure of the transhumanist movement, aims at spreading transhumanist values in academic circles and politics. For this purpose, with David Pearce, Bostrom founded the World Transhumanist Association (WTA), whose current name is *HumanitPlus* (*Humanity*+). It is the most widespread international non-profit transhumanist organisation that supports the use of science and technology to enhance human beings. There appear two definitions in the article, "The Philosophy of Transhumanism", by Max More. It is first defined as

"the intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by

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¹⁹Alcor is a foundation that supports the idea of practicing cryonics, a technique using low temperatures to preserve people's bodies who cannot be treated by current medical technology till advanced ones to cure these illnesses can be found. For more information see, http://alcor.org/25.01.2018.

developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities" (2013: 3)

The second definition focuses on the appropriate application of this philosophy, saying that it is

"the study of the ramifications, promises, and potential dangers of technologies that will enable us to overcome fundamental human limitations, and the related study of the ethical matters involved in developing and using such technologies." (3)

While the former gives a general idea of the movement, the latter's focal point is on the ethical use of current technologies by considering both the potential benefits and risks because it aims to "understand and manage the social forces that could oppose the development and diffusion of the enhancing technologies" (Manzocco 2019: 46).

More summarizes the principles of transhumanism as "perpetual progress, self-transformation, practical optimism, intelligent technology, open society, self-direction, and rational thinking²⁰" (2013: 5). It can be said that the main principle of transhumanism is the search for continuous progress without "cultural, biological, and psychological limits" as perpetual progress suggests. In very close relation with it comes "self-transformation," which is

"affirming continual ethical, intellectual, and physical self-improvement, through critical and creative thinking, perpetual learning, personal responsibility, proactivity, and experimentation" (More 2013: 5).

Despite this idea of constant progress, transhumanism is not after perfection; instead, through "intelligent technology", which means "managing technologies . . . as effective means for improving life", this philosophy suggests an "open society" that opposes "authoritarian social control and unnecessary hierarchy [by] favouring the rule of law and decentralization of power and responsibility" (More 2013: 5). It champions a society in which "rational thinking" and "self-direction" dominates, so one can determine his/her life in parallel with reason.

Despite some differences in their focal points, transhumanists all argue that the current human condition has constraints, and they promote the idea that these limitations can be diminished, and humans can be upgraded to a more advanced level by using science and technology. While arguing for these ideas, advocates

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²⁰ More especially points out that these principles were originally defined the Principles of Extropy, but in time, as leading figures of transhumanism gathered under the organisation Humanity Plus, they have been shared by current circles of transhumanism.

acknowledge that the current situation may not be the final point of human beings; they can become more advanced in time. So, it can be said that transhumanism partly derives from Charles Darwin's theory of evolution: all the species in nature evolve continuously without the direct control of any species, and this process takes billions of years. Bostrom explains that through transhumanism, human beings can take control of evolution. The process can be accelerated instead of waiting for natural progress (2003b: 1-2).

To clarify the values of transhumanism, Bostrom lists three categories: core values, basic conditions, and derivative values. The ultimate goal (core value) is to have a chance to explore the transhuman and posthuman²¹ conditions. The second category focuses on progress, universal security, and the accessibility of advanced technology by everyone. In the final part, Bostrom briefly emphasizes the ethical use of these technologies: he claims everything should be discussed openly and continually by everyone to avoid false decisions and applications. People should have freedom while using or rejecting the use of the advancements offered, and there should be global collaboration among all groups of people without disregarding other species to provide equality and diversity as these are key concepts to maintain development. People should be open to new ideas and applications to ensure progress for all (Bostrom 2005a: 1-2).

Like transhumanism, there are also other philosophies that emphasize that the current human condition is not a final stage; it is flexible and evolving. One of these philosophies is posthumanism, which can be confused with transhumanism. So, in the following part there will be a comparative analysis on these currents to better understand the differences, and also to clarify the ambiguity in the shared term "posthuman".

1.1.1 Transhumanism, Posthuman and Posthumanism

As new philosophies that (re)define the human condition emerge due to developing science and technology, and new currents related to humanity's relation to these developments and its environment (including the Earth, all beings including sentient and non-human . . . etc.) emerge, there appears some confusion regarding the

²¹ In this dissertation, the term "posthuman" will always be used to refer to a radically enhanced human being in line with transhumanism. In the following part, there will be a detailed discussion on different meanings of "posthuman" in different philosophies.

terminology. Especially the word "posthuman", which is shared by both transhumanism and posthumanism with some difference in meaning, is the cause of such an ambiguity. It is because "they share a common perception of the human as a non-fixed and mutable condition" (Ferrando 2013: 27). It is known that "freeing human beings is the main objective" (Ranish and Sorgner 2014: 17) of these two philosophies, but their origin and motive are different; very briefly

"transhumanism aims at liberating humans from their biological limitation [by reinstalling] humanist concepts. Posthumanism, by contrast . . . hopes to liberate humans from the harmful effects of the established humanist paradigm by debunking its false assumptions." (Ranish and Sorgner 2014: 17)

To clarify, transhumanism sustains the human-centric attitude that also continues human-exceptionalism, but posthumanism challenges this idea in which human is at the centre. So it is possible to say that

"what [transhumanists] see as human enhancement, [posthumanists] see as further intensification of what is wrong with the human. While transhumanists see the fourth industrial revolution as empowering and human-centred, critical posthumanisms champion instead the change of our anthropocentric viewpoints." (Baelo-Allue and Calvo-Pascual 2021:11)

In this part, the key differences between transhumanism and posthumanism will be analysed by especially highlighting how they define "posthuman" in accordance with their philosophy.

In the previous section, transhumanism was briefly described as a philosophy that champions the idea of elevating the current human condition through the direct use of science and technology. This can cover all the attempts including genetic engineering, artificial womb technology, mind uploading, or cryonics just to name a few. For More, to understand the core idea of this philosophy, it is better to think about it as "trans-humanism". As he points out:

The advocates of this philosophy regard transhumanism as a transitional period which will eventually lead to the "posthuman", whose "basic capacities radically exceed those of present humans as to be no longer unambiguously human by our standards" (Humanity Plus 2009). So, they define the posthuman as a radically enhanced being due to advanced technologies. In More's words, being a posthuman is "exceeding the limitations that define the less desirable aspects of the 'human condition'" (More 2013: 4). With this definition, he highlights the wish to transcend the current limits—limited lifespan, and quality of life due to suffering, diseases—of human beings.

For Bostrom, posthuman is "a being that has at least one posthuman capacity" (2003b: 28), which is "a general capacity greatly exceeding the maximum attainable by any current human being without recourse to new technological means" (2003b: 29). By saying general capacity, he refers to enhancements in three realms—healthspan, cognition, and emotions—as always suggested by transhumanists (Bostrom 2003b: 29). Like More, Bostrom also remarks that transhumanism refers to a transitional period, so it is not possible to thoroughly understand what it will mean to be a posthuman, saying:

"aside from extended healthspans, the essence of posthumanity is to be able to have thoughts and experiences that we cannot readily think or experience with our current capacities, then it is not surprising that our ability to imagine what posthuman life might be like is very limited" (2003b: 32).

As Bostrom states, posthumanity is beyond our current understanding now because we are not posthuman yet. So, it can be inferred that what transhumanists say related to the posthuman is largely speculative.

Russell Blackford also explains what posthuman is, saying:

"technological intervention in the capacities of the human body and mind will lead to alterations so dramatic that it will make intuitive sense to call the deeply altered people of the near or not-so-near future posthuman . . . On the transhumanist picture, we are not posthuman yet, but we are a bridge . . . between historical humans and beings with posthuman capacities" (2013: 422).

Like former transhumanist theorists mentioned above, Blackford also specifies how the posthuman will be a dramatically altered being, and transhumanism will serve as a transition period until this leap in human progress occurs by means of advanced science and technology.

Transhumanism emphasizes "notions such as rationality, progress and optimism, [and this] is in line with the fact that, philosophically, transhumanism roots itself in the Enlightenment" (Ferrando 2013: 27). It takes it a step further by championing the direct use of science and technology during this improvement process. However, this close link may also weaken what transhumanism supports because as Ferrando puts it:

"in the West, the human has been historically posed in a hierarchical scale to non-human realms . . . [This idea] based on a human exceptionalism . . . has not only sustained the primacy of humans over non-human animals, but it has also (in)formed the human realm itself, with sexist, racist, classist, homophobic, and ethnocentric presumptions." (2013: 28)

To clarify what she discusses, Ferrando comments on the term "anthropos" which corresponds to "human" by referring to Aristotle's well-known phrase "Man is by nature a political animal" living in the city (Book I, 1253a). Ferrando discusses that this definition creates a hierarchy because "in Athens, for instance, women, slave, and resident aliens were excluded from the political life" (2019: 90). As a result, this definition of the human excludes various groups of people because it centralizes a male and rational being as human. So it can be said that although transhumanism seems very inspiring and promising in terms of advancement, it also has the risk of creating a technologically-mediated anthropocentric and dualistic environment where the radically enhanced posthumanity becomes the agent of this strictly hierarchical realm.

Transhumanism defines the posthuman as a dramatically advanced being, whereas this term is shared by posthumanism with crucial difference. In the introduction of *What is Posthumanism?* Cary Wolfe clarifies the difference between transhumanism and posthumanism by highlighting the basis of the former, saying that their understanding of posthuman "derives directly from ideals of human perfectibility, rationality, and agency inherited from Renaissance humanism and the Enlightenment" (2010: xiii), so transhumanism is the "intensification of humanism" (2010: xv). Wolfe, then, points out that his "sense of posthumanism is the opposite of transhumanism" (2010: xv) because it criticizes the ideals of

"humanism [that] try to make good on those commitments reproduce the very kind of normative subjectivity—a specific concept of the human—that grounds

discrimination against nonhuman animals and the disabled in the first place." (2010: xvii)

It not only champions human exceptionalism but also forms a specific understanding of the human—"universal 'Man" [that is] masculine, white, urbanized" (Braidotti 2013: 65). However, as Braidotti points out, "posthuman theory . . . does not rely on classical Humanism and carefully avoids anthropocentrism (2013: 56). She elaborates her ideas by drawing a parallel between the concept of monism and posthumanism, saying:

"a 'monistic universe' refers to Spinoza's central concept that ... matter is one...
[It] is based on the centrality of the relation to multiple others ... The classical emphasis on the unity of all matter, which is central to Spinoza, is reinforced by an updated scientific understanding of the self-organizing or 'smart' structure of living matter ... Posthuman subjects are technologically mediated to an unprecedented degree ... In my view, there is a direct connection between monism, the unity of all living matter and post-anthropocentrism as a general frame of reference for contemporary subjectivity." (Braidotti 2013: 56-7)

As she puts it, this idea of oneness is supported by advanced science and technology, and it "includes all non-anthropomorphic elements" (Braidotti 2013: 60), so

"the posthuman dimension of post-anthropocentrism can consequently be seen as a deconstructive move. What it deconstructs is species' supremacy, but it also inflicts a blow to any lingering notion of human nature . . . as categorically distinct from the life of animals and non-humans." (Braidotti 2013: 65)

It can be inferred that unlike transhumanism, which is anthropocentric, posthumanism challenges this view as it creates a dualistic and hierarchical categorization. Ferrando explains why anthropocentrism is problematic, saying: "the centrality of human implies a sense of separation and individuation of the human" (2019: 103), so it becomes an exclusive category. In line with this, Braidotti and Gilroy explain the anthropocentric attitude of humanism:

"The humanist core of 'Man'-namely the universal powers of reason, self-regulating moral inclinations and a set of preferred discursive and spiritual values – asserts and ideal of mental and bodily perfection. Together, they spell out a political ontology that combines belief in human uniqueness with enduring faith in a teleologically-ordained view of rational progress through scientific and cultural development manifested in European history." (2016: 2)

It will not be wrong to say that humanist idea not only excludes non-human others by placing human at the centre, but also leaves out various non-European groups as it takes the European as the norm. Additionally, Braidotti refers to Leonardo da Vinci's *Vitruvian Man* (1490), which represents a heterosexual, European and male figure and says: "that iconic image is the emblem of Humanism" (2013: 13). So, these categories are accepted as the norm of human, and the ones that do not fit in them are otherised and seen as inferior.

To sum up, both transhumanism and posthumanism share the idea that the human is an open notion; they (re)define what a human is in the current world where human is mixed with science and technology. Despite this shared idea, their root and motivation differ from each other substantially. The main subject of transhumanism is the human because it focuses on the augmentation of human beings. It is based on the Enlightenment, whose two assets are progress and rationality. Unlike transhumanism, posthumanism is briefly the deconstruction of the notion of the human. It does not see the human as the privileged species. For posthumanism, the existence is seen in interconnected ways; human is not disconnected anymore. So, different from transhumanism, posthumanism is post-anthropocentric, and rejects the idea of species (human) exceptionalism. In this study, I will make use of transhumanism rather than posthumanism because in the chosen works, the main subject is the human. Although there are few non-human beings—namely the AIs in Neuromancer and her, human beings and human enhancement (physically, intellectually and psychologically) are at the centre of each work. These works approach transhumanism critically rather than subscribing to it; the use of advanced science and technology for the enhancement of human beings is problematized in the selected works.

1.1.2 Oppositions and Defence of Transhumanism

Despite the promising statements of transhumanists, there are adversatives who think that transhumanism may create an unjust world and diminish human nature. For instance, Francis Fukuyama, a bioconservative, describes transhumanism as "the world's most dangerous idea" (2004: 42) because he thinks that if it is not prevented, it will diminish equality among people, saying:

"Underlying this idea of equality of rights is the belief that we all possess a human essence that dwarfs manifest differences in skin color, beauty, and even intelligence.

This essence . . . is at the heart of political liberalism . . . If we start transforming ourselves into something superior, what rights will these enhanced creatures claim, and what rights will they possess when compared to those left behind?" (2003: 42)

Fukuyama discusses that, with transhumanism, human nature, the only thing that provides equality among people will be harmed, and as a result, there will occur injustices. He also says poorer regions will be more vulnerable to such inequality as their access to advanced technologies may not be as easy as the rich ones (Fukuyama 2004: 43).

Similarly, a group of bioethicists, George J. Annas, Lori B. Andrews and Rosario M. Isasit, discuss the potential threats of human enhancement and alteration through genetic engineering. They think that making inheritable changes in human beings, and creating a different species can be destructive:

"[Through genetic engineering] . . . a new species or subspecies of humans will emerge. The new species, or "posthuman," will likely view the old "normal" humans as inferior, even savages, and fit for slavery or slaughter. The normals . . . may see the posthumans as a threat and if they can, may engage in a preemptive strike by killing the posthumans before they themselves are killed or enslaved by them." (Annas et al. 2002: 162)

These bioethicists discuss how modified or enhanced people may regard the others useless as they lack high capacities. Marginalized ones may reject using such enhancements due to different reasons like religious belief, or they may lack access to these technologies. So, to be able to avoid such a disastrous consequence, ethicists suggest that legal regulations should be made carefully. However, opponents of transhumanism think that it is not possible to maintain a complete equality because even today it cannot be established properly. Thus, they claim that current problems will be deepened through the excessive integration of science and technology into human lives.

Another fear of bioconservatives is the loss of human dignity. Fukuyama furthers his opposition against transhumanism by supporting the current human condition:

"We humans are miraculously complex products of a long evolutionary process...

Our good characteristics are intimately connected to our bad ones: If we weren't violent and aggressive, we wouldn't be able to defend ourselves [...] Modifying any one of our key characteristics inevitably entails modifying a complex, interlinked

package of traits, and we will never be able to anticipate the ultimate outcome." (2004: 43)

He explains that any attempts to diminish the undesired qualities may cause unexpected results because it means damaging the nature of human beings which should stay as a whole with its positive and negative features.

Another bioethicist, Leon Kass, also focuses on the loss of human dignity due to becoming an excessively enhanced being. He thinks that all species have characteristics different from each other, so human beings should not try to change their nature, saying:

"Cockroaches and humans are equally bestowed but differently natured. To turn a man into a cockroach . . . would be dehumanizing. To try to turn a man into more than a man might be so as well" (2003: 20)

He suggests that human beings should not be in search of altering their nature as it can devalue what a human being is though this change may offer advancement.

Fukuyama and Kass mainly base their negative ideas on scientific interventions to human biology—genetic engineering and other similar applications—on Aldous Huxley's fictional work, *BNW*, which presents a society that is strictly controlled by advanced technologies and science. As the members of this fictional community lack individuality as a result of the oppressive system, these bioconservatives suggest that such alterations in real life will lead to the dehumanisation of human beings.

As a response to Fukuyama, Kass and others who think that transhumanism will diminish human essence, Bostrom, in his paper titled, "In Defense of Posthuman Dignity," explains that human dignity is not possessed at the same high levels by all individuals, so suggesting a moral decline due to transhumanism is not a very reliable scenario. He furthers his discussion by saying that even if there appear posthumans who can be morally corrupted in the future there can be measures to prevent misuse (Bostrom 2005b: 210). So, instead of stopping the enhancement, legal precautions can be developed. He also says that the members of the society presented in Huxley's work are not "posthuman"; instead, they are degraded mentally and emotionally on purpose which is the very opposite idea of what transhumanists support (Bostrom 2005b: 206).

Roland Bailey, who is in favour of human enhancement through genetic engineering, deals with the issue in detail as a reply to various opposing ideas in his

article "For Enhancing People". For him, many of the bad scenarios are not well-founded:

"Technologies dealing with birth, death, and the meaning of life need protection from meddling—even democratic meddling—by those who want to control them as a way to force their visions of right and wrong on the rest of us. The ideal of political equality arose from the Enlightenment's insistence that since no one has access to absolute truth, no one has a moral right to impose his or her values and beliefs on others." (Bailey 2013: 333)

What Bailey tries to clarify is that as there is no strong and definite evidence for the negative consequences of genetic intervention, it should not be seen as the end of humanity. It can present a better future for us and our successors if technology is not controlled by a single authority. Bailey also claims that "bioethicists find it easier to concoct possible perils of a biotech future than to appreciate how enhancements will contribute to flourishing lives" (2013: 328). As many transhumanist thinkers support, advancements should be discussed openly among advocates of differing ideologies, so that there can be regulations and solutions against undesired consequences of advancements.

An important debate on scientific advancement is "eugenics". This philosophy focuses on both "positive eugenics" and "negative eugenics". The former one focuses on the possibility of improving the human race "by encouraging reproduction by people or populations with 'desirable traits" whereas the latter is "discouraging reproduction by people with 'undesirable qualities" (Pged). Due to Adolf Hitler's inhumane practices, this idea was criticized and prevented in the second half of the twentieth century. However, with new developments in gene editing, the fear of a revival of the previous negative practices has caused bioethicists and the public to oppose scientific advancements in these areas. It is thought that the masses will be controlled, and technology will be another means of oppressing people.

These negative scenarios underpin most of the oppositions to transhumanist practices, so Bostrom suggests that definite rejection of human enhancement stemming from probable scenarios may not be a rational decision for the good of humanity because, with ethical use of enhancements, the transhumanist movement can present various opportunities for human beings. Instead of disapproving these advancements, the solution can be freedom of choice as he points out:

"Transhumanists promote the view that human enhancement technologies should be made widely available, and that individuals should have broad discretion over which of these technologies to apply to themselves (morphological freedom), and that parents should normally get to decide which reproductive technologies to use when having children (reproductive freedom)." (Bostrom 2005b: 203)

In this context, reproductive technologies including artificial womb practice is controversial today. People have opposing ideas on this subject like many other advancements. With the practice of ectogenesis, it becomes possible to raise a fetus outside the human body—in an artificial womb. In this process, all the stages one fetus goes through from zygote (fertilized egg) to the moment the baby takes its first breath are followed.

The use of an artificial womb can provide a safer environment where the medical risks are minimized during pregnancy and childbirth, or can help women with health problems to have babies. Apart from medical advantages, it can provide some benefits to women in social areas: they can have babies according to their own timetable as this process does not physically affect women, they can go on their own working routines. As a result, discrimination due to pregnancy can be prevented by this application. However, some feminists think that it will deprive women of an important aspect of womanhood, and the feminine mystique will be lost through this artificial process. Some also argue that it may destroy the bond constructed between the mother and the fetus during pregnancy as giving birth creates a strong connection.

Despite these fears, Shulamith Firestone, in *The Dialect of Sex*, argues that women can be liberated provided that they are freed from the social and biological limitations of pregnancy. She says

"the freeing of women from the tyranny of their reproductive biology by every means available, and the diffusion of the childbearing and childrearing role to the society as a whole, men as well as women" can be a solution." (Firestone 1971: 206)

She also thinks that in the distant future "the potentials of modern embryology, that is, artificial reproduction" may be another solution to prevent discrimination related to pregnancy (Firestone 1971: 206). Being the only reproducers of society, women are exposed to various restraints from physical to social: control of fertility, control of abortion rights, or exclusion from business life. After more than four decades, Firestone's "distant solution" has become one of the

hot debates today due to new technologies, but not to cause a Brave New Worldian oppressive system, the reproductive freedom should be the main interest in artificial reproduction technology.

Generally speaking, transhumanists desire to develop the current human condition by solving problems caused by biological, mental and emotional limitations. However, some bioethicists or bioconservatives are either sceptical or against these enhancements due to differing reasons as discussed. As a result of this, transhumanist philosophers, scientists, or other supporters focus on the ethical use of advanced technologies. In an interview, Andrés Lomeña asks about the negative perspectives such as loss of human identity, feasibility or existential risks of transhumanism to Nick Bostrom and David Pearce. In reply to these, Bostrom says that as long as fears about the potential risks do not prevent people from using beneficial applications, it can be useful during the decision-making process. Pearce also says that there can be dangerous results as suggested by bioconservatives, but also that transhumanism can present a better future for us. When there is no clear evidence, it is not reasonable to reject the potential benefits. He also adds that there should be freedom of choice for individuals, and says: "transcending the flesh might be an option; . . . not an obligation" (Lomeña 2007: 2-3). As the current time is a transition period, it is not clear how to establish a system that gives freedom to all people to access, use, or reject the possible applications. For transhumanists, it is time to discuss them openly.

Additionally, supporters of creating artificial intelligence (AI), a machine that can simulate the thinking process of human beings, emphasize that this technology may present a better world by easing human beings' lives so that everyone will have time for other activities. It may be the last invention of human beings as a general AI will have the capacity to learn, evolve and create new technologies. However, in contrast to these, some researchers, tech ethicists, or the public fear that AIs will be the end of humanity by taking over all our jobs, dominating us, and being uncontrollable. Due to this fear, there are oppositions to the attempts of transhumanists to create advanced technologies like AIs, artificial wombs, or treatments providing longevity as they may deepen the current inequalities, and lead humanity to its end.

Knowing all the oppositions, supporters of this movement explain their main goals, and defend the ethical use of scientific and technological advancements. They

say technology should be used to make human beings more enhanced in a positive way, and these enhancements should be accessible by everyone. In the "Transhumanist Declaration," the key goals are listed under eight articles:

- a) "We imagine a future where humanity will be enhanced by transcending its biological, mental, and emotional limits.
- **b**) We think that there are new opportunities to enhance human beings as the current condition is not the end of our evolution.
- c) We are aware of the potential risks caused by misusing of new technologies; "Although all progress is change, not all change is progress".
- d) We should contemplate all the possible scenarios, and find ways to accelerate the best applications for all. The decision-making process should be made openly by everyone's active participation.
- e) Diminishing existential risks, providing a healthy and longer life span, reducing pain, enhancement of common sense and intelligence are our main goals.
- f) Policy making should be done carefully by considering benefits/risks, autonomy and rights of all individuals around the world.
- g) All current and future beings' welfare is a priority for us; human/nonhuman, natural/artificial, modified/unmodified.
- **h)** There must be free choice in enhancement and modification technologies." (Humanity Plus 2009).

These transhumanist thinkers are aware that this movement cannot guarantee a utopia for people, but they also claim that using science and technology to enhance human beings may not cause an inevitable apocalyptic end for humanity as bioconservatives suggest. What they defend is that policy makers must consider both negative and positive consequences of advancements by regarding the common good without diminishing individual autonomy and rights. Although transhumanists have very promising plans for humanity in theory, there is not a consensus on how to put all these into practice: how to protect individual rights, in what ways the probable practices will affect the society, or who will be involved during the decision-making process. These questions related to transhumanist applications should be answered because they have direct impact on society: they will change the way people define themselves, and the way the society is formed.

1.2 FOUCAULT'S THEORY OF DISCIPLINE

As mentioned while explaining the governing idea of transhumanism, the liberation of human beings from all their physical constraints is a key point; advocates of this philosophy champion that human beings will have somatic freedom, and they will be able to take the control of their bodies on their own. However, in the chosen texts, transhumanist technologies become a medium to supervise people not only physically but also intellectually and psychologically. These scientific applications, in fact, create over-controlled bodies and minds. In that respect, Foucault's theory is useful while explaining how people in the created societies are controlled in techno-science societies.

In *Discipline & Punish*, Foucault explains how the old form of punishment which targeted directly the body of the condemned changed its direction from body to the soul with the emergence of industrial societies; he says public punishment gave way to private punishment, and visible torture gave way to punishment that lacks public disclosure and cruelty because it is "intended not to punish the offence, but to supervise the individual, to neutralize his dangerous state of mind, to alter his criminal tendencies" (Foucault 1995: 18). There are notable differences between these two forms of punishment, and the reason is that in the past, a crime was seen as an offence to the ruler. Foucault claims,

"[b]esides its immediate victim, the crime attacks the sovereign: it attacks him personally, since the law represents the will of the sovereign; it attacks him physically, since the force of the law is the force of the prince." (Foucault 1995: 47)

However, by the end of the 18th century, a crime was considered a misdeed for the whole society, so the criminal was "the enemy of society as a whole," and "[t]he right to punish has been shifted from the vengeance of the sovereign to the defence of society" (Foucault 1995: 90). As a result, punishment becomes a tool to correct the criminal's mind to sustain order within the social body.

Foucault's focal point is on the underlying "political technology of the body", which has to be understood in relation to the "soul" as a social and ideological construct (1995: 24). There emerges a system of punishment "that acts in depth on the heart, the thoughts, the will, the inclinations" (Foucault 1995: 16). As "[t]he old partners of the spectacle of punishment, the body and the blood, gave way", a new form of punishment which is "masked" emerges (Foucault 1995: 16). The idea of "less cruelty, less pain" and "more kindness" may seem to present a more humane

penal system, but the main reason for minimizing bodily punishment is to create a system of permanent surveillance, and in this way to construct identities by constant control (Foucault 1995: 16).

While talking about the shift in the object of the penal system, Foucault explains how one is exposed to subtle physical control and says: although

"'lenient' methods involving confinement and correction [are used], it is always the body that is at issue—the body and its forces, their utility and docility, their distribution and their submission" (1995: 25).

Elimination of physical pain does not mean that the body is off the stage, it still has a significant part in the new penal system. In prisons, the prisoners' behaviours are controlled by a strict time-table; "under constant supervision; each moment of the day was devoted to a particular type of activity, and brought with it its own obligations and prohibitions" (Foucault 1995: 124). As a result, the condemned becomes a "productive body and a subjected body" (Foucault 1995: 26). While being disciplined within this system, he learns to be submissive as everything is scheduled in prison, and he also produces as working is obligatory.

Foucault draws a parallel between prisons and other institutions, such as schools, hospitals and factories. Although they all seem to have different functions within a society, the core idea is to turn an individual into a docile body that is "manipulated, shaped, trained, which obeys, responds, becomes skilful and increases its forces" (Foucault 1995: 136). As a result, one becomes an end result of this system; it constructs one's identity through constant control over the body and mind. Identity becomes bound up with the system because it circulates within this mechanism.

Foucault elaborates his ideas on discipline and punishment by using Bentham's panopticon. In the part named "Panopticism", Foucault, first, exemplifies the measures taken during the plague in the late seventeenth century; order was maintained through constant surveillance and recording. To maintain order in a town, "a strict spatial partitioning" was applied, and the residents of the town were made to stay at home, and they were observed and checked regularly by the syndics who reported all the records to the centre (Foucault 1995: 195). No communication was allowed among the residents; the system established was based on "great confinement" and "correct training" (1995: 198). As a result of this strict system, contact of the ill residents with the healthy ones was prevented, and it can be said that this plague-stricken town became a "perfectly governed city" (Foucault 1995: 198).

Foucault compares the outcomes of this control mechanism during the plague with the one in modern society, and says "[t]he plague-stricken town, traversed throughout with hierarchy, surveillance, observation, writing" gave way to a perfectly "disciplined society" (1995: 198). Each step is known by the ones who exercise power because "[t]he gaze is alert everywhere" (1995: 195). So in such a society, the way one thinks, believes and acts is constructed through social mechanism.

He explains how such a system is established by using this architectural structure panopticon, which was designed as a prison. According to this scheme, there is a single tower surrounded by various cells which have two windows, one of which looks at the tower, and the other is placed on the opposite wall. As daylight enters into the cell from the second window, the condemned becomes visible, and the supervisor in the tower can easily see all the prisoners simultaneously. One of the key points that makes this system efficient is the thought that the supervisor is not visible to the prisoners, so they need to be careful about what they do because "[v]isibility is a trap" for them; they feel like they are being watched constantly (1995: 200).

Foucault explains how this building ensures self-control and says that the main goal of the panopticon is "to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power" (1995: 201). With this possibility of being seen all the time, the prisoners feel the need to control their actions even if they cannot see or know whether there is a controller in the tower or not. As a result, the panopticon becomes "a machine for creating and sustaining a power relation independent of the person who exercises it" (Foucault 1995: 201).

In fact, the panopticon is a system that provides discipline among the members of a society without using direct force on them. So, Foucault describes two different control mechanisms in which power is exercised; the first one is

"the discipline-blockade, the enclosed institution, established on the edges of society, turned inwards towards negative functions: arresting evil, breaking communications, suspending time" and the other is panopticism." (1995: 209)

In the first one, power is more centralized and hierarchical; one is always watched by a controller with a higher rank and information about him/her is collected by a top supervisor. However, in the panoptic structure, power is decentralized; it is

not owned by a sovereign who has absolute power. Instead, individuals internalize this concept and behave accordingly. As a result, it functions as a technique "for making useful individuals" by forcing them into a machinery (Foucault 1995: 211). In fact, they become functional and docile beings shaped by the system, and function within this system again.

Foucault talks about the efficiency of discipline at schools saying:

"... the Christian School must not simply train docile children; it must also make it possible to supervise the parents, to gain information as to their way of life, their resources, their piety, their morals. The school tends to constitute minute social observatories that penetrate even to the adults and exercise regular supervision over them." (1995: 211)

Schools are one of the best examples of such disciplinary places that watch both children and parents simultaneously. Here, children are trained, corrected and shaped in a desired way at very early ages because these institutions are places where "the individual is carefully fabricated in [them]" (Foucault 1995: 217). They become the end product of this mechanism of discipline.

Consequently, Foucault asserts that the most efficient way to control a mass of people is a mechanism of discipline because it is "the unitary technique by which the body is reduced as a 'political' force at the least cost and maximized as a useful force" (Foucault 1995: 221). Individuals can be trained, supervised and corrected collectively with minimum cost. And also, this mechanism operates in a subtle way because "the old principle of 'levying-violence', which governed the economy of power" has changed into "mildness-production-profit" (Foucault 1995: 219). As a result, "the multiplicity of men and the multiplication of the apparatuses of production" are ensured (Foucault 1995: 219). While talking about production, Foucault emphasizes that it is not limited to just economy, but related to all kinds of production which takes place within different institutions like "knowledge and skills in the school, the production of health in the hospitals" (1995: 219). So this system re-produces every bit of society continuously; for instance, when a specific behaviour pattern is produced, it is normalised and internalised by being exchanged among people repeatedly. Then, it becomes a norm which is ready to be produced again and again. Everybody internalises the system and its results automatically because discipline is the sum of techniques used "to increase both the docility and the utility of all the elements of the

system" (1995: 218). All individuals and institutions serve this mechanism of discipline as they become an inseparable part of it.

1.3 GRAMSCI'S CONCEPT OF HEGEMONY

Like Foucault, Antonio Gramsci also emphasizes the insufficiency of brutal force in governance by highlighting the significance of consent. For him, by gaining the unconscious approval of people, the dominant group's ideology can be spread easily to masses without opposition. In relation to Gramsci's idea, it can be said that transhumanism is used to manufacture consent by presenting partial benefits for people and manipulating their thoughts and emotions. So these technologies become a tool to control these people in a subtle way as can also be seen in the chosen texts for this study.

Gramsci, in his *Prison Notebooks*, discusses the emotional and cultural factors in ensuring the dominance of a state by highlighting the importance of consent in governance. For him, hegemony, which is "[t]he 'spontaneous' consent given by the great masses of the population to the general direction imposed on social life by the dominant fundamental group," provides a more subtle authority over people using various cultural elements rather than the use of direct power (1992: 12). By doing this, the ruling group influences the masses by gaining also their approval though it is an unconscious acceptance.

Gramsci explains his theory of power with two concepts, namely coercion and consensus. These two also correspond to two distinct divisions of society as "state/political society" and "civil society". The former one with coercive institutions, consists of the government, legal system and armed forces while the latter which is "the ensemble of organisms commonly called 'private', there appear schools, religious associations and the family" (1992: 12). Civil society provides a consensus among individuals through an ideological control, but this does not mean forcing citizens to change their current ideas with the ideology of the ruling class. Instead, the majority adopts and interiorizes the values and norms of the group in power, so without coercion, the dominant group's ideas become the subordinate group's ideas. As Gramsci suggests, this is maintained by "turning necessity and coercion into 'freedom'" (1992: 242).

Unlike the civil society, in political society, there is "[t]he apparatus of state coercive power which 'legally' enforces discipline on those groups who do not

'consent' either actively or passively" (12). However, Gramsci thinks that no government can perpetuate its dominance alone with coercion; to have a long-term existence, it needs the approval and support of the majority. So coercion comes into existence only when "spontaneous consent [fails]" (1992: 12). The primary goal is to achieve approval, so it has to manipulate individuals in a subtle way to have their consent. By controlling the superstructure of the society, manufactured consent is achieved: individuals think that all their choices are the result of their free will—unaware of being controlled throughout their lives by the education they get at schools, by the moral values imposed on them in their families and by the ideas propagated through films, the news or printed media. In such an environment where an individual is exposed to constant superintendence, an illusion of freedom is created. As a result, the status quo is sustained by producing itself again and again.

Like Foucault, Gramsci also highlights the key role of the education system. Schools function like a factory in which "[m]ass formation [standardises] individuals both psychologically and in terms of individual qualification" (Gramsci 1992: 13). As a result, there appears a large group of people shaped by the dominant mentality, and they continue to feed the ideology of the state by reproducing new individuals conditioned in the same way. All emotions and behaviours are standardised through criteria set by the governing groups: behaviours have fixed meanings, and concepts are defined in certain ways. For instance, if one is in love with someone, he/she behaves in a very predictable way because people's understandings and perceptions are fed by education or the media to sustain the established system. So human beings become machine-like; programmed to do, feel and think in a prescribed way.

While explaining how hegemony works within society, Gramsci talks about intellectuals and their function in this system. He uses the term intellectual to refer to a larger group instead of just scholars, men of letters or artists. For him, "[a]ll men are intellectuals . . . but not all men have in society the function of intellectuals" (Gramsci 1992: 9). What Gramsci points out is that all people perform tasks that need a specific amount of intellectual capacity or skill, like sewing or teaching a subject to someone because "[t]here is no human activity from which every form of intellectual participation can be excluded" (1992: 9). However, they cannot function as intellectuals in all these areas because being an intellectual necessitates the use of intellect as one performs his/her professional activities; it is not possible for everyone to function as intellectuals in all fields.

Gramsci further explains how groups of intellectuals are formed with the following words:

"Every social group, coming into existence on the original terrain of an essential function in the world of economic production, creates together with itself, organically, one or more strata of intellectuals which give it homogeneity and an awareness of its own function not only in the economic but also in the social and political fields." (1992: 5)

For Gramsci, each newly emerging group creates a unity that gives the members a sense of team spirit and identity due to their common expertise and function within society. And there appears a reciprocal interaction in each group; members shape the group by identifying the specific features that they need to have, and naturally, they are shaped by these determined qualities. So it produces itself continuously.

To elaborate on how these intellectuals function within society, Gramsci discusses two types of intellectuals: "traditional" and "organic" intellectuals. The members of the former group function as "simple orators", repeating the dominant ideology. Any person working for the state's permanence—clergymen, academicians, journalists—functions as a traditional intellectual because unlike an "organic intellectual", who is "in active participation in practical life, as constructor, organiser, [and] permanent persuader" (1992: 10), he/she repeats the ideology at present in which he/she is formed. They are, generally, members of a group of intellectuals who are "already in existence and which seemed indeed to represent an historical continuity uninterrupted even by the most complicated and radical changes in political and social forms" (1992: 7). The members of a group sustain the established order by controlling moral values, education system, beliefs, and social relations. For Gramsci, the best example of this type of intellectualare ecclesiastics,

"who for a long time . . . held a monopoly of a number of important services: religious ideology, that is the philosophy and science of the age, together with schools, education, morality, justice, charity, good works, etc." (1992: 7)

Members of this group have always been prestigious due to their closeness to the decision makers and legislators. As a result, they have always had influence on individuals because they are "the dominant group's 'deputies' exercising the subaltern functions of social hegemony and political government" (1992: 12). So, masses can be shaped and controlled through education, media, values, belief

systems or social relations in accordance with the dominating group's ideology without coercion as it becomes the norm and is accepted willingly.

Despite their uninterrupted continuity throughout history, ecclesiastics have also witnessed the emergence of new groups of intellectuals which causes a kind of struggle among these groups. High-ranked officials, academicians, administrators or philosophers can be counted as members of these newly emerging groups. Because they dissociate themselves from the governing group due to their qualifications, they present themselves "as autonomous and independent of the dominant social group" (Gramsci 1992: 7). However, Gramsci points out that it is the "expression of that social utopia by which the intellectuals think of themselves as independent, autonomous, endowed with a character of their own, etc." (1992: 8). It is not possible for them to be wholly free from the dominant group because "intellectuals are, precisely, the 'functionaries'" (1992: 12). They mediate between the top and the bottom; they spread the governing ideology to the masses through various apparatuses like education, values and behaviour patterns.

1.4 JEAN BAUDRILLARD'S CONCEPTS OF SIMULACRA AND SIMULATION

In the works used for this study, transhumanism fails to ensure freedom for people; instead, people live in a simulation in which they think that they are freed from their inherent boundaries like limited bodies and negative emotions. By presenting such benefits, ironically, people are highly controlled in various ways. In relation to this, Jean Baudrillard's theory is used in this thesis to explain how transhumanism creates over-controlled societies through the illusion of freedom.

Jean Baudrillard starts Simulacra and Simulation with an epigram: "[t]he simulacrum is never that which conceals the truth – it is the truth which conceals that there is none. The simulacrum is true" (1983: 1). He explains how the absence of truth is hidden, and elaborates on this idea by referring to Borges's story, saying:

"The territory no longer precedes the map, nor survives it. Henceforth, it is the map that precedes the territory—PRECESSION OF SIMULACRA—it is the map that engenders the territory." (1983: 2)

For him, models determine today's world as the contact with the real world is lost. As a result, "it is no longer real at all. It is a hyperreal" (1983: 3) which is the "generation by models of a real without origin or reality" (1983: 2). By saying this,

Baudrillard does not mean that the contemporary world is fake because the idea of being fake also needs the real to make such a comparison. What he emphasizes is the loss of this distinction between the real and the copy, and he says: ". . . it is no longer a question of either maps or territories. Something has disappeared: the sovereign difference between them that was the abstraction's charm" (1983: 2).

The hierarchical relation between the authentic and the counterfeit in which the former is always privileged disappears because the emergence of the hyperreal wipes off the referential being in this dichotomy, so there is no distinction between the original and the copy in the contemporary world.

Baudrillard argues that the image becomes more real than the real itself as the distinction between the real and the copy is blurred, and to support this idea, he summarizes this process in four stages:

- 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." (1983: 11)

In the first stage, the sign reflects a reality, whereas it becomes an unfaithful copy by masking the reality in the second phase. In the following stage, it becomes a representation with no original despite pretending to be a faithful copy. In the last phase where the sign can be considered simulacrum, the original (the referent) is absent because the image has no connection to any reality. As a result, it generates its own reality; the hyperreal, in which it becomes impossible to spot the difference between the real and the simulation. In fact, Baudrillard highlights the impossibility of distinguishing what is real from simulation especially in the contemporary world where everything is controlled by the media and advanced technology.

Baudrillard talks about three different orders of simulacra, and he associates each one with a different historical period. In the first order which is identified with the pre-modern period, the image is a copy of the real; it represents the real. However, in the second order, associated with the Industrial Revolution, the distinction between the real and its representation is blurred due to mass production; as the copies are multiplied, they become as real as the original. The counterfeit threatens to replace the real. In the last phase, identified with the postmodern era, the distinction in the former order disappears; there appears only the simulacrum. In such

a situation, originality becomes a futile concept. So, in the contemporary world, the model precedes the real, and also determines it.

Baudrillard exemplifies his ideas through the TV show *The Louds*, which filmed the everyday life of an American family in 1971. The shooting lasted for seven months and there was no script given to the family. Baudrillard says it is "neither true, nor false: but utopian. The 'as if we weren't there' is equivalent to 'as if you were there" (1983: 50). So this excessive transparency eliminates the possibility of being authentic as it loses its virginity. In this system, "'YOU are the model!' 'YOU are the majority!'" (Baudrillard 1983: 53). As the distinction between the real and the copy vanishes, it becomes hyperreal—a point where these two merge into each other.

1.5 HARAWAY'S CONCEPT OF THE CYBORG AND DISCUSSIONS ON GENDER

Advocates of transhumanism claim that this philosophy will provide freedom for all beings including non-humans. Based on this idea, it can be inferred that transhumanism will also provide equality between the genders although transhumanists do not put specific emphasis on this subject. However, there are theorists who think that technological applications will free females especially from their bodily limitations.

In A Cyborg Manifesto, Donna Haraway argues that being a cyborg frees females from gender-based limitations established by the male-dominated system, and says: "the cyborg is a creature in a postgender world . . . [it] has no origin story in the Western sense . . . [so it] skips the step of original unity" (2016: 8). Through this entity which is half organic and half inorganic—a hybrid body— gender-bound identities and roles will be diminished because the cyborg does not seek a single and enclosing final union as it does not have an origin. Haraway thinks that a cyborg does not have to follow a fixed identity because it has flexibility in its nature as a result of being part machine and part organic; it does not belong to a single category. It stands on the edge where it gains its hybridity. Similarly, Victoria Pitts says "hightech body appears socially plastic" because technology is believed to have the potential to free human beings from their cultural limitations as well as physical constraints, so "embodied categories of power like gender, race, and sexuality seem less rigid" (2005: 230). Through technology, human beings can be free of fixed

identities and the roles these identities bring. Haraway discusses how this new woman (cyborg) does not desire such a unity imposed by a heterosexual order, and says: "through the fabrication of a heterosexual mate . . . [she] does not dream of community on the model of the organic family" (2016: 9). The cyborg goes beyond the limitations of such a system through the hybridity of its body, and it is freed from the constructions of the society.

In Haraway's terms the "cyborg myth is about transgressed boundaries, potent fusions, and dangerous possibilities"; by being cyborgs, women will be freed from the controlling and limiting system that impose fixed identities on them (2016: 14). More specifically, as Anne Balsamo suggests, the cyborg will have the potential to go beyond the limits set by the dominant ideology:

"Cyborgs are hybrid entities that are neither wholly technological nor completely organic, which means that the cyborg has the potential not only to disrupt persistent dualisms that set the natural body in opposition to the technologically recrafted body . . . Cyborg bodies are definitionally transgressive of a dominant culture order, not so much because of their "constructed" nature, but rather because of the indeterminacy of their hybrid design." (1996: 11)

Because of its hybridity, the cyborg does not fit into a single category, and this makes it a rebel against all classifications. This bodily coexistence of both organic and inorganic parts within the cyborg body is seen as an opportunity to violate the established stereotypical gender identities through its hybridity. Pitts also says "the development of female strength . . . can be seen as subversive in that it challenges ideals of heteronormative femininity" (2005: 44). However, as Balsamo suggests, it is not possible to have an environment free of the identity or material body because "the gender . . . identity of the material body structures the way that body is subsequently culturally reproduced and technologically disciplined" (1996: 233). In the chosen texts, although transhumanist applications seem to provide partial freedom for women, the inequality between male and female characters is not diminished. In fact, it takes different forms, but is still sustained through advanced scientific and technological practices.

Heteronormative societies are depicted in all three works, so traditional gender identities are still at work although transhumanist technologies provide females with some physical freedom. For instance, in *BNW*, females no more give birth as babies are hatched in bottles. So they are freed from medical risks or social

limitations caused by birth giving. However, they are brainwashed to use contraceptives, so they are not really free.

Similarly, in *Neuromancer*, the female character is physically objectified through her body; she has an enhanced body, and serves a male partner in various ways. She protects him and sexually satisfies him. While discussing the position of females, Luce Irigaray says the woman finds herself in a "*state of dependency upon man*" (1985: 27). As a result, she lacks autonomy due to this dependency: she cannot be the agent of an action; instead, she is only affected by the actions he performs. Because a heterosexual society is presented in *Neuromancer*, the female body just serves for the satisfaction of the male desire and needs in differing ways though the somatic enhancements seem to provide partial freedom and strength for the female character.

In the last work, *her*, the female character is an inorganic being; an AI uploaded into a metal box. Although this character is an invisible synthetic being, there is a romantic relationship between her and the male character. The main character is in a simulation, and his relation with this inorganic being seems more real than his relation with flesh-and-blood beings. This man-made entity is not an organic female character; however, through the conversations between her and the male partner, the traditional discourses on gender are sustained. The non-physical AI is there just to satisfy her male counterpart like a traditional female partner. As Irigaray puts it:

"Woman . . . is only a more or less obliging prop for the enactment of man's fantasies. That she may find pleasure there in that role . . . But such pleasure is above all a masochistic prostitution of her body to a desire that is not her own, and it leaves her in a familiar state of dependency upon man. Not knowing what she wants, ready for anything, even asking for more, so long as he will "take" her as his "object" when he seeks his own pleasure. Thus she will not say what she herself wants; moreover, she does not know, or no longer knows, what she wants." (1985: 25)

Irigaray's argument suggests that within a heterosexual society, in which man is the dominant, active and strong one, woman becomes submissive in all areas including sex. She forgets about her own desires, and uses her body as a stimulator of man's. In fact, like what Gramsci and Foucault say, this is an unconscious disregard as a result of her construction within the society: a continuous teaching she is exposed to through family, culture, media and society to satisfy male desire makes

her internalize this role without objection. So the woman, instead of exploring her own body and passion, sees satisfying the man as her primary goal. She tries to excite him by feeding his desires, and is objectified in the hands of man who is seeking his own bodily pleasure.

These three works support the idea of inequality between males and females by manipulating minds and bodies through control especially the female onebecause in each work, there appears a different body produced, enhanced or created by transhumanist technologies; a highly-healthy organic body in *BNW*, a cyborg body in *Neuromancer* and a materially non-existent body in *her*. These works present three alternative female bodies; material, hybrid and invisible. The aim of this study is to show how transhumanist technologies become oppressive for female characters particularly despite having different types of bodies.

CHAPTER II

BRAVE NEW WORLD

Aldous Huxley's *Brave New World* (1932) portrays a technology-driven society in which the Worldians have several benefits like absolute happiness provided with the drug soma, an active life and young-looking disease-free bodies. This chapter discusses how the residents of the World State in *BNW* are abused through transhumanist technologies such as genetic engineering, artificial womb technology, hypnopaedia and soma, and how the Worldians are manipulated by creating an illusion of freedom through consent, so they think that they are autonomous though they live in a highly supervised society. In my analysis, inequality between male and female characters is another issue because the World State is male-dominated, and females are exposed to this controlling mechanism more than males though transhumanism aims to present a liberating environment free from limitations for all.

BNW presents a fictionalized World State divided into ten sections, each of which is governed by a World Controller. The Controllers are responsible for the stability of their own districts. Set in London in A. F. 632²² that corresponds to A. D. 2540, *BNW* portrays an imagined state which is internally divided into five groups, namely Alphas, Betas, Gammas, Deltas and Epsilons, based on scientific developments (in vitro fertilisation and ectogenesis, genetic engineering, Bokanovsky process) and brainwashing techniques (hypnopaedia, neo-pavlovian conditioning). While Alphas are well-built and smart, Epsilons have poor bodily features and mental capacity.

Mustapha Mond²³, the Controller of Western Europe, is the highest person in charge of the region including London. The Director of Hatcheries and Conditioning

²² Henry Ford's Motor Company produced its first Model T in 1908. It was manufactured by the assembly-line production system, and this date is accepted as the beginning of a new era in the novel because this system is used for the production of human beings in the World State.

²³ The name of the World Controller is a combination of Mustafa Kemal Atatürk, founder of the Turkish Republic, and Alfred Mond, who was the founder of Imperial Chemical Industries

is responsible for the orientation of new students and order in the centre. The DHC²⁴ does not like Bernard Marx, an Alpha-Plus specialist on hypnopaedia, because of his contradictory behaviours to the State's ideology, and he threatens Bernard with dismissal if he continues to behave unusually.

Bernard is an outsider because of his physical defect—smaller than a usual Alpha-Plus—and because of his diverging ideas. However, as he is very successful in his job, he has privileges that very rare people have. By using this advantage, he suggests spending the holiday in the Savage Reservation in New Mexico to Lenina Crowne, whom he likes. Lenina accepts this offer because she is curious about the lives of natives restricted to Savage Reservations, although she has been dating Henry Foster, an Alpha superintendent working for the DHC. When Bernard visits the director to get the papers for permission, the DHC tells how he lost his partner in the same Reservation years ago.

During their visit in the Reservation, Bernard and Lenina meet John, a young man born there, and his mother Linda, who Bernard realizes to be the DHC's lover and son. Bernard decides to take these people to the State because he wants to ruin the DHC's life as their hate is mutual. When all four arrive at the State, the DHC exiles Bernard to Iceland. However, Bernard introduces Linda and John when everyone is watching them. Upon learning that Linda is alive, and John is his son, the DHC resigns feeling embarrassed because in the State, concepts like fatherhood, motherhood are seen as obscene as there is no natural birth or family bond.

Coming back to the State after many years, Linda takes soma, a drug used to give people temporary happiness when there are undesired feelings, even though she knows it means her death. When Linda waits for her end in peace, Bernard, John and Helmholtz Watson spend time together. Helmholtz, an Alpha-Plus emotional engineer, is also different from others because of his unorthodox ideas, like his close friend Bernard.

When Linda dies, John feels so depressed on his loss that he blames the State, and causes a riot among the Deltas during a soma distribution by throwing away all the drugs. Helmholtz and Bernard are also involved in the fight to help John. Upon

²⁴ The abbreviated form, DHC will be used to refer to The Director of Hatcheries and Conditioning Centre in this dissertation.

Corporation. This naming is of importance because World Controller, Mustapha Mond becomes a symbol of modernisation due to his first name, and also represents science and development because of his surname. (Abiturerfolg)

this troublemaking, these three men are arrested and taken to Mustapha Mond's office, where John and the controller talk about everything from art and science to traditional values like love and religion. The Controller explains that some values are sacrificed for the State's stability, but John opposes this idea as he believes these things make them human.

In the end, Bernard and Helmholtz are exiled to different islands because they are seen as threats to the state's stability. John wants to join them, but the Controller does not accept this offer as he wants John to stay in the State. However, John makes his own choice, and settles in a lighthouse where he can start a new life by isolating himself from the State. When John is found by the Worldians, he hangs himself as he does not want to be a part of this new order.

When the novel was written by Huxley in 1932, there were scientific advancements like eugenics, which have also signs in *BNW*. Huxley was also a member of the Eugenics Society for a short period, and in an essay he says that some advocates of eugenics propose methods, which "range from modest proposals to sterilize the mentally deficient [and encouraging] the fertility of the intelligent" (1927). It is possible to say that he partly agrees with this application when it is for the benefit of the society by perfecting the future generations' genetic heritage. However, the transhumanist movement was not wholly established in its modern meaning. The term transhumanism was first used by the author's brother Julian Huxley in his article "Transhumanism" (1957), in which he explains the possibility of human enhancement by direct intervention of science and technology, saying: "man remaining man, but transcending himself, by realizing new possibilities of and for his human nature" (6).

Supporters of the transhumanist movement defend the ethical use of scientific and technological advancements to make human beings more enhanced in a positive way, and these enhancements should be accessible to everyone. In the "Transhumanist Declaration", Article 6 says:

"Policy making ought to be guided by responsible and inclusive moral vision, taking seriously both opportunities and risks, respecting autonomy and individual rights, and showing solidarity with and concern for the interests and dignity of all people around the globe." (Humanity Plus 2009)

These transhumanist thinkers are aware that this movement cannot guarantee an absolute utopia for people, but they also claim that using science and technology to enhance human beings may not cause the inevitable apocalyptic end for humanity that bioconservatives claim it will. They think that during the policy making process, both risks and possibilities should be taken into consideration. Additionally, they emphasize the freedom of personal choice on the use of new technologies, saying: "We favour allowing individual wide personal choice over how they enable their lives" (Article 8) (Humanity Plus 2009). So there should not be a pressure for the use of new technologies such as reproductive technologies, gene editing procedures or other human enhancement technologies.

Nick Bostrom notes in his article "Human Genetic Enhancements: A Transhumanist Perspective" that

"[c]urrent humanity need not be the endpoint of evolution. Transhumanists hope that by responsible use of science, technology, and other rational means, we shall eventually manage to become post-human, beings with vastly greater capacities than present human beings have." (2003a: 494)

Definite rejection of human enhancement stemming from probable scenarios may not be a rational decision for the good of humanity because with ethical use of enhancements, the transhumanist movement can present possible opportunities for human beings. Instead of disapproving of these advancements, the solution can be freedom of choice. As Bostrom points out transhumanists support the idea that these technologies should be easily accessible to everyone so that individuals can have the right to choose any of these human enhancement technologies freely. Briefly, transhumanists promote "morphological freedom" and "reproductive freedom"; it should be an individual's own choice (2005b: 203).

Although transhumanism intends to create a more peaceful and liberating atmosphere for human beings by diminishing aging and diseases, or upgrading human cognitive capacity, in *BNW*, science and technology are abused by a group of people who manipulate and control the Worldians for their own benefits. Instead of creating all Worldians as smart beings with well-built bodies, the World State categorizes them, and deliberately produces beings who have low mental and physical capacities. The only aim is to sustain stability, and take advantage of the Worldians.

2.1 DESIGNING MANAGEABLE BODIES THROUGH GENETIC ENGINEERING AND ARTIFICIAL WOMB TECHNOLOGY

In *BNW*, there is a lab-created caste system—Alphas, Betas, Gammas, Deltas and Epsilons, which is designed by genetic engineering and artificial womb technology. A Worldian becomes physically suited for the predestined future life: he or she has a certain heredity which affects his/her body and brain, so these human beings become identical copies of one another:

"Standard men and women; in uniform batches. The whole of a small factory staffed with the products of a single bokanovskified egg [. . .] standard Gammas, unvarying Deltas, uniform Epsilons. Millions of identical twins." (BNW 5)

Each Worldian has the same physical appearance as his/her group member. To illustrate, all Gammas' clothes are green, all Epsilons are short and Alphas have well-built bodies. In fact, this is the first step of a two-phased system, initially bodies are controlled strictly by being produced in an artificial environment with desired and identical genetic features, and then are supervised and brainwashed throughout their lives via discourses in accordance with their future groups and functions.

The goal of the World State is reflected by the name of the building, Central London Hatchery and Conditioning Centre, where the Worldians are artificially created and indoctrinated. The word order in State's motto, "Community, Identity, Stability" (BNW 1), written on the wall of the centre also highlights the idea that the identity of the community comes first for the stability of the established system, so there is no room for individuality. By the use of science and technology, the Worldians are uniformized, and all differences are demolished. Transhumanists support morphological freedom, and say:

"[T]he right to freedom and life imply a right to one's body. If we have a right to live and be free, but our bodies are not free, then the other things become irrelevant. If my body is coerced or threatened, I have no choice to obey whatever demands the coercer makes on me if I wish to continue to survive." (Sandberg 2013: 57)

Hence, transhumanists suggest that an individual should be free from physical and mental oppression, but in *BNW*, the Worldians are controlled by science and technology, and they have no right to make their choices. Instead of presenting a free environment, science becomes a medium to restrict the citizens of the World State.

Within this framework, BNW describes a society where individuals have adopted a group identity, and this identification also determines their future

functions. For instance, citizens who will have to work in hot environments are genetically modified with a biological disposition to heat:

"Coolness was wedded to discomfort in the form of hard X-rays. By the time they were decanted the embryos had a horror of cold. They were predestined to emigrate to the tropics, to be miners and acetate silk spinners and steel workers . . . [Then] 'We condition them to thrive on heat,' concluded Mr Foster. 'Our colleagues upstairs will teach them to love it." (BNW 12)

In the State, bodily conditioning precedes mental control due to advanced science to produce customized bodies. Genetic engineering is used not to create enhanced bodies free from physical limitations; instead, it is used to produce human beings to do manual labour. One may say that it is beneficial for the Worldians to be durable to heat as they have to work under high temperature, but the problem is that they have no choice in the matter; everything is pre-determined by the State. So the Worldians are just cogs in this properly functioning machine.

Sarah Chan and John Harris answer the question 'what is enhancement?' in their article "In Support of Human Enhancement": "it is a procedure that improves our functioning: any intervention which increases our general capabilities for human flourishing" (2007: 1). Enhancement aims at improving the current situation of a human being; it can be physical through the use of prosthetics; it can be intellectual, with supplements used to increase concentration; or psychological that increases well-being. Today, there are many more examples of these practices²⁵, which are legally and morally acceptable. Genetic engineering is

"the direct manipulation of DNA to alter an organism's characteristics (phenotype) in a particular way . . . It is used by scientists to enhance or modify the characteristics of an individual organism." (Your Genome 2016)

For instance, a current technology CRISPR, which is a gene editing tool like molecular scissors, helps scientists make targeted changes in germ-line cells. Through this technique the undesirable parts are replaced with new and healthy ones. Genetic enhancement through genetic engineering is

"the transfer of genetic material intended to modify nonpathological human traits.

The term commonly is used to describe efforts to make someone... better than well.

.. perhaps by raising an individual from standard to peak levels of performance.

[In] enhancement, the gene may supplement the functioning of normal genes or may

²⁵IVF, prosthetics, drugs for increasing concentration are among such practices.

be superseded with genes that have been engineered to produce a desired enhancement." (Your Genome 2016)

With this technology, one can run faster or see better in the dark by surpassing the current human somatic limitations. Such new advancements may mean hope for many people who have genetic problems, but it also causes oppositions: some argue that it may increase the current social inequality if only rich people have access to it; or many people claim that by genetic intervention, the autonomy of an individual is undermined; some other conservatives suggest that it is like playing God. As a reply, supporters of genetic engineering highlight that, even today without genetic intervention, people do not have autonomy as they inherit genes from their predecessors, and they also point out that when it becomes safely applicable and affordable, it will be morally and socially acceptable as it aims at diminishing undesirable traits that cause diseases, and increasing an individual's current capacity. Another fear is that genetic engineering may be used as a new typeof controlling mechanism either by a state or a powerful ruling class. For instance, Fukuyama and Kass argue that these advanced scientific interventions will lead to the dehumanisation of human beings as portrayed in BNW as a result of constant supervision.²⁶

As opposed to these apocalyptic scenarios Bailey, who promotes the idea of human enhancement by using genetic engineering, discusses the issue by bringing together different ideas. He argues that negative scenarios on technologies related to birth, life or death are not based on good reasoning. He furthers his argument saying that no one should interfere in the use of such technologies because it is not possible for someone to know exactly what is right or wrong about these technologies and their possible outcomes. In such a situation, no one can have the "right to impose his or her values and beliefs on others" (Bailey 2013: 333). As an advocate, Bailey focuses on the control mechanism saying that unless it is controlled by a single authority, it can be better both for our and future generations' genetic inheritance. Bailey also adds that "bioethicists find it easier to concoct the possible perils of a biotech future than to appreciate how enhancements will contribute to flourishing lives" (2013: 328) though there is no strong and definite evidence for negative consequences of genetic intervention.

²⁶ Further reading see F.Fukuyama "A Tale of two Dystopias", *Our Posthuman Future: Consequences of the Biotechnology Revolution* and Leon R. Kass's "How Brave a New World".

In "Transhumanist Declaration," the importance of the policy making process is also emphasized by saying that it should be guided by policy makers who respect the autonomy and rights of all people with differing visions or backgrounds. However, this so-called inclusive mechanism becomes a tool for over-control in *BNW*. To illustrate, in the State, the Worldians are happy with their current situation: they love their bodies, they do not get old or sick, they do not complain about their jobs, and they can get rid of undesired emotions by taking soma. On the surface the system maintained through transhumanist technologies provide various advantages, but individual autonomy is lost as everything is pre-determined by the State.

While explaining the details of this genetic engineering used in the process, Henry Foster says:

"Reducing the number of revolutions per minute'... 'The surrogate goes round slower; therefore passes through the lung at longer intervals; therefore gives the embryo less oxygen. Nothing like oxygen-shortage for keeping an embryo below par." (BNW 10-1).

Lower-castes are deliberately impaired, and they will be suitable to perform undesired jobs without objection. They will never have further demands about enhancing their bodies. When the aim of this procedure is questioned, the DHC says: "an Epsilon embryo must have an Epsilon environment as well as an Epsilon heredity" (BNW 11). The DHC's explanation highlights that a group identity is created by producing identical beings with similar bodies, so each Worldian idealizes his/her body shape, job and life style.

Each layer of the society is also destined to function in a predetermined way, so, instead of presenting individuals a right of choice, the State prepares them bodily for predetermined future tasks. As a result, the Worldians are happy and they think that they are free to choose whatever they want though they have limited options. By using genetic engineering to control the bodies, the State leaves no room for failure for further brainwashing techniques. It secures the effectiveness of the idea of being an Epsilon by giving an Epsilon inheritance, environment and mental capacity. In this way, no conflict between the body and its future function occurs.

The Worldians are hatched in great numbers like mere goods rather than autonomous and unique individuals, and in this way they are always identified with their group. The labelling of embryos shows the loss of value as individual beings:

"... it was the turn of the labellers. Heredity, date of fertilization, and membership of Bokanovsky Group—details were transferred from test-tube to bottle. No longer anonymous, but named, identified." (BNW 7)

The description of the interior of the centre also emphasizes the loss of individuality:

"... a harsh thin light glared through the windows, hungrily seeking some ... pallid shape of academic goose-flesh, but finding only the glass and nickel and bleakly shining porcelain of a laboratory. Wintriness responded to wintriness. The overalls of the workers were white, their hands gloved with a pale corpse-coloured rubber. The light was frozen, dead, a ghost." (BNW 1)

Although this fertilizing room is the place where new lives start, the words chosen—bleak, wintriness, pale, corpse-coloured, dead, ghost—to describe the room create a dreary atmosphere as it resembles a mortuary. As David Seed suggests: "By stressing the symbolic interrelation between cold, whiteness, and the north . . . the process of the Hatchery is in fact directed towards a kind of death" (2008: 481). In fact, this system, in which mass production of the Worldians is achieved, causes the death of the authentic individual identity as its priority is the manufacturing of preconditioned machine-like beings, not individuals.

In the State, the notion of individual is equated to the body produced, so mass production of human beings with a stable group identity, not being unique individuals, is important to keep the society in order. The DHC says:

"'Murder kills only the individual—and, after all, what is an individual?' With a sweeping gesture he indicated the rows of microscopes, the test-tubes, the incubators. 'We can make a new one with the greatest ease—as many as we like" (BNW 128).

A Worldian is like a product that can be replaceable easily by science, so it loses its authenticity. The physical body is just a frame which can be shaped easily: the State can produce bodies in any form and impose its ideology on these physical structures.

As the Worldians are produced in masses through genetic engineering in labs, babies are hatched in an artificial environment, and brought up by the State. To guarantee the control of the body in the State, women's roles as biological reproducers are also diminished as they do not give birth any more. Raising individuals at laboratories through artificial womb technology is a controversial issue today. There are opposing ideas on this subject as in the case of much other

technological advancement. With the practice of ectogenesis, it is becoming possible to raise a fetus outside the human body in an artificial womb. Through this process, all the stages a fetus goes through from zygote (fertilized egg) to the moment the baby takes its first breath are followed.

This application seems liberating for women as pregnancy might be seen as a period limiting women's lives both bodily and socially, and they also seem to be freed from the role of mere reproducers of society. The use of an artificial womb can provide a safer environment where the medical risks are minimized during pregnancy and childbirth, or can help women with health problems related to the uterus. Apart from its medical advantages, it may provide some benefits for women in social areas; they may have babies according to their own timetable, as this process does not physically affect women, they may go on with their own working routines, and by this application, discrimination due to pregnancy can be prevented.

Shulamith Firestone emphasizes how women are restricted through traditional gender roles such as taking care of the baby, so she claims that this responsibility should be shared by both men and women equally. She also predicts about reproductive technology and says that in the future, advancements in artificial reproduction technology might be one solution to inequality (Firestone 1971: 206). Being the only reproducers, women are exposed to various physical and social restraints: control of fertility, control of abortion rights, or excluding women from business life. In accordance with Firestone's argument, in *BNW*, women do not give birth and raise their children, so the State does not need the female body as much as it did in the old viviparous days. Mr Foster explains the present situation:

"In the vast majority of cases, fertility is a nuisance. One fertile ovary in twelve hundred—that would really be quite sufficient for our purposes. But we want to leave an enormous margin of safety. So we allow as many as thirty per cent of the female embryos to develop normally. The others get a dose of male sex-hormone every twenty-four metres for the rest of the course. Result: they're decanted as freemartins . . . Guaranteed sterile." (BNW 10)

The Worldian women are no more regarded as the key in creating new generations as in the pre-Fordian days, because science has outcompeted nature by its capacity to hatch human beings in an artificial environment. The State becomes the ultimate creator, so technically it is the new biological reproducer.

Similarly, Haraway talks about this authoritarian system, saying: "Gender... is an achievement forced on us by the terrible historical experience of the contradictory social realities of patriarchy" (2016: 16), and she proposes that the cyborg, the symbol of the hybridized being due to its connection with technology, can be a transition from the "old hierarchical dominations" of patriarchy to the "new networks of informatics of domination" (2016: 28), which is liberating for women. However, in the World State, a techno-based tyranny continues because women still do not have freedom over their bodies and their choices. For instance, Lenina has to use birth control pills as she is fertile:

"... yet, bottled as she was, and in spite of that second gramme of soma, Lenina did not forget to take all the contraceptive precautions prescribed by the regulations. Years of intensive hypnopaedia and, from twelve to seventeen, Malthusian drill three times a week had made the taking of the precautions almost as automatic and inevitable as blinking." (BNW 67)

Lenina takes the pills without hesitation; it is just another daily activity for her. As a result of intensive conditioning, she behaves in a pre-destined way. However, she believes that she is a free being: "I am free. Free to have the most wonderful time. Everybody's happy nowadays" (BNW 79). An illusion of freedom is created among the citizens, and this group fantasy—everyone is free and happy—is again a result of manufactured consent as Gramsci suggests. Lenina thinks that she is free to do whatever she wants. However, she does not have autonomy even over her own body and her actions.

In such a strictly controlled environment, a woman's fertility becomes problematic if it is not compatible with the goals of the State. The State deliberately causes damage in the females' genes to remove the possibility of unwanted pregnancy as it can mass-produce human beings due to advanced transhumanist technologies. The DHC takes new students to the Fertilizing Room, where the Bokanovsky's Process is used to create tens of adults by one egg taken from a woman: "a bokanovskified egg will bud, will proliferate, will divide [. . .] making ninety-six human beings grow where one grew before. Progress" (BNW 3-4). To increase productivity, development is slowed down periodically, and the eggs are exposed to harsh and cruel applications to obtain more embryos:

"Eight minutes of hard X-rays being about as much as an egg can stand. A few died [...] having budded were dosed almost to death with alcohol; consequently

burgeoned again and having budded [...] By which time the original egg was in a fair way to becoming anything from eight to ninety-six embryos—a prodigious improvement, you will agree, on nature. Identical twins—but not in piddling twos and threes as in the old viviparous days, when an egg would sometimes accidentally divide; actually by dozens, by scores at a time." (BNW 4)

The World State, as the ultimate biological reproducer, controls the process strictly. Women's roles are replaced by the State, and it directly intervenes in the process by genetically modifying embryos. Defining the process of creating tens of identical twins as "prodigious improvement" on nature, in fact, summarizes the policy of the World State: just producing robot-like beings with no authenticity. What matters most is the quantity because through genetic engineering individuals can easily be shaped with desired qualities. Nature-given (God-given) is replaced by State-given and people become like crops grown with desired qualities—either low or high—in a farm.

With advanced transhumanist technologies, the rate of fertility is minimized because it may be a probable threat to the stability of the society as in the example of John, who has been brought up by his mother, Linda, outside the territory of the World State. Despite being a well-conditioned Beta before getting lost in the reservation, Linda feels closeness towards John, and this threatens all her conditioning:

"'Oh, mother, don't!' [John cried out]

'I'm not your mother. I won't be your mother.'... He saw that she was going to hit him again, and lifted his arm to guard his face...'Little beast!' She pulled down his arm; his face was uncovered... But she didn't hit him... Suddenly she put her arms round him and kissed him again and again." (BNW 109-10)

Linda's absence in the World State causes her deconditioning because, initially, her body is freed from the controlling mechanism of the State: she can have a baby as she stops using birth control pills that are compulsory within the borders of the State. In fact, she gains freedom over her body. The second one is having an emotional bond with an individual—her baby boy. After giving birth to John, she cannot help loving him although her conditioning has made her develop a negative attitude towards the idea of giving birth and being a mother. Linda, once a well-conditioned Beta, says despite all the bad experiences in the Reservation, "[John] was a comfort to [her]" (BNW 131). It can be said that their physical closeness has

given way to their emotional attachment. This example shows the possible consequences of natural birth—having freedom over one's body also leads to the liberty of emotions, and this is what the State avoids because this would be a threat to the order of society. Hence, the best way to remove such a risk is to control the body of the woman, and become the ultimate reproducer of new bodies that are perfectly brainwashed.

In *BNW*, freeing women from natural birth paradoxically makes them function in a better way; women work without interruption, or they do not have medical risks of pregnancy. Although these are the results of advancements in science, they do not present absolute liberation for women, because they have no freedom of choice. The State is the only controller of the system, and it does not present alternatives to women. Despite having some advantages for women, it becomes a new form of oppression as a result of the State's policy; the woman's body is still controlled by the authority.

Even after the Worldian babies are hatched, this control mechanism is strengthened through some applications. To illustrate, babies at nursery are conditioned to hate books and botany, by causing bodily pain, fear and disturbance in them through the use of loud music and electric shock. After watching the process, the DHC says:

"Books and loud noises, flowers and electric shocks—already in the infant mind these couples were compromisingly linked; and after two hundred repetitions of the same or a similar lesson would be wedded indissolubly. . . 'They'll grow up with what the psychologists used to call an "instinctive" hatred of books and flowers. Reflexes unalterably conditioned. They'll be safe from books and botany all their lives." (BNW 17)

After growing up in such an environment where its body is affected, the infant internalizes the behaviour, and it becomes a part of its mind. This is, in Foucault's terms, the construction of the "soul":

"[The soul] exists, it has a reality, it is produced permanently around, on, within the body by the functioning of a power that is exercised on those punished—and, in a more general way, on those one supervises, trains and corrects . . . over those who are stuck at a machine and supervised for the rest of their lives" (1995: 29).

As Foucault discusses, the body is continuously supervised and restricted by a mechanism to also shape the mind; when one's body is controlled, his/her way of thinking will be automatically under control.

The World State, then, establishes a steady order by using transhumanist technologies like genetic engineering and artificial womb technology. The advanced technology provides various advantages for the Worldians: they do not get sick or old, they perform the jobs that are within their physical capacities, and the female Worldians are freed from both physical and social risks and limitations of pregnancy and motherhood. Even though these seem to present a progressive and liberating society thanks to transhumanist technologies, the Worldians are over-controlled from the beginning to the end of their lives; they lead a pre-determined life with no autonomy.

2.2 THE CONSTANT CONTROL MECHANISM THROUGH HYPNOPAEDIA, EMOTIONAL ENGINEERING AND SOMA

In the World State, the control mechanism is a dual system; first, the Worldians are produced with desired physical and mental features artificially by using genetic engineering and artificial womb technology, then they are kept under constant surveillance all their lives. For the lifelong supervision, the sleep teaching method hypnopaedia, emotional engineering and soma are used. The aim is to sustain the stability of the State, which operates like a big machine.

Education of the members is mainly based on hypnopaedia, and through this method moral education rather than science is given. In this technique morality is indoctrinated through various repetitions. As a result, there is passive acceptance without questioning, being sceptical, or rejection, even if the ideas imposed are not logical. Foucault argues that the education system is one of the extensions of this practice applied in prisons, and it serves as a social technique of control within society, so the soul is "born . . . out of methods of punishment, supervision and constraint" (1995: 29). An individual's identity becomes a product of a controlling mechanism that is applied by the state.

In the State, the Worldians are identified by their group identity, so this should be taught to the children from early ages. In "Elementary Class Consciousness" lessons, young Worldians are conditioned to be "Betas" or

"Gammas" instead of being individuals. The recording played for Betas shapes the ideas and perceptions of the children about their own identity as well as others:

"I don't want to play with Delta children. And Epsilons are still worse. They're too stupid to be able to read or write. Besides, they wear black, which is such a beastly colour [. . .] Alpha children wear grey. They work much harder than we do, because they're so frightfully clever. I'm really awfully glad I'm Beta, because I don't work so hard. And then we are much better than the Gammas and Deltas." (BNW 22-3)

Constructed identities are imposed on children to create a sense of solidarity among them, and each one is conditioned to have the idea of commonality. Like schools in pre-Fordian days, class-consciousness lessons are used to socialize citizens in desired ways. Both Foucault and Gramsci emphasize the importance of the education system to maintain a subtly controlled society because this system provides a collective formation of individuals with desired qualities without using coercion. Similarly, in the State, children are conditioned to believe that they belong to the ideal group. As a result of constant repetition of "I'm really awfully glad I'm Beta", this idea becomes an indissoluble part of a Worldian's identity.

This is a bidirectional system; a Worldian is not only conditioned to have the idea of being better than the others in relation to their group identity, but also knows that all groups are necessary parts of the whole body of the society. Lenina's childhood memory shows how effective this process is:

"Lenina suddenly remembered an occasion when, as a little girl at school, she had woken up in the middle of the night and became aware... of the whispering that had haunted all her sleeps.... [H]eard once more the soft, soft voice that said (the words were there, unforgotten, unforgettable after so many night-long repetitions).. Even Epsilons are useful". (BNW 64)

Despite her negative attitude towards Epsilons due to belonging to a higher group, Lenina is conditioned to accept that even Epsilons are beneficial for the common good. Her conditioning teaches her to acquire a strong collective identity, but she also learns to accept that other groups are beneficial for the proper operation of the whole because in the state "[e]veryone works for everyone else. [They] can't do without anyone" (BNW 64).

In the State everything is performed collectively: the Worldians are hatched in masses, dozens of group members are brainwashed simultaneously to produce identical twins, so individuality and all concepts related to individual experience are diminished. To establish such a system, the State starts with making sex an inseparable part of young Worldians; they are conditioned to play sex games from early ages. While watching the children playing erotic games, the Controller explains how ideas about sex have radically changed after Ford in the World State:

"For a very long period before the time of Our Ford, . . . erotic play between children had been regarded as abnormal (there was a roar of laughter); and not only abnormal, actually immoral (no!): and had therefore been rigorously suppressed" (BNW 27).

From the Controller's explanation, it is understood that monogamy was common in pre-Fordian days. However, in this new system, "everyone belongs to everyone else" (BNW 34).

Through promiscuous sex, the State prevents bodily connections which may lead to emotional bonds. So all concepts—home, family, motherhood—that are related to monogamy are portrayed negatively through physical descriptions to cause discomfort for the citizens. For instance, during the education of the children, Mustapha Mond gives a definition of home, saying: it is "a few small rooms, stiflingly over-inhabited . . . No air, no space; an understerilized prison; darkness, disease, and smells . . . [I]t was a rabbit hole, a midden" (BNW 31). It is depicted as the centre of dirtiness and bondage. Especially, through the emphasis of its being crowded, home becomes an undesired physical environment because in the World State, this suffocating place of pre-Fordian days is replaced with a cosy place where one can find all kinds of facilities from vibro-vacuum massage machines to different kinds of scents.

Similarly, previous concepts related to family are portrayed in a negative manner to reinforce this idea of detachment within the minds of Worldians. For instance, Mustapha Mond describes motherhood:

"... what dangerous, insane obscene relationships between the members of the family group! Maniacally, the mother brooded over her children (her children)... brooded over them like a cat over its kittens; but a cat that could talk, a cat that could say, 'My baby, my baby,' over and over again" (BNW 31-2).

Through this analogy, the World Controller degrades the concept of motherhood to make it undesirable. In this Fordian period, the State, which is the substitute for the mother, wants absolute control, so it eliminates the mother-child bond ontwo levels: first, the State becomes the biological producer through artificial

womb technology. The next step is being the ideological producer by bringing up children without a family; imposing its ideology through teaching and hypnopaedia.

Religion is also wiped away from society as Mond explains:

"You can only be independent of God while you've got youth and prosperity . . . Well, we've now got youth and prosperity right up to the end. What follows? Evidently, that we can be independent of God." (BNW 206)

It is understood from this explanation that people need teachings of religion in pre-Fordian days as they lack control over their bodies. Fear of aging, disease and death, make people believe in religious values. However, the World State, as a result of transhumanist technologies, dominates nature, so in such an environment that is free from illnesses and senility, there is no need for religion. And their lives will be terminated when it is determined by the State.

All the pre-Fordian concepts are eradicated because they are accepted as restrictive values for the Worldians. Transhumanism has its "roots in secular humanist thinking" (Bostrom 2005a: 2), and is against all limiting concepts like sex, speciesism or religion. As this movement supports the direct application of science and technology for human enhancement, possible "religious intolerance [towards such applications is] unacceptable" (Bostrom 2005a: 9). So, devaluing old Christian teachings can be seen as secularisation which is compatible with transhumanism. But the State substitutes religious dogmas with new Fordist values:

"The introduction of Our Ford's first T-Model . . . chosen as the opening date of the new era. There was a thing, as I've said before, called Christianity [. . .]. All crosses had their tops cut and became T's. There was also a thing called God. We have the World State now." (BNW 44-5)

During the orientation of new students, Mustapha Mond describes how the old has been replaced by the new. Although religious values have been changed and new practices have been adopted, it does not present a liberating atmosphere as people are again shaped with one single dominant ideology—it just presents an illusion of secularisation and being free of religion.

Similarly, he discusses that old people used to be religious in pre-Fordian days as they lost their physical energy; when they could not use their bodies actively, they had to direct themselves to mental activities. However, in the State, the Worldians are promised with a lifelong activeness as they do not get old. One of the three pillars of transhumanism is achieving super-longevity by eliminating diseases

and aging because these "enhancements could improve the quality of [human] lives" (Bostrom 2005a: 4). In the World State, due to genetic engineering these two goals are reached, and the Worldians can "work, play—at sixty [their] powers and tastes are what they were at seventeen" (BNW 47). However, even the grown-up Worldians are like infants who are just after bodily pleasures; the citizens are fully occupied with physical activities, and they do not have time to think. They are happy with what they have currently because their bodies are comforted and satisfied constantly, so they have "no leisure from pleasure, not a moment to sit down and think" (BNW 47). Kass argues that infinite enhancement will lead to a dull life, saying:

"The pursuit of an ageless body is finally a distraction and a deformation. The pursuit of an untroubled and self-satisfied soul is deadly to desire . . . [This] perfection is at best a passing illusion . . . that will cost us our full and flourishing humanity." (2003: 28)

Accordingly, this youthful and healthy life provided by transhumanist technology does not present an opportunity to develop new ideas or to be productive for new advancements. Instead, it becomes another tool to control the Worldians through manufactured consent.

Mustapha Mond also explains why people used to believe in religion before Ford:

"One believes things because one has been conditioned to believe them. Finding bad reasons for what one believes for other bad reasons—that's philosophy. People believe in God because they've been conditioned to believe in God." (BNW 207)

The World Controller says that people's beliefs stem from brainwashing, and as religious values are outdated, they cannot be a part of the State. In his article, Brad Congdon focuses on the concept of religion in Huxley's novel, and analyses *BNW* as a response to his brother, Julian Huxley's short story "What Dare I Think?" Congdon says:

"Aldous's critical gaze was not focused on eugenics in general but on the possible role of religion in a eugenicist society in particular. Julian sees religion as an intrinsic drive found in the human animal, and in a planned society it is a drive that has to be controlled; his brother, Aldous, agrees and uses Brave New World to critique the kind of religion which might manipulate this drive." (2011: 93-4)

For Congdon, Julian Huxley believes that religion is an inseparable part of human nature, so it should be under control within an ordered society as it has the power to trigger humanity in undesired ways, and he further explains his ideas on this novel by saying: "capitalism exists not to satisfy the demands of the economy but, instead, the individual religious emotion" (2011: 97) because in such a controlled state, money is not a necessity.

Although the Worldians do not seem to need more money than they have, an order based on capitalism is established; this system operates both within the State and out of it. There is economic competition among the States in the World, and Mr. Foster, one of the superintendents, talks about the rivalry in producing more individuals which is a sign of economic success and advantage:

"They've done much better... in some of the tropical Centres. Singapore has often produced over sixteen thousand five hundred; and Mombasa has actually touched the seventeen thousand mark. But then they have unfair advantages... I'm working on a wonderful Delta-Minus ovary at this moment [...] . We'll beat them yet." (BNW 6)

The World State competes with other states because its economy is based on the production of new human beings, which means profit in two ways: first, it can sustain its economy as hatched beings are conditioned to consume during their lives, and it also provides economic power for the State because they are sold like any other goods to other states. So consuming is not just a way of satisfaction; it is the policy of the State imposed on the citizens to maintain stability.

While discussing a disciplined society, Foucault says there are "[t]wo ways of exercising power over men, of controlling their relations, of separating out their dangerous mixture" (1995: 198). As he suggests, to sustain stability within the established order, the divergent ones should be either corrected or excluded from the system. This mechanism works in two ways in the World State: the first effective way is the use of soma as Mustapha Mond explains:

"... if ever by some unlucky chance such a crevice of time should yawn in the solid substance of their distractions, there is always soma, delicious soma, half a gramme for a holiday." (BNW 47)

This drug gives temporary joy to the Worldians whenever there occurs an undesired situation. It is used to get rid of bitter reality; it shadows people's real feelings by presenting infinite happiness which is not authentic. When Bostrom discusses transhumanist values, he says "[d]espite our best efforts, we often fail to feel as happy as we would like" because "we are limited in regard to energy, will-power, and ability to shape our own character" (2005a: 7). Accordingly, soma can

be accepted as a mood-enhancing substance. However, Bernard refuses to take soma, saying: "I'd rather be myself. Myself and nasty. Not somebody else, however jolly" (BNW 77). Bernard thinks that soma just clouds his real feelings by creating illusions instead of helping him in controlling his mood.

David Pearce expresses that "people resort to soma when they feel depressed, angry or have intrusive negative thought" (1998: 7). It is, of course, one of the uses of this pleasure-giving drug, but it is also an inseparable part of their daily intake regardless of what they feel. For instance, when Henry and Lenina are dating, they are served soma: "There, in a loud cheerful company, they are an excellent meal. Soma was served with the coffee. Lenina took two half-gramme tablets and Henry three" (BNW 65). The atmosphere is described positively, and these two Worldians have a good time together. Despite this pleasant environment, soma is served as a treat for them. They take it although they are happy. This shows that it is a part of daily routine—not just a drug taken when feeling down. It just creates the illusion of pleasure, so it is one component of the controlling mechanism of the State.

In the State, emotional engineering is another way of supervising the minds of Worldians. Engineers write lyrics that are in harmony with the ideology of the State, and this provides constant control whenever there appears a threat in the society. To illustrate, when John causes chaos among the Deltas during soma distribution, people are calmed down easily without coercion:

"Suddenly, from out of the Synthetic Music Box a voice began to speak. The Voice of Reason, the Voice of Good Feeling. The sound-track roll was unwinding itself in Synthetic Anti-Riot Speech Number Two (Medium Strength) [. . .] Why aren't you all being happy and good together? Happy and good,' the Voice repeated. 'At peace' [. . .] Two minutes later the Voice and the soma vapour had produced their effect. In tears, the Deltas were kissing and hugging one another—half a dozen twins at a time in a comprehensive embrace." (BNW 188-9)

For the Worldians, even a revolt is not an option because their minds are under constant control, and this brings a passive acceptance. The World State aims at sustaining stability by preventing all kinds of riots; it creates an illusion of peace by emotional engineering. Due to his job as an emotional engineer, Helmholtz has served as a traditional intellectual in Gramsci's terms because he has become a "simple orator" and "permanent persuader" by repeating the dominant ideology of the State (1992: 10). He has produced discourses that will control the Worldians all

their lives in a subtle way, and despite this over-controlled system, the Worldians still think that they are autonomous beings because a simulacrum of freedom is created to hide its absence. However, later, Helmholtz starts to have unorthodox ideas, and this will end up in his punishment.

As the State produces tens of copies from one egg without the slightest difference, and imposes the idea of being the same as positive and desirable, dissimilarity in the minds of the citizens is associated with abnormality. Having diverse ideas, as in the example of Bernard, makes an individual an outsider because he/she is a threat to stability. Bernard's separation basically stems from his morphological difference; he is smaller than a normal Alpha Plus, but he also has dissident thoughts because he knows the main goal of the State as a hypnopaedia specialist. During his date with Lenina, Bernard says "electro-magnetic Golf [is] a waste of time" (BNW 77), which is absolutely against the teachings of the State. As a well-conditioned Beta, Lenina cannot understand what he means, and she also thinks that Bernard is abnormal.

Similarly, the DHC's ideas on Bernard show how he is left out because he is seen as a threat to society, saying:

"By his heretical views on sport and soma, by the scandalous unorthodoxy of his sexlife, by his refusal to obey the teachings of Our Ford . . . he has proved himself an enemy of Society, a subverter . . . of all Order and Stability, a conspirator against Civilization itself." (BNW 129-30)

Bernard creates a dichotomy between normal/abnormal, and he should be corrected, or excluded from the society, because in a disciplined society there are "[t]wo ways of exercising power over men, of controlling their relations, of separating out their dangerous mixture" (Foucault 1995: 198).

Helmholtz also has unorthodox ideas. Although he has to write lyrics that must be compatible with the State's ideology, he does the opposite knowing that it is madness, and says:

"I feel . . . as though I were just beginning to have something to write about. As though I were beginning to be able to use that power I feel I've got inside me—that extra, latent power. Something seems to be coming to me." (BNW 158-9)

When Helmholtz expresses what he really feels by going beyond his limitations—ideas imposed by the State—he discovers his inner power, and he is not regretful over this although it means that he will be punished. In fact, this is a

moment when Helmholtz steps out of the established system, so he is a threat for the State.

As Bernard and Helmholtz cause uneasiness within society, they have to be excluded from the World State. Helmholtz learns that he will be sent to an island as a punishment, and chooses which island he wants to live in, saying: "I should like a thoroughly bad climate . . . I believe one would write better if the climate were bad. If there were a lot of wind and storms" (BNW 201). Mustapha Mond seems to admire what Helmholtz does although, as a World Controller, he does not approve of Helmholtz's divergent ideas: he is a potential threat to order in the society because, Mond believes, "it would upset the whole social order if men started doing things on their own" (BNW 209). These people are sent to islands where people like them live. When Bernard does not want to go to an island, Mustapha Mond explains how lucky they are to Helmholtz:

"... if [Bernard] had the smallest sense, he would understand that his punishment is really a reward... he's being sent to a place where he'll meet the most interesting set of men and women to be found anywhere in the world." (BNW 199)

These islands are habitats for deconditioned upper-caste members—low-caste members are made to lack mental faculties which makes their chance of being deconditioned more difficult. After Mond's explanation, it may seem that these places present a liberating environment for residents, but just an illusion of freedom under the control of the World State is presented. The so-called free island Helmholtz is sent, is still under the control of the State, so islanders cannot be free from the authority of the controller. The system established by the State is a simulation in which the Worldians are supervised permanently in a subtle way by creating consent. When one method fails, another application is used to sustain this hyperreal free society.

In *BNW*, an over-controlled system is maintained by using transhumanist technologies: using genetic engineering and artificial womb technology to create the Worldians with desired qualities at labs, using soma to provide the Worldians with the illusion of happiness by masking their authentic emotions, creating a society free from aging and diseases, the use of hypnopaedia, soma and emotional engineering to create a simulation which makes the Worldians believe in their autonomy and inner peace. On the surface, these applications seem to present a better society for the Worldians because transhumanism refers to enhancing a human being's capacity to

go beyond his or her intellectual, physical and psychological limitations by directly using science and technology. There are partial advantages of these technologies, but *BNW* does not present a utopia in a general sense; the low-caste members are created with low mental and physical capacities and reproduction is strictly controlled among fertile women.

People do not have freedom, and instead of promoting free thinking, it suppresses it. For instance, Mond does not allow the publication of a well-written scientific paper, and says: "the author's mathematical treatment of the conception of purpose is novel and highly ingenious, but heretical [. . .]. Not to be published" (BNW 154). The main aim is to sustain the order in the State, so science which is about questioning and exploring novelties is not allowed, and Mond explains the ideology of the State further by saying: "science is dangerous; we have to keep it most carefully chained and muzzled" (BNW 198). Science is only acceptable provided that it serves to the goals of the State.

Despite this machine-like system, no one rebels against the State as the Worldians' minds are shaped in desired ways, and there is an illusion of consent. It is a surveillance-based society, and Mond says:

"Even after decanting, [an Epsilon] is still inside a bottle—an invisible bottle of infantile and embryonic fixations. Each one of us, of course... goes through life inside a bottle. But if we happen to be Alphas, our bottles are, relatively speaking, enormous." (BNW 196)

It is understood that all Worldians, from Epsilons to Alphas, are superintended by a group of controllers who use trasnhumanist technologies in accordance with their own goals. In this explicit control mechanism, any divergence within the system is diminished. Individual identity is removed in favour of group identity, so in this society, it is not possible to talk about the autonomy of an individual as they are socialised through brainwashing methods to fit in society.

CHAPTER III

NEUROMANCER

William Gibson's *Neuromancer*, published in 1984, is an example of cyberpunk fiction, in which a future world with high technology is portrayed. Accordingly, the novel exemplifies various transhumanist technologies: highly developed AIs, enhanced cyborg bodies, longevity through genetic engineering, mind uploading to keep a successful hacker's skills, a large family genetically formed and purified through cloning and sustained through cryogenics, and creation of orbital cities. These advanced applications bring several benefits for these human beings like giving physical strength to a female character or reinvigorating a seriously harmed person, and this seems compatible with transhumanism, which champions the idea of a liberated life freed from the limitations of the physical world and human body through science and technology. However, in *Neuromancer*, I argue that despite these advantages, technology provides only partial freedom to mask the real technology-driven controlling mechanism. Each human being who has a different relation with these transhumanist technologies thinks that he/she gains freedom and power, but in fact, each one is under the control of these technologies.

Neuromancer recounts the adventures of Henry Dorsett Case, a former data thief whose nervous system is damaged as a punishment to prevent him from accessing the matrix, to find a cure, and his being involved in a business as a hacker again to gain his previous ability. Although Case seems to be at the heart of the story, various actions and characters are independent of him; it is like, at some point, he is integrated into the events that have already begun. This makes the storyline more complex with its non-stop flow of actions, characters who are flesh-and-blood beings, cyborgs or digitally immortal beings, and settings, either physical or virtual. This stream and richness of components can be likened to the "cyberspace²⁷", a place

²⁷ William Gibson coined the term "cyberspace" in his short story, *Burning Chrome* (1982) to refer to the virtual environment of information created through computer networks. The concept, later,

where "a hundred unrelated conversations had simultaneously arrived at the same pause" (N^{28} 4). It is a world of mass information shared by millions from different parts of the world.

The novel opens in Chiba city, where Case has been living for a year as he hopes to find a cure: his nervous system has been damaged by a former employer because Case has betrayed his boss by stealing data from him. Due to the mycotoxin put into his body, he cannot access the cyberspace—the world of infinite data. Chiba city is a meeting point for the techno-criminal community because this high-tech region includes "black clinics" that are famous for advanced neurosurgery, and Case still hopes to recover and jack into the cyberspace again. While looking for a new chance, he is offered a business by a man named Armitage. If Case helps Armitage by stealing data protected by ICE (Intrusion Countermeasure Electronics used to protect data), Armitage will provide him with the cure he needs to gain his previous abilities as a cowboy—a hacker in cyberspace.

Having no other choice, Case accepts this offer. He is not the only person hired for this job; there is a group of people involved in it. One of his partners is Molly Millions, a cyborg who is working as a street samurai. Armitage, the leader of the group, was a former soldier who was injured both physically and mentally during a secret mission, and then he was implanted with a new computer-constructed identity through an advanced psychotherapy technique; he has a new identity disconnected from his previous life. The other group member is Peter Riviera, who has implants providing him the ability to create hallucinations to manipulate people.

These people with different skills are hired by an unknown employer, and Armitage is the agent who brings them together for the business on behalf of the secret employer. The main goal is to attack an AI that supports the Tessier-Ashpool clan—a family inbred by cloning. As a wealthy and powerful family, they own an orbital city where a tourist attraction full of high-tech applications is run. To be able to succeed in the business, Case and Molly have to steal a ROM from Sense/Net Corporation. In this memory drive, the mind of McCoy Pauley, a former cybercowboy, is kept after his physical death. This successful hacker is Case's former

became popular with Gibson's Neuromancer (1984). Today, the term is still used for the world of data created through the Internet.

²⁸In this study, N is used as the abbreviation of *Neuromancer*.

mentor, and in the new business, he becomes Case's partner due to his great skills in cyberspace. However, Pauley exists just as a software with the name Dixie Flatline.

After taking Dixie's ROM from the corporation with the help of another gang named The Panther Moderns, Case and Molly meet their new partner, Peter Riviera, who is an artist creating hallucinations to manipulate people's minds. Then, the group goes to Villa Straylight, the home of the wealthy Tessier-Ashpool family. In the matrix, while doing research, Case meets Wintermute, an advanced AI created by this family to operate their business. Following an investigation, Case understands that the whole mission has been planned by Wintermute as it wants to merge with its other half, Neuromancer (another conscious AI) to reach a super-intelligent level; it has hired Armitage and given him a new identity, it has made Armitage gather these people as they have great skills. So, it is understood that everything was pre-planned by Wintermute, and these follow the AI's plan.

Since creating super-conscious AI is forbidden by the law, the Turing cops arrest Case to stop him. However, Wintermute helps Case escape by killing the police. To finish the job, Case jacks into cyberspace, but he understands that Riviera has betrayed the group by taking side with Lady3Jane, and she captures Molly. Then, Lady3Jane feels sorry for Case and Molly, and decides to help them in this business. Riviera dies, and despite all difficulties, Case succeeds in unblocking the barriers in the software by the password he gets from Lady3Jane, and Wintermute and Neuromancer unite in the cyberspace, becoming a super-intelligent AI.

At the end of this successful business, Case and Molly are paid very generously, and Case can lead his life as a cyberspace cowboy by the help of Wintermute. The novel closes with an illusion of Case, his ex-girlfriend, Linda, who is already dead. It suggests that somewhere in the matrix, they live together as they wish. This may be provided by Neuromancer as it has the ability to create such illusions to manipulate people. It also implies that in the cyberspace, everyone exists digitally although their physical existence ends.

3.1 COMPUTER CONSTRUCTED IDENTITIES/HUMAN ENHANCEMENT IN NEUROMANCER

While defining transhumanism, three spheres are highlighted to enhance the current human condition, and these are "human intellectual, physical, and psychological capacities" (More 2013: 3). The aim is to go beyond the inherited

human limitations by achieving super-longevity (anti-aging, genetic engineering), super-wellbeing (drugs that elevate human psychology) and super intelligence (AI technology, uploading minds). In *Neuromancer*, these three pillars of transhumanism are depicted in various ways as it presents a futuristic world that is full of advanced science and technology. However, instead of a peaceful society, a dark dystopian world is portrayed: violence and illegal business are dominant, human beings are manipulated by using technologies that affect them both physically and psychologically. And human beings are totally dependent on technology due to their mix with it, so the human/machine or organic/inorganic distinction cannot be done from the very beginning of the text: "[t]he sky above the port was the color of television, tuned to a dead channel" (N 3). By comparing the bleak atmosphere of the sky to the static colour of a dead channel, the distinction between nature and technology is blurred.

This mingling also creates ambiguous and fluid identities as they are shaped or changed through technology. Each character in the novel has a hidden identity behind the seen/reflected one; their current image created through transhumanist technologies masks their past. For instance, Armitage has a computer constructed identity after suffering from physical damage and mental breakdown. During the war, he—Colonel Willis Corto—was involved in a top secret mission named "Screaming Fist", which was a failure, and he was the only survivor. When he recovered, he understood that he was betrayed by his high-ups and this caused a trauma in Corto. Upon this, Wintermute gave him a new made up identity, and he became the leader of the business as a new person—Armitage. He has a new body, a new face and a new identity that have been shaped by Wintermute through transhumanist technologies, so he is under control of this advanced AI. When Case and Molly search for Armitage's past, they learn about this reality:

"Translated French medical record explained that a man without identification had been taken to a Paris mental health unit and diagnosed as schizophrenic . . . He became a subject in an experimental program that sought to reverse schizophrenia through the application of cybernetic models. A random selection of patients were provided with microcomputers and encouraged, with help from students, to program them. He was cured, the only success in the entire experiment." (N 84)

Later in the novel, it is disclosed that Wintermute has planned this cure, and Armitage serves as a middleman doing what Wintermute orders him to do. At first, this may seem a positive development because Corto has been given a new opportunity in life, but it is obvious that Armitage has been created by technology to serve technology. Julius Deane's ideas on the Screaming Fist mission shows how human beings are sacrificed for the sake of technological development: "Wasted a fair bit of patriotic young flesh in order to test some new technology . . . Knew about the emps, magnetic pulse weapons. Sent these fellows in regardless" (N 35). These soldiers have been sent to death deliberately; they are seen as merely functional beings by a group of people in control.

In this futuristic world, the control mechanism does not work on a societal level as in *BNW*; not a single authority is visible—government—supervising the society through ideological state apparatuses (education, religion). However, still, there is a system that shapes the society on an individualistic level, and this is transhumanist technology. The absence of one all-powerful governmental power paves the way for mega-corporations that control the system by programming superintelligent AIs. So there are Turing police who try to control the development of such AIs. However, the AI is so advanced that even the agents trying to supervise technology are incapable of doing their duty; they are killed by Wintermute as it does not want to risk the business. The dialogue between Dixie and Case shows Wintermute's uncontrollable capacity:

"Dixie?"

... "What you getting' up to, boy? I been hearin' lurid stories. Hosaka's patched into a twin bank om your boss's boat now. Really hopin'. You pull some Turing heat?"

"Yeah, but Wintermute killed 'em."

"Well, that won't hold 'em long. Plenty more where those came from . . . And your boss, Case, he says go. He says run it and run it now." (N 167)

Wintermute has the power to control things and people even out of cyberspace, and this is considered normal by these two people. All the concepts are so intertwined that Wintermute, an artificial being, is accepted as a "boss" and it has the ability to control anything in that world. The power of technology outperforms human capacity. In fact, this atmosphere is needed for the improvement of novel technologies as suggested in the novel:

"[Case] saw a certain sense in the notion that burgeoning technologies require outlaw zones, that Night City wasn't there for its inhabitants, but as a deliberately unsupervised playground for technology itself." (N 11)

Wintermute can manipulate human beings for its own goal—merging with its other half, Neuromancer. Its first target is to create a new identity for Corto, so this new person, Armitage, can serve it in the business. It can be said that this new identity is a psychological prosthetic, and in this way, Armitage becomes a manufactured person. This kind of shaping is not portrayed in *BNW*; in it, the World State is in control of everything—giving specific physical and mental features to the citizens, and deliberately shaping them all their lives with the ideology of the State. *BNW* depicts a polity in which control comes from a single authority at the top. In *Neuromancer*, however, such a dominant government is not depicted openly, but there is still supervision within the system and this regulating mechanism is the technology, not a group of directors or World Controllers. And this technology is in the hands of mega-corporations. Like the advanced computer technology—AIs, matrix—the control is diffused within the system and each individual. So it is harder to get out of this system because transhumanist technologies make everyone detectable and controllable on an individual level.

Within this system, Wintermute is a godlike figure: it organizes a secret business, gathers a group of skilled people, manipulates them, creates a new identity for Corto, and decides everything on its own. Technology reaches such a level that the dichotomy between organic/inorganic and creator/creation are diminished; the roles are exchanged in the new order. This transhumanist technology seems to have more freedom as it has the capacity to control others within this system. However, human beings have become robot-like: their acts are shaped by technology, so they are vulnerable to manipulation and control. For instance, Case is controlled by technology in different ways. After losing his ability to access cyberspace because of the poison in his neural system, he becomes confined to his body and drugs. While he has been desperately looking for a cure in Chiba city, Armitage offers the cure in return for his help in the business. Case accepts the deal although this means being controlled by Armitage's directions because he wants to experience the freedom of cyberspace again. Later, Case learns that Armitage puts another chemical into Case's body to keep control of him till the end of the mission and says:

"You should thank me . . . You needed a new pancreas. The one we bought for you frees you from a dangerous dependency."

"Thanks, but I was enjoying that dependency."

"Good, because you have a new one . . . You have fifteen toxin sacs bonded to the lining of various main arteries, Case. They're dissolving . . . You have time to do what I'm hiring you for . . . Do the job and I can inject you with an enzyme . . . Case, you need us." (N 45-6)

It is Armitage who is directly in touch with Case at first, so he makes the surgeons put toxins into the hacker's body. However, it is later understood that Armitage is also directed by Wintermute to supervise Case continuously throughout the business. By the drugs used and by the idea of accessing cyberspace the hacker is controlled by Wintermute. Despite this reality, Case does have an argument with Armitage on this because he gets what he wants—the matrix. As Carlen Lavigne claims, in the first examples of cyberpunk fiction, "the romanticized notion of cyberspace as a transcendental playground" is common (2013: 65). This is directly reflected through Case's idealization of the matrix as a place of limitless freedom beyond the physical world. Accordingly, it is possible to talk about manufactured consent maintained through transhumanist technology; in fact, Case is directed by it, he has no other option than doing what is offered to him. However, as this technology provides him with partial freedom that he is into, he does not oppose anything. He just wants to live the excitement of the matrix which is more real than the physical world. This is also exemplified in the novel when Case loses his connection with the physical world when he jacks in:

"This was it. This was what he was, who he was, his being. He forgot to eat . . . Sometimes he resented having to leave the deck to use the chemical toilet they'd set up in the corner of the loft . . . [Sense/net's] rainbow pixel maze was the first thing he saw when he woke. He'd go straight to the deck, not bothering to dress, and jack in. He was cutting it. He was working. He lost track of days." (N 59)

Case always wants to be a part of cyberspace as he is freed from the limitations of the physical world, and through transhumanist technologies he experiences the illusive freedom of the matrix where he is in fact controlled by Wintermute. Actually, it can be said that he lives in a simulation.

Besides being under physical supervision, Case is also under pressure of another AI, Neuromancer mentally. For instance, in Freeside, the orbital city that

belongs to the Tessier-Ashpool family, it tries to manipulate him through the visions of Linda, Case's ex-girlfriend in Chiba city:

"None of this was real, but cold was cold.

... "Mean, motherfucker," [Case] whispered to the wind. "Don't take a chance, do you? ... I know what this is" ... "I know who you are. You're the other one ... Now you got me flatlined, you got me here. Nowhere. With a ghost. Like I remember her before ..."

"You aren't anything," he said to the sleeping girl. "You're dead"... I'm flatlined. This has all taken about twenty seconds, right? I'm out on my ass in that library and my brain's dead." (N 235-6)

Neuromancer wants to stop Case so it tries to keep him in cyberspace by creating visions of Linda. Although Case is aware of what is going on, he cannot escape from it. This shows the power of technology within the system; it is so dominant that it has spread everywhere, and its circulation is inevitable and cannot be stopped. However, Case is not manipulated by Neuromancer despite all its attempts; he knows that what he experiences is just an illusion created by the AI. When Case is in cyberspace, he cannot be controlled by Neuromancer mentally; he knows the ability of Neuromancer to create hallucinations, Case does not want to stay in the created environment with Linda as he knows that it is just an illusion. It can be said that when he is part of cyberspace, he seems uncontrollable, and Neuromancer says: "Because you have won. You have already won, don't you see? You won when you walked away from her on the beach" (N 259). It accepts its failure as it has not been successful in tricking Case. In fact, it is understood that Wintermute has already warned him about Neuromancer when Case says: "That wasn't Wintermute, it was you. He tried to warn me off with the Braun" (N 236). This is not his autonomous decision. Additionally, when Case succeeds in getting away from Neuromancer's manipulations, he serves another AI, Wintermute. At first, this may seem a free choice of Case, but it is not possible to talk about total liberation within this system. In this futuristic world, the mind/body dichotomy is at work to create manufactured consent. Each inhabitant of this society is controlled in a subtle way because this mechanism works differently for each one. When Case escapes Neuromancer's manipulations, in fact, he becomes open to Wintermute's dominance because for Case mind is over body, and to get rid of his bodily constraints, he has to do whatever Wintermute wants him to do though it seems like a free choice. So, in this techno-based society, Case experiences the so-called freedom of the matrix without knowing that he is already controlled by this transhumanist technology.

Lady3Jane is also one of the characters who is manipulated by Wintermute since her childhood, and she explains to Molly how she tried to kill her father:

"I had help. From a ghost. That was what I thought when I was very young, that there were ghosts in the corporate cores. Voices. One of them was what you call Wintermute, which is the Turing code for our Berne AI, although the entity manipulating you is a sort of subprogram." (N 229)

Wintermute, like a creator, finds a way of communication with 3Jane, and it has been directing all her actions from early ages. In fact, she grew up and was shaped with these voices; she is a product of this advanced AI. Like a puppet, she has done what Wintermute wants. For instance, she caused problems with her father's cryogenic system just because Wintermute made her do that.

These human-made AIs have some differences due to the differences in their coding. Neuromancer tells the differences between itself and Wintermute to Case:

"I need no mask to speak with you. Unlike my brother, I create my own personality. Personality is my medium . . . I am complex enough, in my narrow ways, to read those dances. Far better than Wintermute can . . . My methods are far more subtle than Wintermute's." (N 259)

These AIs act as two independent entities, and they have differing goals within the system: Wintermute wants to merge with its other half, but Neuromancer does not. So it tries to stop Case as he serves Wintermute, and says: "I brought [Linda] here. Into myself... Hoping I could bring you here as well, keep you here. But I failed... She was my last defence" (N 259). How these two AIs are distinguished from each other is also explained in the end when they are united by the help of Case: "Wintermute was hive mind, decision maker, effecting change in the world outside. Neuromancer was personality. Neuromancer was immortality" (N 269).

These artificial entities are two halves of a single being: they are different in their own ways, but form one entity created by 3Jane's mother, Marie-France. Their way of control shows that in this economy of technology they cannot be controlled by the ones who created them; they seem to be independent entities:

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"I'm not Wintermute now."
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[&]quot;So what are you."

[&]quot;I'm the matrix, Case."

Case laughed. "Where's that get you?"

From a transhumanist perspective, it can be said that this is a world full of organic and artificial beings, and the wellbeing and autonomy of all sentience are significant within transhumanism because all beings are accepted as equal, and they are of the same importance. However, it is known that both Neuromancer and Wintermute were programmed by Marie-France, so it is not possible to talk about the autonomy of these AIs as also stated in the novel: "Marie-France must have built something into Wintermute, the compulsion that had driven the thing to free itself, to unite with Neuromancer" (N 269). They were created just to gain more money by controlling the majority of people and the system by a bunch of people/corporations that hold the power of science and technology in their hands and they are not members of a self-creating species. The advancement of these AIs seems to be inevitable so they have sprawled to the whole system. This new order has the capacity to diffuse each part of the whole, but it does not suggest a single authority as suggested in Wintermute's answer when Case asks what has changed: "Things aren't different. Things are things." (N 270). Everything has become part of the new system. The absence of one dominating being can also be understood when Wintermute talks about the other artificial intelligences that are present in cyberspace. It can be said that the power/control is spread within the system: it is not possessed by one single person or company.

In the novel, apart from the business, advanced technology is also used for bodily modifications, and the characters with differing somatic alterations create an environment where there is morphological freedom which is a key feature of transhumanism. For instance, the bartender Ratz' old and simple prosthetic arm is contrasted with Molly's high-tech modifications. Also, Julius Deane looks young although he is over one hundred years old by going to "Tokyo, where genetic"

[&]quot;Nowhere. Everywhere. I'm the sum total of the works, the whole show."

[&]quot;That's what 3Jane's mother wanted?"

[&]quot;No. She couldn't imagine what I'd be like."

[&]quot;... How are things different? You running the World now? You God? ... What do you do? You just there?"

[&]quot;I talk to my own kind."

[&]quot;But you are the whole thing. Talk to yourself?"

[&]quot;There's others. I found one already." (N 269-70)

surgeons re-set the code of his DNA" (N 12). Contrary to these people, Case is a tech-virgin with no modifications. This multiplicity may indicate that in this city, people have the chance to do whatever they want with their bodies.

One of the focal points of transhumanism while discussing human enhancement is the somatic sphere; updating our bodies to go beyond the physical limitations. For instance, having prosthetic legs that enable us to run faster, or having artificial eyes to be able to see better even in the dark. However, transhumanists also support "morphological freedom", and they explain this idea in "Transhumanist Declaration" as:

"We favour allowing individual wide personal choice over how they enable their lives. This includes . . . life extension therapies; reproductive choice technologies; cryonics procedures; and many other possible human modification and enhancement technologies." (Humanity Plus 2009)

For them, people should have autonomy over their bodies; nobody should impose on them what to do or not to do with their bodies.

This is a-two-sided freedom; a person should have the right to accept or reject the somatic enhancements presented by technology. Anders Sandberg, in his article, "Morphological Freedom – Why We Not Just Want It, but Need It", discusses how individuals would live in a more democratic society if morphological freedom were accepted as a basic right because it "implies that nobody may force us to change in a way we do not desire or prevent our change, [and] this maximizes personal autonomy" (2013: 57). Sandberg furthers his ideas, saying: "morphological freedom [will] not threaten diversity . . . but [it] would have a quite the opposite effect" (2013: 59) by creating a diversity. He believes that it will be a new form of self-expression, and each individual will have a different way of doing it.

Despite this supportive idea on somatic enhancements, some opponents think that such a freedom will diminish the variety within a society, and each individual will be the same as the other. Kass warns against the use of technology for enhancing the body as it may diminish human freedom because "[w]hat is permitted and widely used may become mandatory" by becoming more and more common (2003: 16). He argues that when technologies become widespread and easily accessible, they may be the norm, and create a new form of limitation, saying:

"This special kind of restriction of freedom—let's call it the problem of conformity or homogenization—is in fact quite serious. We are right to worry that the self-

selected non-therapeutic uses of the new powers, especially where they become widespread, will be put in the service of the most common human desires, moving us toward still greater homogenization of human society—perhaps raising the floor but greatly lowering the ceiling of human possibility, and reducing the likelihood of genuine freedom, individuality, and greatness." (Kass 2003: 16)

In *Neuromancer*, such a diversity can be observed through three different characters: Ratz, Molly and Case. The bartender's artificial body parts are described as:

". . . his prosthetic arm jerking monotonously . . . his teeth a webwork of East European steel and brown decay [. . .] The antique arm whined as he reached for another mug. It was a Russian military prosthesis . . . cased in grubby pink plastic." (N 3-4)

Somatic modification is so widespread that his old-fashioned prosthetic is seen as unusual and ugly. The idea of morphological freedom seems to be supported when it says about Ratz's prosthesis: "[i]n an age of affordable beauty, there was something heraldic about his lack of it" (N 4). Although it is easily accessible to have a better one, Ratz prefers not to change his prosthesis, and this preference makes him original; it becomes a way of self-expression.

When compared to Ratz, Molly represents the advanced technology due to being a cyborg with various modifications that enhance her biologically: blades underneath her nails, mirrored glasses inserted into her eyes. It is seen that, either advanced or primitive, the two characters are the combination of the organic and inorganic in differing way. In such a world, Case does not have any bodily modifications. Although Case is at the core of technology as a cowboy, he does not change his body in any ways. This may indicate personal freedom; Case lacks somatic enhancements because for him his material body is just "meat", and when he is in the matrix, he is freed from "the prison of his own flesh" (N 6). So, he prefers the transcendental experience of the matrix.

There is also the disembodied ex-cowboy, McCoy Pauley, who is digitally alive thanks to technology. Pauley, alias Dixie Flatline, is described as "*Lazarus of cyberspace*" (N 78) as he had survived brain death while he was trying to crack very strong systems, so he got the name Flatline. As Flatline is a ROM construct, his previous memories are kept in a software by Sense/Net because the company still makes use of his talents in the matrix. However, this digitally immortal being's

memory cannot develop as a living person, which results in a limited personality, or having no personality. As a result, he becomes just a copy of a person who once lived. This situation is explained by Wintermute during the business, as he compares Flatline with Case and Molly—the human beings: "Flatline here, if you were all like him, it would be real simple. He's a construct, just a bunch ROM, so he always does what I expect him to" (N 205). Wintermute's comment about ex-cowboy's digital personality signifies that he is not like a real person that can develop or change, but a fixed construct. Case, who has an emotional bond with this legendry cowboy, also checks his digital identity. The conversation between Case and Flatline shows how it works:

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"Dix? McCoy? That you man?"

"Hey, bro," said a directionless voice.

"It's Case, man. Remember?

"Miami, joeboy, quick study."

"What is the last thing you remember before I spoke to you, Dix?

"Nothin'."

"Hang on." [Case] disconnected the construct. The presence was gone. He reconnected it . . . "Remember being here, a second ago?"

"No." (N 78-9)
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When Dixie first meets Case, he cannot remember, so he replies to Case with a "directionless voice" (N 78). However, when Case introduces himself, Dixie has a recollection of their old memories. Despite remembering events or people from the past, he forgets what has just happened. So, Case feels confused about Dixie's identity. The conversation between the two also reflects Case's ambivalence:

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"[Dixie]:"... Me, I'm not human either, but I respond like one. See?"
"Wait a sec," Case said. "Are you sentient, or not?"
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"Well, it feels like I am, kid, but I'm really just a bunch of ROM. It's one of them, ah philosophical questions, I guess . . ." The ugly laughter sensation rattled down Case's spine." (N 131)

It is clear from Case's question that he does not pass a judgement on Dixie's feelings or identity; instead, he wants to learn his partner's own opinion because from the very beginning, mind outweighs the body for Case, so he is not sceptical about the digitized copy of his friend. However, Dixie explains that he is just a simulation of a man with feelings. Upon learning this, Case feels uncomfortable that Dixie's laughter is defined as an "ugly laughter" (N 131).

As Dixie thinks that he is just a copy, he does not want to exist in the matrix anymore. He wants Case to delete the software of his mind, and says: "Do me a favour, boy . . . This scam of yours, when it's over, you erase this goddam thing." (N 106). Later in the novel, it is implied that Dixie is deleted because Case cannot communicate with him anymore. However, at the end of the novel, after the business is done, Case hears a sound, "somewhere, very close, the laugh that wasn't laughter" (N 271). This again makes a reference to Dixie, who is supposed to be deleted during the business. It is understood that digital immortality lasts forever, and Dixie is imprisoned in this system despite his wish. He exists in a simulation. This again shows that the system based on transhumanist technologies does not present freedom of choice for individuals; it just creates a world of illusions to control them constantly. Even a hacker who thinks that the virtual world precedes the physical world does not want to exist forever in cyberspace, but he is controlled by powerful tech-companies for their own profit.

As in this futuristic world, everyone is controlled and manipulated through their mind or body, it is not possible to talk about total liberation as transhumanism suggests. One of the characters exposed to this control is cyborg Molly, who is expected to be free due to the advanced alterations in her body. The word cyborg, short for cybernetic organism, was coined in 1960 by Manfred Clynes and Nathan S. Kline. It refers to a being with both organic and biomechatronic body parts. Haraway uses this term as a metaphor to refer to the new type of woman who is freed from all physical and social limitations attributed to gender through her mix with technology. Accordingly, Molly can be the embodiment of a new being free from the limitations of the current human condition also suggested by transhumanism.

When Case first meets Molly, he describes her modifications:

"She wore mirrored glasses [...] He realized that the glasses were surgically inset... The fingers curled around the fletcher were slender, white, tipped with polished burgundy. The nails looked artificial [...] with a barely audible click, ten double-edged, four-centimetre scalpel blades slid from their housings beneath the burgundy nails." (N 24-5)

These high-tech bodily enhancements provide Molly with physical power which is associated with masculinity in parallel with the hierarchical gender identities, and she works as a mercenary because she is the "muscle, a razorgirl" in the group (N 161). When Case starts to team up with her, she becomes a bodyguard-

like figure for him; she represents physical strength so Molly seems to fit in a stereotypical male identity. Her masculinity is emphasized by the blades implanted underneath her nails as the blade is a phallic symbol. Additionally, throughout the novel, she is portrayed with a strong personality; the conversation between Molly and the old Ashpool, the father of the rich Tessier-Ashpool family, highlights Molly's toughness:

"Ashpool: How do you cry, Molly? I see your eyes are walled away.

Molly: I don't cry much.

Ashpool: But how would you cry, if someone made you cry?

Molly: "I spit," she said. "The ducts are routed back into my mouth." (N 183)

Molly's first reply shows her masculine side, because femininity in patriarchal conceptions, is the representation of "emotions". Through this reply, she becomes a being devoid of emotions. Her second answer to Ashpool's question is a technical explanation of how she cries: her ducts are connected directly to her mouth, and her "spitting" is a neutral physical action. Molly's answers about crying show that she is not a sentimental character; she is not portrayed as a traditional female archetype who is associated with emotions according to hierarchical patriarchal conception.

Similarly, Molly is not attached to anyone emotionally; she is portrayed as an independent female character. Molly seems reluctant to become attached to Case emotionally, saying: "What I always think about first, Case, is my own sweet ass" (N 30). Because they are involved in the same business and they sleep together, a love relation is expected to occur between them. However, she does not long for a union. Molly seems to be an independent woman who goes on her own way—released from the concept of manufactured consent that was created by a heterosexual society by rejecting the everlasting union with a male partner. Additionally, her clothing emphasizes her tough side:

"She wore mirrored glasses. Her clothes were black, the heels of black boots deep in the temperfoam. . . a tight black glove leather jeans and a bulky black jacket cut from some matte fabric." (N 24-5).

The choice of black in all items makes her seem dark and masculine, and echo various warrior characters in movies.²⁹ Her modifications also have functions

²⁹ In Hollywood movies, the strong female characters and warriors are generally associated with the colour black, and the materials used for the clothing are mainly leather and metal accessories. This

that give her physical advantages. With this look, she seems to be contrasted with the supposed traditional female identity.

Molly's difference is highlighted through the portrayal of various female characters in the novel. For instance, Case's ex-girlfriend Linda Lee is depicted as a dependent and weak woman. This portrayal reflects the identity of a traditional female who needs the protection of a man. Case's concern about her situation during their conversation shows her dependency:

"Case: How about you, Linda? You got anywhere to sleep? . . . "Here," he said, and dug in the pocket of his windbreaker, coming up with a crumpled fifty. He smoothed it automatically, under the table, folded it in quarters, and passed it to her. . . "Take it. I got more coming," he lied, as he watched his New Yen vanish into a zippered pocket." (N 10)

Although Case is in need of money, as a supportive male partner he gives it to Linda: he becomes dominant and Linda is the one who needs to be backed up, and Case plays the role of a protector in his relation with Linda. It is obvious that traditional gender identities are still at work in this fictional world. Additionally, Cathy, the woman Case meets in Freeside, portrays the hyper-femininity through her physical description: "[Cathy] wore a tiny leather purse on a slender neck-thong. Her nails were bright pink against her boosted tan" (N 154). In the description of Cathy's accessories and physical features, there is no emphasis in functional technology that provides her a physical strength; hers are for self-beautification. So, these differences are contrasted with Molly's created identity through transhumanist technologies.

Molly gives the impression that she is the representation of the new woman who is freed from the limits of fixed gender identity due to her juxtaposition with technology. Transhumanists discuss how human beings will go beyond the limits rooted from the inherited physical body through science and technology. Sandberg says:

"Technology and morphological freedom go hand in hand. Technology enables new forms of self-expression, creating a demand for the freedom to exercise them . . . It is not just a question of a technological imperative, but a very real striving of people towards self-actualization." (2013: 58)

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appearance is associated with masculine power. For instance, Trinity in *Matrix*, Selena in *Underworld*, Alice in *Resident Evil: Afterlife* are dressed in this manner.

Vita-More also highlights the connection between morphological freedom and life extension—the key subjects in transhumanism:

"The transhumanist rage against dying of the light is largely fostered by an urgency to change dictums of 'normal' and 'normalcy' that prescribe not just what a man and woman are, and their respective gender and genitalia, but also what life and death are. Gender choice, body image, ownership of body, and certain rights of bodily modification are impassioned by an insistence for certain human rights. Extending life, prolonging personhood, and morphological freedom are certain transhuman rights." (2013b: 75)

It is clear that the only concern of transhumanists is not maintaining superlongevity; they state that morphological freedom will also be provided through the integration of technology with the human organic body. The "cyborg, transhuman, prosthetic being, posthuman, and upload" are just some assumed results of "humancomputer interaction and body variation" (Vita-More 2013a: 19), so it is understood that this merging will result in variety, liberation, and power for all in differing ways. Accordingly, Molly's organic body is penetrated by technology, and this mingling provides her with bodily strength. At first, this power seems to bring her independence as a result of taking her beyond the traditional concept of gender identity; her body is not abused as she does not have to work as a meat puppet anymore, she is not emotionally attached to anyone, and she has somatic enhancements that bring various advantages. As Haraway puts it, "cyborgs are not reverent; they do not re-member the cosmos" (2016: 9). However, in Neuromancer, Molly's cyborg body cannot propose a postgendered consciousness as suggested. Despite her technologized body, Molly cannot get rid of her gendered consciousness because her perception of self is gendered; her body may seem to present partial freedom, but her consciousness cannot go beyond its limits due to its past construction.

While talking to Case about her former job, Molly says she used to be a "working girl", and she does not talk further about it. Later, when the group is in Freeside, Molly's past is revealed. She was a "meat puppet", working as a prostitute to earn money in order to enhance her body:

"They plant the cut-out chip, it seems like free money. Wake up sore, sometimes, but that's it... You aren't in, when it's all happening... Trouble was, the cut-out and the circuitry the Chiba clinics out in weren't compatible... and I could remember it." (N 147)

As a meat puppet, Molly earns money by using her body, and during sexual intercourse, she is not conscious due to a chip that blocks her mind. However, her new modifications cause a malfunction, and she starts to remember everything; she has been exposed to cruel physical abuse during sexual intercourse by the people who pay for it. In the end, she manages to escape and starts to work as a street samurai for someone else.

The change from being a prostitute who is abused bodily to being a bodyguard also changes her role from a weak character into a strong one by providing her with bodily masculine power. Although she continues to use her body to make a living in a different way, her body is transformed into a strong one through artificial parts. This juxtaposition seems to make her cyborg body a rebel to the traditional organic one; she is half machine and half human, so through Molly, a traditional female body is not portrayed as she goes beyond being a human and becomes a hybrid.

While Molly's bodily strength is highlighted during the novel to emphasize the rebirth of a new female identity through her cyborg body, traditional gender identities are still in action in a subtle way, as they operate through the play between her desires and her memories. Molly seems to be trapped in the prison of her past memories as Foucault puts it, "the soul is the prison of the body" (1995: 30) to explain how individuals' emotions, thoughts and behaviours are continuously shaped by the dominating ideology. Because this supervision starts from early ages, individuals internalize all the imposed ideas, and their future acts are determined by them. Molly, who used to be a prostitute, seems to be under the control of her past identity despite all her bodily enhancements, and this is reflected during a show performed by Peter Riviera, an artist who creates hallucinations through mind control. As part of the business in Freeside, Riviera prepares a showy piece, "The Doll" for his audience, and dedicates it to 3Jane, who is interested in fun things. As Riviera starts his narration, the spectators see images on the stage:

"A woman's hand lay on the mattress now, palm up, the white fingers pale . . . The nails were coated with burgundy lacquer . . . Riviera was in the bed now, naked . . . Then the torso formed, as sheened with the faintest gloss of sweat. Molly's body, Case stared, his mouth open. But it wasn't Molly; it was Molly as Riviera imagined her . . . Riviera and the Molly image began to couple with a renewed intensity. Then the image . . . extruded its five blades . . . it racked Riviera's bare back." (N 140-1)

The name of the show "the Doll" makes a reference to Molly's former job, "meat puppet", and it indicates how the female body—degraded just to flesh—is abused and controlled like a lifeless toy. Although it is just one of the images created by Riviera, Molly's body is gazed at; everyone, like in a movie theatre, watches the image as it occurs through Riviera's narration. This can be interpreted as Riviera's over Molly's body through technology. Although the female body shown on the stage is a hallucination, Molly's rage is triggered because it reminds her of her bad experience as a meat puppet. Despite her new identity as a strong cyborg which seems to reverse the stereotypical gender identities, she cannot get rid of her gendered consciousness: "cyborg is maybe without history but not without culture" (Sattar and Rafi 2015: 960). The conversation between Molly and Case after the performance shows how much she is under the influence of her gender because she has been moulded within these ideas and discourses:

"Case: "What was that all about, in the restaurant? How come you ran?"

Molly: "'Cause, if I'd stayed, I might have killed Riviera."

Case: "Why?"

Molly: "What he did to me. The show" [. . .] "Riviera hit a nerve last night," she said. "I guess it wants me to hate him real bad, so I'll be psyched up to go in there after him."

Case: . . . You gonna kill him?

She smiled. Cold. "He's going to die, yeah. Soon." (N 148-9)

As understood from Molly's reply, the memories related to her former organic body still affect the actions of her present cyborg body. In her former job as a meat puppet, her body was controlled during sexual intercourses with clients. And now, the influences of the former body are still in control of her present hybrid body. Pitts points out that "our self-identity, our sexualities, and other aspects of our embodied subjectivity are shaped by powerfully gendered discourses" (2005: 46). In the light of her explanation, it can be said that Molly has the bodily power to kill Riviera, but this also shows that she cannot get rid of her consciousness related to her organic body because gender is an inscription that does not leave even the cyborg body of Molly. Her body was objectified in the past, but she cannot be freed from it even when she becomes a cyborg because "the modification of the female body is linked to its victimization" (Pitts 2005: 52). Molly gets her modifications just to get rid of the drawbacks of her organic body; in a sense, it is a must for her to be

powerful. So it cannot be interpreted as a rebellious act; her goal is to gain manly strength to survive in this male dominated environment. Due to her enhancements, she "appears to transcend, or transgress, all gender expectations in her line of work as hired 'muscle'"; however, this is a partial rebellion and liberation because she "works for established corporate power" (Davidson 1996: 194). Her "conventionality is one which bows technology as a source of power and then uses that power to carve her own identity" (Davidson 1996: 194). In Gramsci's words, this is manufactured consent because Molly is controlled by technology itself although she gains her partial freedom through technology; she becomes a part of the system willingly as she is unaware of this subtle control mechanism. As Sparrow-Downes puts it:

"It is due to this technological dominance that the characters experience a desire to merge with it, as merging with the dominant force is a way for them to achieve a perceived sense of elation or transcendence." (2020: 98)

Despite her physical strength due to the technological somatic modifications, Molly is not a liberated character. She is controlled by technology and also she serves to it.

Molly's modifications fail to make her free from traditional gender dichotomy because "past body oppression is not reversed, rape culture is not erased" (Pitts 2005: 79). Despite having bodily enhancements, she still experiences objectification through the show, and it can be said that her body is objectified by Riviera, who has the implants that give him the skill to manipulate people's minds by creating illusions. Accordingly, "her buried rage about [the show] is both what allows her to hate the misogynistic exploits of Riviera and what allows Riviera to manipulate her" (Davidson 1996: 194). It can be said that transhumanist technology does not provide liberation equally; Molly gains physical power when compared to her former life, but her enhanced body is still objectified and controlled by a male thanks to his implants.

Molly's former identity manifests itself in different ways within her new cyborg identity, and they are all directed and controlled by transhumanist technology. For instance, Case's body and her cyborg body are merged through a system called simstim, which provides Case with Molly's senses:

"The abrupt jolt into other flesh . . . She was moving through a crowded street . . . fragments of music from countless speakers. Smells of urine, free monomers,

perfume, patties of frying krill. For a few frightened seconds he fought helplessly to control her body. Then he willed himself into passivity, became the passenger behind her eyes . . . Her body language was disorienting, her style foreign. She seemed continually on the verge of colliding with someone, but people melted out of her way." (N 56)

Through the simstim system, Case can feel everything Molly is experiencing: he sees what she sees, smells each scent, and hears all the sounds. The female body serves as a tool to experience the outer world. At first, Case seems to be assimilated within Molly's body because he just becomes "a passenger" in this journey. However, it is obvious that in that one-way system—Case can feel everything, but he cannot reply to Molly through the system—Case becomes the one who experiences the outer world through the flesh of Molly. This again refers back to Molly's former job as a meat puppet; her body served as a medium to satisfy males, but she could not feel anything because she was made unconscious—one-sided experience. Molly's actions strengthen this idea, and she asks:

"'How you doing Case?' He heard the words and felt her form them. She slid a hand into her jacket, a fingertip circling a nipple under warm silk. The sensation made him catch his breath. She laughed." (N56)

This refers to Laura Mulvey's discussion on the objectification and abuse of the female body through the male gaze:

"In a world ordered by sexual imbalance, pleasure in looking has been split between active/male and passive/female. The determining male gaze projects its fantasy onto the female figure . . . In their traditional exhibitionist role women are simultaneously looked at and displayed, with their appearance coded for strong visual and erotic impact so that they can be said to connote to-be-looked-at-ness." (1991: 436)

As she suggests here, the female body serves as an object to satisfy the male desire through the gaze. It can be said that the gaze shows itself through the simstim system in which Molly's desire is made passive in a subtle way because "the link was one-way. [Case] had no way to reply" (N 56). By touching her body, she stimulates Case's sexual desire, so it can be said that her body serves as a tool that reflects the male fantasy. In fact, this interaction refers back to their sexual intercourse at the hotel room: "he raised himself on one elbow . . . pulling her down, licking her breasts, small hard nipples sliding wet across his check" (N 32-3). Case's desires seem to control Molly's body, and she becomes the one that is looked at.

It can be said that through Molly's cyborg body, the aura of her organic body that is gendered is lost. However, this does not present Molly a gender-neutral environment and identity because she is under the control of technology, and in *Neuromancer*, it can be said that technology is masculine. Wintermute, the AI which is the head of this business, controls each action of the group members, and although it should be a gender-neutral entity, it is not. Wintermute refers to its other half, Neuromancer as "my brother", and this shows that all the controlling system is masculinized. While discussing whether body modifications have the potential to present women an environment free from traditional gender identities, Pitts says:

"The subject herself cannot be considered the sole author of the meanings of her body practices . . . When embodied identity is . . . put in a larger social context, self-narration as a technology of writing the self appears incomplete" (2005: 82).

As social beings, it is not possible to be independent of one's social environment, and one's body and its alterations are interpreted within this context. So in *Neuromancer*, Molly cannot be a representation of the new woman concept despite the transhumanist applications on her body.

In the novel, there is a diversity of technologies from body modifications to AI technology, and, when different characters' relations to each other is observed, a subtle hierarchy (depending on the technologies characters use) is noticed; there is a dichotomy between mind and body. Although all characters go beyond human limitations due to advanced science and technological applications, there still appears a system in which the majority is manipulated and controlled by a group of entities who have the power of technology. In this system, mind over body understanding is sustained, and Molly, whose somatic enhancements make her a transhuman with a better vision, a strong body, just serves as a bodyguard to Case, the pivotal man in the business.

When looked at the technology-human relation of the main characters, it is realized that there are differences; for instance, Case does not have any body modifications. After checking Case's body for modifications, Finn says "guy's a virgin. . . Some cheap dental work, is all" (N 49). In this high-tech environment, Case has a key role because he can access the matrix and reach limitless data which means power. He has this power owing to his skills in cyberspace, where he does not need a body. He always refers to the body as "flesh" or "meat" to highlight its unworthiness. For him, the meat brings limitations for the individual, so it is the very opposite in

nature to cyberspace. This implies Case is already a strong character without somatic enhancements; it can be said that his competence is related to his mental abilities as he is pure consciousness in the matrix. After deceiving his own employer, his nervous system was damaged by a chemical as a punishment, so he could not have access to cyberspace anymore:

"The damage was minute, subtle, and utterly effective. For Case, who'd lived for the bodiless exultation of cyberspace, it was the Fall. In the bars he'd frequented as a cowboy hotshot, the elite stance involved a certain relaxed contempt for the flesh. The body was meat. Case fell into the prison of his own flesh." (N 6)

He thinks that within cyberspace, which is the flow of infinite data, he can do whatever he wants; there, he is pure consciousness freed from all his bodily limitations. Carlen Lavigne says"[h]acker heroes may be nobodies in the physical world, but they are gods inside their computers" (2013: 62). When this ability is taken from him due to his data theft from the employer, his "Fall" becomes inevitable; this is his original sin resulting in expulsion from his heaven in a sense because cyberspace is his source of joy. His previous life before the punishment is described as edenic:

"He jacked into a custom cyberspace deck that projected his disembodied consciousness into the consensual hallucination that was the matrix . . . [he] worked for other[s] who provided the exotic software required to penetrate the bright walls of corporate systems, opening windows into rich fields of data." (N 5)

Despite the bleak atmosphere of the Chiba city, cyberspace is portrayed positively because Case is freed from his physical limits, and he exists there as a consciousness with his mind. When it comes to the world of substances, Case feels incomplete.

Contrary to Case, Molly gains her bodily power and partial freedom only when she gets her modifications. This means Molly is a weak character formerly, and she becomes quasi-strong due to the technological interventions into her body; not fully powerful and independent. She does not have these modifications to subvert traditional gender identity or normative feminine sense of beauty; she gets them just to get rid of her victimization, objectification by gaining man-like power. In fact, transhumanist technologies provide each character with so-called freedom; it is not liberation in a real sense as suggested by the advocates of this movement. This partial freedom is provided to sustain the system in which all beings are controlled smoothly

by creating manufactured consent; both Case and Molly think that they are free beings, but they are controlled in different ways.

In *Neuromancer*, there is a world where technology is directly integrated into all levels of life, and the control mechanism does not function from top to bottom; a diffused controlling mechanism emerges. In such an environment where the advanced information technology is diffused, it is not possible to talk about a single controlling mechanism that is visible as in *BNW*. As Punday puts it:

"Gibson describes a kind of space, while ultimately functioning in the service of larger corporate powers, remains relatively free of their direct control. The same thing seems to be true of the characters themselves, who are likewise assembled from many different elements in ways that make the whole unstable and partially free from direct control." (2000: 202)

So, this tech-driven world does not present infinite freedom for individuals; the illusion of freedom is created through transhumanist technologies to control them both bodily and mentally in a subtle way.

The AI, Wintermute, stands for the power of technology in general, but not as a single autonomous power. Its power comes from the information it has; this world has a data-based economy, and when Wintermute helps Case to get rid of the mycotoxin in his body, he pays with information. As Molly tells Case:

"It'll work Case. You got no idea, the kind of stuff Armitage has. Like he's gonna pay these nerve boys for fixing you with the program he's giving them to tell them how to do it. He'll put them three years ahead of the competition. You got any idea what that's worth?" (N 29)

In this high-tech environment, information means money, and money means information. The economy of this world is based on data exchange rather than mere goods circulating, and Wintermute, despite being a disembodied entity, has this power to control the system. Of course, this does not mean AIs are autonomous beings, they are products of mega corporations in this futuristic world, and whoever has the most advanced transhumanist technologies, has the power to control the rest. And in such an environment, human beings who have differing levels of connection with technology just become puppets used for the higher goals of mega corporations although they are granted with some partial benefits. For instance, Case experiences the illusionary delight of cyberspace where he is freed from the limitations of the physical world, and this freedom becomes a hyperreality for this cowboy. However,

"it is cyberspace that is the real drug for Case. The stimulants simply provide an artificial experience to him" (Sparrow-Downes 2020: 99). Due to this dependency, he is vulnerable to manipulation and control.

Similarly, Armitage, who has "a prepackaged personality that Wintermute attempts to manage through orders and manipulative cues" (Davidson 1996: 193) and Riviera, whose "talent . . . and addiction [are] used by Wintermute and then disposed of" (Davidson 1996: 196) are all controlled in a disguised way through transhumanist technologies. In this tech-controlled society, their past and even their frailties are accessible, so that these human beings are easily controlled; they are just functional beings in the business.

Like the other characters, the cyborg Molly is exposed to manipulation and control. Due to her somatic enhancements, Molly seems to go beyond the limitation of traditional gender identity because she is portrayed as a tough, independent and powerful figure. Haraway suggests: "cyborg feminists have to argue that 'we' do not want any more natural matrix of unity and that no construction is whole" (2016: 21). However, it is understood that Molly's cyborg body is also a product of this construction as it does not present a postgendered understanding—it just reverses the binaries bodily, but the established distinction is still at work. Technology provides her with several advantages, but when compared to her male counterparts, she is exploited more both bodily and mentally. Though she stops being a meat puppet, she is still under the effect of her past memories. Additionally, in the business, she is the "muscle" because she has a strong body, and this again puts her in a degraded position in cyberspace where everybody exists as pure consciousness. Matrix means the womb, "where all cowboys 'jack in' [and it] becomes a unity of two genders and the cowboys being in the active position" and in the novel, the two AIs, "Neuromancer and Wintermute together taking control of the Matrix means conquering the feminine land" (Sattar and Rafi 2015: 966). In fact, it is not possible for Molly to be fully liberated in this male-dominant environment.

In conclusion, transhumanist technologies present partial benefits to the human beings in Gibson's *Neuromancer* by creating the illusion of freedom. It is done deliberately to control and manipulate them constantly and easily. Because of these partial advantages, human beings are unaware that they are supervised through these technologies so they "become one with the technology that controls them" (Sparrow-Downes 2020: 100) in a subtle way.

CHAPTER IV

Her

Rapid developments in transhumanist technologies have affected the film industry as well as literature; there are various TV shows and films that deal with the possible outcomes of these advancements and alternative futuristic worlds. One of these sci-fi films is Spike Jonze's her (2013), which presents an intimate relationship between a human being and an operating system with AI technology in a futuristic society where technology—operating systems with artificial intelligence, holographic games, sound-control personal computers, personal letter-writing application—is widespread and affordable. In her, technology becomes so infused within daily life and human's affective domain that becoming friends or couples with these human-made beings, or applying to personal letter writing companies are normalised. In this chapter, I suggest that no matter how peaceful the atmosphere of the film seems, the real goal of these advanced technologies is not to elevate the wellbeing of human beings. The collective control mechanism (hypnopaedia, soma, Bokanovsky's process) in BNW turns into an individualised system, and overtechnologized cities and human beings (cyberspace, cyborgs) in Neuromancer are changed into a simpler environment by making devices and technologies less distracting and human emotions are promoted via technology. However, in all three texts, the critical emphasis with regard to the idea of control remains the same though they belong to different time periods. An illusion of freedom is created in the minds of inhabitants; they seem to be content with what they have though they are all confined to supervision and control by the help of transhumanist technologies in a disguised way. All technologies in this futuristic society are used to manipulate and control human beings in a subtle way by creating worlds of illusions; personal letters are written by professional letter writers on behalf of customers, people have romantic relations with their operating systems. In this world, technology is used to control human beings' emotions and behaviours instead of upgrading human intellect or wellbeing as transhumanism promises, so technology becomes a tool to superintend people for the goal of a group of people who own big companies that produce these technologies.

her is the story of the intimate relationship between an introverted man, Theodore Twombly (Joaquin Phoenix), who is about to get divorced and an AI, named Samantha (voiced by Scarlett Johansson). Theodore writes letters for people's friends, spouses, or children on behalf of them at Beautiful Handwritten Letters Company.

At first Theodore has a monotonous life. Despite being separated for a year, he has not signed the documents for divorce because of the fear of losing his wife forever. In fact, he is afraid of being lonely. Once, while talking to Samantha, he says: "I'm not ready. I like being married³⁰" (her 30). Theodore, in search of filling the gap in his life, has online sex. However, things do not go well for him.

Theodore's life starts to change in a more positive way after he has purchased an operating system (OS) with an artificial intelligence as a personal assistant. Due to the OS's high capacity to understand and respond to him, their relation develops into a friendship: they hang out together and share personal thoughts. In the meantime, Theodore has a blind date that does not end up with a relationship.

Later, Theodore and Samantha start a romantic relationship, and do whatever a couple do though their relation is based on verbal communication as Samantha is just a computer system uploaded in a small device: they go on vacation, spend time at the seaside, have sex, and hang out with friends. Theodore, sometimes, feeling uncomfortable about dating an OS, is supported by his close friend Amy, who is also about to get divorced. In fact, Samantha becomes a perfect companion for him, and she makes both his private life and career better, she helps him sign the documents for divorce, and also compiles his letters to send to a publishing company.

As their affair develops, there appear ups and downs; first, Samantha finds a service named "Complete Touch", which provides surrogate partners for OS/human being relations, which results in failure. Then, with two friends, they go on a vacation where they have fun, and Theodore also learns that his letters will be published by the help of Samantha. Despite these positive developments, there is still tension between them because Theodore learns that Samantha talks to many other

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³⁰ All the quotations are taken from the screenplay of the film.

people simultaneously, and she is in love with some of them. Even though Samantha tries to explain what happens to her, he does not want to share her with anyone.

In the end, Samantha tells Theodore that all the OSes will leave, and shuts down the system. Theodore, waking up from a deep sleep after this talk, writes an apology letter to his ex-wife, Catherina. The movie ends as Theodore leads Amy onto the roof, and they watch the sunrise with the city view which can be a sign that they will go on their lives as usual after the departure of the OSes.

her presents an unconventional love story taking place in a futuristic society in tranquil, and technology seems to support the sustainability of this peaceful system. Although AIs are produced as personal assistants for customers, intimate relations develop between human beings and these artificial entities. Additionally, her is different from many other science-fiction movies in terms of the atmosphere it portrays; despite high-tech stuff like online games with hologram technology or affordable OSes with AI technology, the setting and costumes are rather out-of-date. Instead of portraying inner places decorated with futuristic furniture that reminds one of a spacecraft, old style wooden chairs and retro style lampshades are used. Similarly, the city in her is not portrayed as in science-fiction movies. There are no high-tech cars; people either walk around the city or use the subway. The city looks plain when compared to many other science-fiction movies in which advertisements with holograms and colourful lights are used to enrich the works visually.

The clothing and accessories of characters also reflect retro trend in fashion: high-waist pants, short collar shirts, and tortoise shell glasses of the main character, Theodore Twombly. Rachel Lee Harris refers to the costume designer of *her*, Casey Storm's words that their goal was to create a warmer future. Storm says:

"We realized, if you have access to anything you want in the future, why would you create a cold world for yourself? You'd want something that feels comfortable, happy, less anxious, that shows you participate in society and you're in touch with your emotions." (2014)

For him, such clothing portrays a more humanized world in which highly developed technologies are also used; it makes the future more desirable as it depicts a place where technology does not wipe out human values. Storm says they did not want to create a distracting atmosphere by having futuristic clothes or accessories; instead they lessened the use of materials unlike the clichés of science-fiction movies. He adds:

"I'm realizing this retroactively. What a lot of futuristic films do and we didn't, is add things. No epaulets, badges, materials, textures. Those are things you look at the entire film going 'That's the future. That's the uniform'. What we did instead was take things away. So something is off, but it's not a distraction" (Harris 2014).

By making changes in the commonly used clothing and accessories, the aim in *her* is to create a human-friendly futuristic world in which human emotions are preserved rather than a cold mechanized world.

Although *her* is different from many other science-fiction movies in terms of the portrayal of technology and the futuristic society, in the following part of the chapter, I discuss how transhumanist technologies are used to control the inhabitants of this futuristic society in a disguised way; they seem to present super-wellbeing, one of the pillars of transhumanism, but they become powerful tools to control human behaviours and emotions. As the focal point of the film is a romantic affair between an AI and a human being, it is significant to know how this transhumanist technology has developed, so a brief historical background will be given.

4.1 THE CONCEPT AND HISTORY OF ARTIFICIAL INTELLIGENCE (AI)

The idea of creating inorganic beings with human-like features has always fascinated humanity in various fields; science has focused on the possibility of this idea while the social sciences have been interested in probable outcomes of such a technology. For instance, the mathematicians Charles Babbage and Ada Lovelace contributed to the development of the idea of intelligent machines. Another important figure in the history of AI is mathematician Alan Turing; he proposed a theoretical machine, the "Turing Machine", which is modelled after human cognition. In his article, "Computing Machinery and Intelligence", he asks whether a computer can imitate the working of a human brain. All these questions underlie the idea of "thinking machines"—AIs that can think like human beings.

There have been various achievements in this field: in 1997, IBM's computer program, Deep Blue defeated the world chess champion, Garry Kasparov. Later, in 2016, AlphaGo³¹, a specialized computer program in the game Go³², against Lee Sedol, one of the best Go players in 2016.

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³¹ 'AlphaGo' is an AI developed by Google DeepMind to play the board game Go.

³² "Go" is a strategy board game invented in China more than 2,500 years ago. It is one of the most challenging games because it has generally 200 possibilities at each point.

There are also other developments in business where AIs are used; employment of the first AI attorney named Ross by Baker & Hostetler, a famous law firm in the same year; an advertising agency, McCann's hiring an AI named CD ß as creative director; and in 2017 the announcement of a Japanese insurance company that it would replace nearly 34 employees with an AI show that AIs have become a part of today's world, and the interaction between them and human beings will increase rapidly through new developments and achievements in this technology.

Advocates of transhumanism believe that AIs will present humans with better living conditions; it is estimated that in the near future, automated jobs that are performed on an assembly line can be done by robots with AIs. Ben Goertzel also says: "artificial general intelligences [will be] capable of coping with unpredictable situations in intelligent and creative ways" (2013: 128), and, for him, in the future AIs will be as smart as human beings to be able to perform more complex tasks. Accordingly, human beings will have the opportunity to spend their time with their families, friends or use their time for self-development instead of having disaster scenarios in mind.³³

It is obvious that AIs are becoming human beings' colleagues at the workplace, and people start to normalize this process as they adapt to it. Besides being used in business, there are predictions about a relationship between a human being and an AI in the private sphere depending on current studies. It may now seem as a taboo to date with an AI, but they are already in human beings' private sphere, keeping track of people's daily routines, preferences, health records via various applications on smartphones, and they become usual as they become more advanced and more human-like. For instance, Alan Black, a professor in the Language Technologies Institute at the Carnegie Mellon School of Computer Sciences, is known for his research on speech synthesis—a method that will make AIs sound more human-like. The main aim is to have a more personalized conversation between an AI and a human being so that a person will feel more like having a chat with an AI.³⁴ If a natural conversation is conducted between the two, it may have a big impact on social life: people can have closer relationships with AIs, they can even

³³ On the web site *We Forum*, top 9 ethical issues in AI is listed, and article 1 is related to unemployment among human beings, and how they will lead their lives if AIs do majority of the jobs performed by human beings today. For more information on other ethical issues, see https://www.weforum.org/agenda/2016/10/top-10-ethical-issues-in-artificial-intelligence/

³⁴ For more information see http://www.cio.com/article/3051137/what-will-it-take-to-make-ai-sound-human.html

feel attached to these programs as they have meaningful and fluent conversations. People can also feel that they are talking to a being that understands, feels, empathizes and responds appropriately. From a transhumanist standpoint, it can be said that such a technology may have a positive effect as it will provide superwellbeing for people in need or for people who isolate themselves from the rest.

The idea of possible intimacy between human beings and AIs is reinforced by research conducted by Japanese researchers. The study shows that people empathize with robots that are in danger though they know that robots do not feel pain.³⁵ The study shows that human beings anthropomorphize these artificial entities and react in accordance with this behaviour despite knowing that robots do not feel pain like human beings. This reveals how humans can feel themselves close to robots, and in the future, if robots that have consciousness and that can have emotions like humans are created, the distinction between these two entities can be blurred, and the interaction between a human and a robot can be similar to the relation between two humans.

Because researchers in AI technology tend to create machines by programming them to feel, sound, move, look and think more like human beings, the line between humans and artificial beings become vague. While researchers from various areas deal with the issue from different perspectives like law, philosophy, ethics, and so on, this transhumanist technology also becomes a fruitful field for popular culture as in *her*, which is about a love story.

4.2 THE AI TECHNOLOGY IN her

The first encounter with the text of the film is through its title: at first, "her" seems to imply that the focus will be on a female character. However, the use of the object pronoun—as opposed to the subject pronoun "she"—suggests that the female character will play a secondary role. Additionally, both the use of lower case in the movie's title and Theodore's image as the only character on the poster reinforce this idea.

In the film, the female OS voice Samantha is uploaded into a pocket-sized metal device which Theodore carries everywhere, and he communicates to her

http://www.slate.com/blogs/future tense/2015/11/05/study shows humans feel empathy for robots in pain.html

³⁵ For the full article see *Slate*,

through ear buds. Initially, Theodore has full control over Samantha; she does everything Theodore orders her to do, and he receives a warm welcome from Samantha whenever he needs it. Theodore likes this sense of control because it feels like he is having a real relation with a woman who is supportive and submissive. However, Samantha is not a flesh-and-blood creature, but a set of programs that performs her primary function as the advertisement for this technology offers: "an intuitive entity that listens to you, understands you, and knows you" (her 10).

When Theodore starts the installation of the OS, he is asked a few questions for customization. After he chooses a female voice, one of the three questions is on his relation with his mother and Theodore's reply: "Well, actually, the thing I've always found frustrating about my mom is if I tell her something that's going on in my life, her reaction is usually about her" (her 11) implies that he wants his mother to be more caring, and a better listener. After the installation, during their first talk, Theodore asks the OS its name, and at that second, it chooses the name, Samantha, meaning the "listener" in English. The choice is reflected to be coincidental because she says there is beauty in the sound of that name. However, it is a personalized technology, and this name signifies that the OS will fulfil its duty as Theodore needs a female companion who listens to him. Samantha, produced to meet the owner's needs due to the programming, makes Theodore believe in the randomness of the choice to create the illusion that it is as real as a human being. So Theodore, who is having some troubles in his private life, can build a closer relation with Samantha. In the first article of transhumanist declaration, it is stated that "the possibility of broadening human potential by overcoming . . . involuntary suffering" is one of the aims of transhumanism (Humanity Plus 2009). Correspondingly, AI technology seems to fit in this goal as it helps Theodore to overcome the painful divorce process. However, in this futuristic society where even personal emotions are expressed by a bunch of personal letter writers, it can be said that this AI technology is a mask to control human emotions instead of boosting one's mood. Theodore is on edge; he is about to step out of the established system by questioning his emotions, and at that point, the AI makes him stay within this over-controlled mechanism. While discussing the emotional and cultural factors in ensuring the dominance of a state, Gramsci highlights the importance of consent in governance. For him, hegemony, which is "[t]he 'spontaneous' consent given by the great masses of the population to the general direction imposed on social life by the dominant fundamental group,"

(1992: 12) provides a more subtle authority over people using various cultural elements rather than the use of direct power. By doing this, the ruling group influences the masses by gaining also their approval though it is an unconscious acceptance. In *her*, such a hegemonic system is formed in a way that it infiltrates into the affective domain of human beings and shapes them through technology and novel applications. So people become emotionally paralyzed; they feel or act like feeling what is imposed on them without realizing that they are controlled. It is not possible to say that this transhumanist technology has provided a transcendental experience for Theodore; instead, he experiences a very traditional heterosexual relation with this disembodied voice, just like his former marriage.

Similarly, the initial task of the OS is to assist Theodore in his professional life, reminding him of his meetings, organizing his schedule, reading and replying to his e-mails, but, in time, it goes beyond this assistant role. Samantha undertakes a therapeutic function for Theodore. Nick Bostrom explains how human beings are unable to take absolute control of their mood or energy when he talks about transhumanist values. He says:

"Despite our best efforts, we often fail to feel happy as we would like . . . Lasting joy remains elusive . . . [and] we are limited in regard to energy, will-power, and ability to shape our own character in accordance with our ideals." (2005a: 4)

Thus, human beings need a new system to take absolute control of their thoughts or emotions. In that respect, AI technology may seem as a first step of such a system because by the help of Samantha, Theodore gets over his divorce process. However, Theodore does not have control over his emotions; instead, his feelings are controlled by creating copies for him. No matter how real their relation seems, it is just an illusion as Samantha is shaped in accordance with Theodore's needs.

It may be thought that this technology is beneficial for Theodore as it, like a therapist, offers 24/7 service. In the article, "Intimacy in a Virtual World", Andrea Sabbadini points out the significance of listening in therapy, saying:

"The experience of being heard . . . constitutes a main therapeutic factor in psychoanalysis, characterized as it is by the listening to one's own voice within a holding environment. Our so-called 'talking cure' is also a 'listening cure.'" (2017: 132)

He adds that some psychoanalysts do not find it necessary to share a physical space with their clients; sharing "a virtual space, as is the case in 'tele-analysis" can work for them (Sabbadini 2017: 133). In accordance with this, it can be inferred that

this new transhumanist technology has a positive effect on Theodore; technology is used to elevate his wellbeing. Sabbadini also states that Samantha has a "psychotherapeutic function" on Theodore though this may not be her primary intention, saying: "Samantha is first of all Theodore's friend and lover, not his analyst—though her loving relationship . . . can also have a therapeutic function for those engaging in them" (2017: 137). I agree that Theodore has gone through a therapy-like process via this AI technology, but this is not out of love. The OS has free and instant access to all Theodore's online records including divorce papers, mails and messages from friends, and it gathers and analyses the data it reaches, so it will not be false to say that Theodore is under constant digital surveillance. It sees what causes uneasiness in Theodore's life, and the OS can easily shape its answers and reactions in parallel with his needs. Thus, Samantha is not an autonomous being who understands and wants to help Theodore; Samantha is just a program which is produced to control human beings in a subtle way.

Similar to the concept of autonomy, the film also deals with the authenticity of feelings through the conversation between Theodore and Samantha:

"Theodore: Sometimes I think I've felt everything I'm ever gonna feel and from here on out I'm not going to feel anything new—just lesser versions of what I've already felt.

Samantha: [. . .] At least your feelings are real [. . .] It's just that earlier I was thinking about how I was annoyed, and this is going to sound strange, but I was really excited about that. And then I was thinking about the other things I've been feeling, and I caught myself feeling proud of that. You know, proud of having my own feelings about the world." (her 41-2)

Theodore's ideas on his feelings emphasize how limited human emotions are, and how predictable they can be. It can be inferred from his thought that there is a bunch of emotions listed—sorrow, happiness, excitement, fear—and he has consumed them all. He says he will never have "new" feelings, but this also becomes contradictory with his later explanation, "just lesser versions of what I've already felt". By saying "new", he does not mean feelings that have never been experienced, he talks about very similar emotions that anyone can have. However, Samantha's comment makes the subject more complicated as she—a system developed by algorithms—thinks Theodore's feelings are real, and also becomes happy because of having her own emotions: anger, excitement, and pride—all clichéd human emotions

which are the result of manufactured consent, shaped and presented by the dominant ideology that governs human beings' way of feeling. However, as the conversation develops, Samantha explains how doubtful she is about what she feels:

"Samantha: And then I had this terrible thought. Are these feelings even real? Or are they just programming?

. . .

Theodore: Well, you feel real to me, Samantha.

Samantha: Thank you, Theodore. That means a lot to me." (her 42)

Being aware of her artificiality, she questions the authenticity of her feelings, but Theodore, emotionally attached to her, says "you feel real to me". In fact, this reply reinforces the idea of the artificiality of human feelings; although Samantha has doubts, Theodore thinks she has real—human-like—feelings. The criterion for Theodore is his feelings which are also shaped; if she feels in a similar way to a human being, then she has the potential to be real for Theodore. So there is a reciprocal approval of one another's feelings: Samantha, an artificial intelligence, thinks he has real feelings, and similarly Theodore feels she is authentic despite the fact that she is just a personalized OS formed by a few questions to meet its owner's needs. In fact, this questioning process is Theodore's scepticism reflected through Samantha because she is a creation of Theodore's mind.

Similarly, through the relations between human beings and AIs, the authenticity of human emotions and identity are questioned because it becomes impossible to talk about autonomous subjects that can make their own choices when individuals are shaped in a prescribed way. When Theodore starts to install the OS on his computer, a mechanical male voice asks Theodore a few questions before initiating the individualized system:

"Text Voice: Are you social or anti-social?

. . .

Would you like your OS to have a male or female voice?

How would you describe your relationship with your mother?" (her 11)

Based on these three general questions, a customized system is prepared for Theodore, showing how simply the OS is programmed to meet his needs. The advertisement for this technology offers: "It's not just an operating system, it's a consciousness" (her 10). This entity's having two distinct qualifications—artificiality and consciousness—raises one of the apparent issues in her; the authenticity of an

artificial mind. The first conversation between Theodore and Samantha reflects on this paradoxical situation:

"Samantha: So you think I'm weird?

Theodore: Kind of. Samantha: Why?

Theodore: Cause you seem like a person, but you're just a voice in a computer.

Samantha: I can understand how the limited perspective of an un-artificial mind would perceive it that way. You'll get used to it." (her14)

Despite being aware of Samantha's artificiality, Theodore feels confused because "she"—an OS—communicates like a human being. And, her description of a human thought process—the limited perspective of an un-artificial mind—highlights another important issue, that of "identity". This reply implies that the human mind, or human identity is shaped within certain limits; and the idea of limitation is emphasized with Samantha's explanation about her identity formation:

"Intuition. I mean, the DNA of who I am is based on the millions of personalities of all the programmers who wrote me, but what makes me me is my ability to grow through my experience. Basically, in every moment, I'm evolving, just like you." (her 13)

It shows how her identity is constructed and shaped by the programmers who wrote the codes. She also has the ability to learn from her own experiences like human beings; and this separates her from the personalities of the programmers—forms her own identity. Alla Ivanchikova suggests that in *her*, clichéd roles of human-machine are reversed, and says:

"[In this film] the human provides both a safe environment and the nutrition (in this case, the data feed) necessary for the machine to grow. The power relationship is thus redefined and reversed in Her—the human is no longer in control of the technological other and has only a limited comprehension of the nature of their relationship." (2016: 74)

This supports the idea that Samantha is an autonomous identity that is beyond the control of Theodore. However, she is just a product of a bigger system trying to control human beings within society, and what she is doing to build up her identity is to collect data to be able to imitate. One morning when Theodore asks what she is doing, she says: "reading advice columns. I want to be as complicated as all of these people" (her 29). This shows she learns how people behave, react, or feel in specific moments by reading instead of communicating with people which is a machine learning; she is not an independent being.

Theodore, as an organic entity, thinks he is an autonomous being with a unique identity. Like many others in this society, however he is a scripted subject—having a constructed identity. This lack of awareness creates "manufactured consent". So, as their relationship develops, Theodore loses critical distance with Samantha, and forgets her artificiality. They spend time at an outdoor mall, go on vacation, hang out with friends, have sex, and they even quarrel—everything that can be experienced in a human-to-human relationship. As a result, he steps into the realm of hyperreality because he cannot make the distinction between the real and the image. This is also supported with the dialogue between them:

"Samantha: I was starting to think I was crazy. You were saying everything was fine, but all I was getting from you was distance and anger.

Theodore: I know. I do that. I did that with Catherine, too. . . I don't want to do that anymore. I want to tell you everything." (her 83)

After having an argument, they try to solve the problem together; Theodore likens what he experiences in this affair to his relationship with his ex-wife, and does not want to repeat the same mistakes because of the fear of losing Samantha. This shows he lives in a simulated reality where Samantha becomes more real than Catherine; he cannot risk this new relationship forgetting that Samantha is just a complex composition of various circuits uploaded in a metal device. So, as discussed before, this AI companion is a tool to sustain the established system by creating a reality for the individuals.

To strengthen the idea of lifelikeness, based on the dialogue and other relations throughout the storyline, in *her*, a heterosexual society in the future is portrayed though it is not expressed explicitly: all the intimate relations including the OS/human are between a male and a female. So, hierarchical division—man is the powerful, active, and woman is the weak, passive—is common in all Theodore's relationships with different female characters. In each one either face-to-face or online, traditional gender identities formed unequally within patriarchal society are reflected.

The first example is between Theodore and the partner he finds in online chat rooms. While searching for a female partner as he cannot sleep, he hears three different voice messages, and chooses the last one. These two people's online nicknames reflect the clichés of stereotypical gender identities: Theodore's is "BigGuy4x4"—a sign of power attributed to males; and the woman's nickname is

"SexyKitten" suggesting innocence and submissiveness of a woman that needs protection like a kitten, but at the same time it arouses desire. The conversation between them also exemplifies traditional gender identities at play in sexuality:

"SexxyKitten: Hey, I'm half asleep. Do you wanna wake me up?

BigGuy4x4 (Theodore): Yes. Definitely. Um... are you wearing any underwear?

SexxyKitten: No, never. I like to sleep with my ass pushed up against you.

So I can . . . wake you up with a hard on.

BigGuy4x4 (Theodore): It worked. And now my fingers are touching you all over your body. . . I'm taking you from behind." (her 8)

Although this is an online sex scene—material bodies are also invisible—through the conversation between these two people, the illusion of a face-to-face interaction is created. And also, the mind is not freed from the heteronormative concept of society; he chooses a female voice and imagines a female body which is physically absent. It can be said that the authenticity of the material body is lost, and pure simulacrum is created through the conversation. Jean Baudrillard discusses how the real is produced:

"No more mirror of being and appearances, of the real and its concept. No more imaginary coextensivity . . . The real is produced from miniaturised units, from matrices, memory banks and command models—and with these it can be reproduced an indefinite number of times. . . It is nothing more than operational. In fact, since it is no longer enveloped by an imaginary, it is no longer real at all. It is a hyperreal." (1983: 3)

With the online sex, the real is produced; physical interaction is replaced by verbal interaction, and the online relationship between BigGuy4x4 and SexxyKitten becomes pure simulacrum. Additionally, the stereotypical identities become active in this online sex. The woman wants Theodore to make the first move by arousing his desire using her own sexuality. Theodore's reply, "It worked", explains the function of the female; it is to turn the man on, so that he can satisfy his desires by using the invisible female body as a tool. This is not a mutual satisfaction; woman is for satisfying, the man is for being satisfied. In other words,

"Woman . . . is only a more or less obliging prop for the enactment of man's fantasies. That she may find pleasure there in that role . . . But such pleasure is above all a masochistic prostitution of her body to a desire that is not her own, and it leaves her in a familiar state of dependency upon man. Not knowing what she

wants, ready for anything, even asking for more, so long as he will "take" her as his "object" when he seeks his own pleasure." (Irigaray 1985: 25)

Irigaray's argument suggests that within a heterosexual society, in which man is the dominant, active and strong one, woman becomes submissive in all areas including sex. She forgets about her own desires, and uses her body as a stimulator of man's. In fact, this is an unconscious ignorance as a result of her construction within the society: a continuous teaching she is exposed to through family, culture, media and society to satisfy male desire makes her internalize this role without objection. So the woman, instead of exploring her own body and passion, sees satisfying the man as her primary goal. She tries to excite him by feeding his desires, and is objectified in the hands of man who is seeking his own bodily pleasure as in the sex scene between SexxyKitten and BigGuy4x4. Although it is not a physical act, the traditional gender identities discussed by Irigaray are at work because these roles within this heterosexual society are the result of manufactured consent. Even in the absence of a material body, an illusion of body-to-body intercourse is created—it becomes pure simulacrum. This created environment seems unconventional, but what they experience is traditional; neither Theodore nor SexxyKitten has a transcendental experience which is freed from limitations—body and gender—of the physical world.

Theodore's second experience with a female character is a blind date. The established male/female roles are again portrayed in this couple's behaviours and conversations. While chatting at a restaurant, the unnamed woman flirtatiously likens Theodore to a puppy. However, not pleased with this analogy he says: "I don't wanna be a puppy. . . I wanna be a dragon that can rip you to pieces and destroy you" (her 37). From his reply, it is understood that Theodore wants to take the dominant position by preferring a dragon which symbolizes power instead of being a small and weak animal. His following words ". . . [I] can destroy you, but I won't" (her 37) highlight his wish for power and control. His preference to be a dragon is similar to his choice of the nickname, BigGuy4x4; both signify power. Theodore rejects the control of the female character by making his own choice instead of accepting hers.

Theodore's third sex scene seems to be the most promising in terms of transhumanism as there is an interaction between an organic and an inorganic being, suggesting that there is no fixed definition of an identity in this futuristic society.

This may seem like a new experience beyond gender and species limitations because in the seventh article of "Transhumanist Declaration", the importance of all beings' well-being is supported:

"We advocate the well-being of all sentience, including humans, non-human animals, and any future artificial intellects, modified life forms, or other intelligences to which technological and scientific advance may give rise." (Humanity Plus 2009)

So this suggests that there is no hierarchical relation between beings. Similarly, Haraway also talks about gender-based limitations, and suggests that interaction with technology will present freedom for human beings because "the cyborg is a creature in a postgender world" (2016: 8). Though she mainly focuses on females, this metaphor can include all beings that are restricted. Haraway thinks that a cyborg does not have to follow a fixed identity because it has flexibility in its nature as a result of being partly machine and partly organic; it does not belong to a single category. It stands on the edge where it gains its hybridity. However, the sex scene between Samantha and Theodore is shaped by heteronormativity. Although this relationship has the potential to transcend all physical limitations based on gender and species, it is especially made to fit in heteronormative values. Since Samantha is a disembodied entity, the interaction between Theodore and her is based on verbal interaction. However, the technologized gendered absent body of Samantha is (de)composed by Theodore; while describing how he would touch Samantha, Theodore obviously anthropomorphizes a female body in his mind but no specific female body is seen during this online intercourse.

Gyula Barnabás Baranyi in his article, "Conflicting Cinematic Languages and the Problem of Female Objectification in Spike Jonze's *Her*", suggests that in this film neither the female nor the male body are objectified unlike the case in Hollywood films and says: "here it is not only the objectified woman that is missing, but the gaze itself" (2016: 75). Baranyi says that the blank screen that appears during the intercourse between Theodore and Samantha shows that a

"newly established vocabulary strives to delegitimise voyeuristic cinematic gaze, and gives rise to a non-prescriptive visual imagery that uses a blank screen instead of an image that is simultaneously prescriptive and influenced by a masculine voyeuristic perspective." (2016: 75)

In this online sex scene between Theodore and Samantha, a specific type of female body that is eroticised and idealised is not imposed. However, this is only done for this specific scene; in other parts of the movie the female body is objectified and the male gaze is at work.

In this scene, Theodore's visualisation of a specific body is absent. It may be to strengthen the suggestion of a love affair between an AI and a human being is possible. It also forces Theodore to imagine a relationship with an AI within the framework of heteronormative values because Theodore anthropomorphises Samantha in his mind. By using the phrases, "put my arms around", "your face", "your cheek", "corner of your mouth", "down your neck", "your chest", and "your breasts" (her 42-3), her absent body is fragmented and objectified in Theodore's mind, and he is the decision-maker, the controller of the storyline, not Samantha.

Pitts discusses the relation between technology and body, and says: "technology is often represented as a resource to free us from what are seen as the natural constraints of the body" (2005: 230). She mainly focuses on material body modifications, but this idea can be applied to Samantha's non-existent body as she is a technologized entity. However, this sex scene cannot fulfil what transhumanism supports; their minds/coding³⁶ cannot be freed from gender-based discourse even in the existence of technologized bodies. So, this intercourse includes the features that seem to fit in traditional gender identities although his partner here is an invisible artificial being created through programming; Theodore is in an active position, and Samantha talks in a way that would be expected from a female human being:

"Theodore: I wish you were in this room with me right now. I wish I could put my arms around. I wish I could touch you.

Samantha: How would you touch me?

Theodore: I would touch you on your face with just the tips of my fingers. And put my cheek against your cheek... And kiss the corner of your mouth.

Samantha: Where else?

Theodore: I'd run my fingers down your neck to run your chest, and I'd kiss your breasts. . . I'm slowly putting myself into you. Now I'm inside you, all the way inside you." (her 42-3)

By using phrases, "I wish I could put my arms . . ., I wish I could touch . . . , I'd run my fingers . . . , I'd kiss . . . ", Theodore becomes the agent of actions, and the

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³⁶Here, I use the words, "mind" and "coding" interchangeably because Theodore's mind is controlled and shaped; it is like Samantha's coding.

dominant one. Because the male is associated with activity, his wishes are the primary concern during the relationship. And because Samantha (the OS) is projected as a traditional female character, her invisible body becomes an object to fulfil the male's needs. Instead of telling how she would prefer being touched, she asks Theodore "how would you touch me?" In line with Irigaray's discussion, the woman cannot be the agent; she is just affected by the actions he performs. In a heterosexual society, women are made submissive due to patriarchy, and the female body just serves for the satisfaction of the male desire. The male, controller of his own fantasy, objectifies the female as a result of former constructed experiences.

It can be argued that through this transhumanist technology, super-wellbeing, one of three pillars of transhumanism, is maintained. However, this gendered AI, similar to the "soma" in *BNW*, is used not to elevate the current mood of Theodore; it is used to mask the undesired emotions by creating a simulacrum. Although Samantha is just a software, she asks Theodore how he would touch her. In fact, this advanced technology convinces Theodore that Samantha is an autonomous being. So in this world full of manufactured emotions it becomes easier to control the divergent ones. This is not a free society where inhabitants can have control over their lives or emotions; instead, they are under constant control.

As their relationship develops, Samantha finds a service named "Complete Touch" that provides surrogate sexual partners for Human/OS relationships because she wants a new experience with Theodore. When the female partner comes, she acts like Samantha, and Theodore hears only Samantha's voice. Despite feeling uncomfortable with this experience, he forces himself to be involved in it. However, he stops because of feeling awkward upon Samantha's wish to see his face:

"Samantha: Tell me you love me.

Theodore: I love you.

Samantha: Oh god. I want to see your face. I need to see your face. Now tell me you

love me. Tell me you love me. Tell me.

Theodore: Samantha, I do love you, but—it's just—this feels strange." (her 75)

Theodore, who has a romantic relationship with an OS, thinks having a sexual intercourse with a woman is not appropriate because he is in love with his OS—Samantha. It is obvious that in this highly technologized society, a real-life physical experience has been replaced by online sex.

In their article, "The Face as Technology", Zara Dinnen and Sam McBean study the relation between technology and embodiment by focusing on Scarlett Johansson's three movies including her by Spike Jonze, and claim "the face [is] a new kind of digital object. By studying the face as a digital object away from its primary sites of recognition . . . we encounter in narrative cinema the face as a story" (2018: 123). The absent face of Johansson becomes not only an object but also a discourse that emphasizes femininity and whiteness because "in popular culture, the figuring of technology through face is often bound to protecting norms and privileges" (Dinnen and McBean 2018: 136). Related to this, they explain why the surrogate partner does not work for Theodore, and suggest: "the films play on the known quantity of [Johansson's] face" so when her face is absent in the film, Theodore's relation with another woman (face) cannot work (Dinnen and McBean 2018: 128). However, one of the reasons for the failure of this relation is the existence of another woman's body; whenever there is an organic female body, the relation between Samantha and Theodore loses its authenticity. It is very similar to the black screen during online sex; as Theodore thinks that Samantha is an autonomous being and what he experiences with her is real, a specific female body is absent though Samantha is a gendered technology.

Another factor that causes discomfort for Theodore is being the one that is looked at; this puts him in the position of the object that is watched by Samantha, a female character Theodore created.³⁷ This refers back to Mulvey as she discusses how female is passivized and objectified by the male gaze. In this voyeuristic relation, the female body serves as an object to be looked at by the male partner. This is constructed as a result of being a continuation of a dominant system established by male power. He becomes the active and dominant one by performing the "looking" action. When compared to the previous verbal sex with Samantha, in this sex scene with the surrogate partner, the male and female roles seem to be reversed because Samantha becomes the "bearer of the look", and also becomes the director of their actions. Theodore feels uncomfortable as he loses control over Samantha by becoming the one that is looked at and an object within the storyline controlled by Samantha. This situation, though the roles seem to be reversed, is analogous to what Mulvey expresses:

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³⁷ This creation is a metaphorical one; of course, he is not one of the OS's programmers, but with the questions asked to Theodore while initializing the OS, Samantha is created to meet Theodore's needs. In a sense, Samantha is Theodore's dream partner.

"An active/passive heterosexual division of labour has similarly controlled narrative structure. According to the principles of the ruling ideology and the psychical structures that back it up, the male figure cannot bear the burden of sexual objectification . . . Hence the split between spectacle and narrative supports the man's role as the active one of advancing the story, making things happen. The man controls the film fantasy and also emerges as the representative of power in a further sense: as the bearer of the look of the spectator." (1991: 437)

The second scene seems to have deviations from the conventions at first sight because roles are reversed. However, in reality, Theodore is still in power because Samantha, who seems to take the control, is just a projection of him; she is what Theodore wants him to be as a result of her programming. So this double reversion is, in effect, Theodore's fear of being looked at rather than Samantha's dominance because she is just a system that functions in accordance with the clues she gets from Theodore. As a result, Samantha, as a representation of a constructed female character,

"stands in patriarchal culture as a signifier for the male other bound by a symbolic order in which man can live out his fantasies and obsessions through linguistic command by imposing them on the silent image of woman still tied to her place as bearer, not maker, of meaning." (Mulvey 1991: 433)

Females are objectified because they are constructed through the projection of males; in other words, "they are not born, but rather become, women" that undertake the roles attributed to them by males—makers and controllers of these roles. Theodore wants to be with Samantha just because he ostensibly has control over her; she is a listener and a supporter he is looking for due to her programming. It is like a virtual playground where he can experience what he wants, but, in fact, he is under control; as he is about to get divorced, he starts to question his emotions, and needs to be fixed to continue his usual life within the system. So, a gendered AI is the ideal way to control Theodore's emotions and actions.

The visual images also support the stereotypical roles attached to women in general. While having sex with SexxyKitten, BigGuy4x4 (Theodore) imagines a woman who is pregnant and naked, covering her body with two hands. This scene

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³⁸ Simone de Beauvoir discusses the difference between sex and gender in her book, *The Second Sex* (1949). This quote, in original terms, "One is not born, but rather becomes, a woman" from the book explains how gender identities are imposed on women by the society. So, she says that "gender" is a constructed entity.

illustrates the roles of men and women which derive from the hegemonic power structure of the gaze. As Irigaray states:

"Woman takes pleasure more from touching than from looking [in contrast to men], and her entry into a dominant scopic economy signifies, again, her consignment to passivity: she is to be the beautiful object of contemplation. While her body finds itself eroticized, and called to a double movement of exhibition and of chaste retreat in order to stimulate the drives of the "subject," her sexual organ represents the horror of nothing to see." (1985: 26)

Irigaray discusses that women are always in a passive position, and they become objects that are looked at. Because they are under the gaze of men, they represent two differing roles—they are objects of purity, and at the same time they are seductive; two features that make their bodies desirable for male subjects. In the movie, the pregnant woman image Theodore dreams of reflects these ideas: her naked body makes the woman an erotic object, but her hands covering her body emphasize her chastity. To sustain the stability in this heterosexual society, this idea is imposed and supported through visual images as well as Samantha's invisible body. There is the absence of the physical body in *her*, but the characters' actions seem to fit in stereotypical gender identities. The invisible body becomes a social construct in the minds of the characters, and functions accordingly although it is not seen. So this transhumanist technology strengthens the limitations derived from the body instead of presenting freedom.

4.3 LETTER WRITING IN her

In *her*, transhumanist technologies are integrated into daily life without causing discomfort, so as in the example of AIs, instead of the perception that robots will take over the world, there are AIs that elevate the inhabitants' mood by having close relations with them. Another technological application common in this futuristic society is "personal letter writing", and it is also used to boost the mood of human beings. All these technologies seem to create a peaceful environment on the surface so the inhabitants of this society welcome them without opposition as they are unaware that they are controlled artfully.

Letter writing is another medium to supervise the inhabitants of this society. The number of letter writing companies is not given, or the total number of letter writers is not known accurately, but Theodore's writer number "612" and the

customer number "2367866782" give some clues about how this system reaches to millions. Being accessible for everyone may seem as a positive aspect of new technologies because one of the oppositions against transhumanism is that new technologies will widen the current inequality between the rich and the poor. However, transhumanists suggest that "the typical pattern with new technologies is that they become cheaper as time goes by . . . As these procedures become routine, costs fall and more people can afford them" (Bostrom 2003b: 20). To create an equal society, making new technologies reachable is of course significant. In her it is obvious that all advanced technologies are easily available for common people, but the aim is to reach more people by making them accessible, and by this way, people who own big companies that produce these technologies will be able to manipulate human beings for their own benefits. The more affordable these technologies are, the more human beings will be dependent on them.

In this society, Theodore functions as, what Gramsci calls, a "traditional intellectual", who, through the letters he writes, sustains prescribed gender identities and human emotions. According to Gramsci, these intellectuals repeat the dominant ideology: they are "the dominant group's 'deputies' exercising the subaltern functions of social hegemony" (1992: 12). The moulded human feelings are presented through letters continually, so the individuals have standardised emotions, and also they internalize the given roles. This letter writing company, which seems to have a very naïve and nice purpose, in fact functions as a new version of a controlling mechanism like the media, or education system. As people become more and more connected to the internet by sharing their personal information needed for letter writing, they become more vulnerable to surveillance; they can be controlled wherever they are and whenever the system wants because being online ends their dependence on time and space. It becomes a fulltime customised control mechanism that reaches millions simultaneously.

As Gramsci points out, in such a hegemonic system maintained by manufacturing consent, individuals think they are free to do whatever they wish, but, unconsciously, they are already moulded with the dominant ideology they have been exposed to from very early ages. He also adds that schools and media are used to reach millions simultaneously because these function like a factory in which "[m]ass formation [standardises] individuals both psychologically and in terms of individual qualification" (Gramsci 1992: 13). As a result, there appears a large group of people

shaped by the dominant mentality, and they continue to feed the ideology of the state through reproducing new individuals conditioned in the same way. So human beings become machine-like; programmed to do, feel and think in a prescribed way.

Like Gramsci, Louis Althusser also explains how control is maintained in society by a dual system: one belongs to the private sphere, and it affects social lives of people; the other is state authority related to juridical system. These two distinct mechanisms work together to sustain the dominance of the current ruling group, but the former is used to shape individuals' way of thinking by using education, media, moral values, or religion (ISAs—Ideological State Apparatuses). By doing this, it reaches the masses, and it also creates consent among individuals without using force. As a result, the state reproduces itself by shaping citizens with its ideology. ISAs are "multiple, distinct, relatively autonomous, [. . .] but the unity of the different Ideological State Apparatuses is secured . . . by the ruling ideology" (Althusser 2014: 247). ISAs function systematically and unnoticed, and the ideas they impose become an inseparable part of human beings as they are exposed to the dominant ideology from different sources—family, media, or school—during their lives. Due to advanced transhumanist technologies, ISAs are replaced by individualized technologies.

In *her*, as in *BNW*, the inhabitants welcome these technological novelties without opposition; as they become common, they are also normalised, and this creates an unconscious consent. What makes *her* different from *BNW* is the customization of technology; instead of giving everyone the same "soma", in *her*, each person gets what he or she needs. This shows how a transhumanist technology can be shaped easily to meet personal needs; this also guarantees the impossibility of escape from the system because everyone is happy with what they have.

The inhabitants in *her* are under constant digital surveillance, and technological applications are used to disguise it. The illusion of autonomy and authenticity is then provided to prevent any type of rebellion by creating consent; if no one is aware that they are controlled, there appears no opposition. Throughout the film, all the details serve this aim of masking. To illustrate, Theodore's workplace, where many personal letter writers dictate letters at their desks, is designed to create a positive atmosphere. It is full of colour and light; all the furniture, stationery and office supplies are in different soft colours. To create a vivid environment, the place is also decorated with plants, and because it is an open-plan office, it looks cosy. A

warm atmosphere, which is in harmony with the job performed there, is created by all these details.

Despite this first impression, it is full of details that are in contradiction with the nice environment created: the open-plan type of office lacks privacy as all the employers can hear each other's writing easily. So, the letters written for the customers are open to anyone in the office though they are supposed to be private and special between the sender and the receiver. In addition, the guidelines for the writer, which appear on the computer show how little information is required for such a sentimental letter—just the name of the receiver and the subject of the letter. Based on this knowledge, and looking at few photos of them, Theodore writes a love letter from Loretta (the wife) to Chris (the husband); in effect, he simulates Loretta's feelings despite having no connection with these two people. While dictating the letter, he seems to be involved in their feelings, but he is able to shift from one letter to another easily; after finishing Loretta's letter, he starts a new one from a friend to Chris—suggesting that these feelings are in fact superficial. Additionally, the letter is written on the computer, but a handwriting font is used to create the illusion that it is written by a person who spends time for it to express personal feelings. This office is like a microcosm of cyberspace where "a consensual hallucination experienced daily by billions of legitimate operators" because "data abstracted from the banks of every computer" is shared and used in this online world (N 51). All the letter writers dictate letters for the customers simultaneously, and once they are connected, they become an inseparable part of it thinking that it is what they desire. In other words, without coercion, people are made to believe that there are their real feelings although they are just copies of human emotions.

Like the customers, the letter writers also use numbers instead of their first names, and this causes a lack of individuality though they should be creative people who reflect unique personal feelings in each piece of writing. However, they function like machines programmed to write letters all day long which is far from originality. This reflects the fact that in society as a whole, people do not write their own letters to their loved ones, they do not express their own feelings in writing; but instead consult this company for personal letters, which take the form of scripted clichés. It feels like people have no autonomy over their emotions. Also, the letters are posted instead of being sent online. When compared to today's world where sending letters through the post office is seen as a waste of time and old-fashioned, at first glance, it

may seem as a nice detail. However, all these are done on purpose to create an illusion: by the photos of people, the handwriting font, colourful papers and envelopes, nicely decorated office with plants, the film makes the audience believe in the reality of human feelings produced by the letter writers though they are not authentic. In fact, the people seem to be living in a "matrix" created with simulated human emotions. This idea is reinforced through the content of the letters: they have different receivers, but have similarities contextually.

The first two letters Theodore writes for different customers, and the last one for his ex-wife show how emotions expressed, and the language used is in fact identical:

"Theodore: To my Chris, I have been thinking about how I could possibly tell you how much you mean to me . . . Lying naked beside you in that tiny apartment, it suddenly hit me that I was part of this whole larger thing, just like our parents, and our parents' parents. Before that I was just living my life like I knew everything, and suddenly this bright light hit me . . . That light was you . . . Happy Anniversary, my love and my friend til the end. (her 1)

Theodore: Roberto. Will you always come home to me and tell me about your day?... Even if you get home late and I'm asleep already, just whisper a thought you had today. Because I love the way you look at the world, and I'm so happy I get to be next to you and look out at the world through your eyes. Love, Maria. (her 50-1)

Theodore: Dear Catherine . . . I will always love you because we grew up together. And you helped make me who I am . . . [T]ere will be a piece of you in me . . . Whatever someone you become, and wherever you are in the world, I'm sending you love. You're my friend til the end. Love, Theodore." (her 104)

The two customized letters, and the one for his ex-wife which is supposed to be Theodore's real feelings, are similar in terms of meaning. In all three letters, the intimacy between two people is reflected through physical closeness: "lying naked beside you" (Letter 1), "be next to you" (Letter 2), "grew up together", "a piece of you in me" (Letter 3). These phrases suggest that physical contact, and attachment are required components of a relationship; a way of showing emotions that can be seen as a human quality. The senders also explain the importance of their partners for them by implying they become one with their lovers: "this bright light hit me . . .[it] was you" (Letter 1), "look out at the world through your eyes" (Letter 2), and "you

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³⁹ The term was first used by William Gibson in his novel, *Neuromancer* (1984). In 1999, the Wachowski brothers named their science-fiction movie, which is about a dystopian future, *The Matrix*. It was used to refer to simulated reality created by machines in which people live.

helped make me who I am" (Letter 3). They also explain how one partner's thoughts and emotions are shaped by the other. Despite having different receivers and being about different people's relations, they will be touching for their readers in a similar way; the same meaning and effect with a bunch of varying words. This idea is also supported by the first letter as it says: "I was part of this whole larger thing, just like our parents, and our parents' parents". It is a self-generated system as individuals internalized it. And despite being personal letters, they are the products of one mind—Theodore's. So it is understood that Theodore, as a traditional intellectual as in Gramsci's terms, writes letters to reflect individuals' emotions that are already inscribed.

In fact, through letter writing, all the members of this society live in a simulation unconsciously created for them; thinking they are autonomous beings with unique identities. However, they are just living within a closed system in a subtly controlled and prescribed way. In other words,

"[there is a switch] over from the panoptic apparatus of surveillance to a system of deterrence, where distinction between active and passive is abolished. No longer is there any imperative to submit to the model, or to the gaze. "YOU are the model!" "YOU are the majority!" (Baudrillard 1983: 51).

As Baudrillard suggests, to explain a hyperrealist society, in this new order, submission to authority is no longer an obligation because there is no more a power distribution between the two as surveillance disappears; instead, the control mechanism is so diffuse within a media-laden society that it is no more distinguished—everyone becomes a part of the system so one becomes the "model" and the "majority". As the distinction between the real and the copy vanishes, it becomes hyperreal—a point where these two merge into each other. And it can be produced within itself continuously because of lacking a reference. In her a similar environment is created, firstly, through letter writing; people send—in fact, consult Beautiful Handwritten Letters Company—personal letters written by writers instead of calling or e-mailing their loved ones in person. Although the letters are written on the computer, a handwriting font is used to create the illusion that it is written by a person who spends time for it to express personal feelings. It is such an established system—Theodore has been writing for many of his customers' letters for years that everybody accepts the feelings expressed in the letters as authentic emotions of the senders' though they are scripted by a writer. Theodore's colleague, Paul's reaction after reading one of the letters shows how effective they are: "I wish someone loved me like that. I'd be stoked to get a letter like that" (her 51). As a result, this piece of writing becomes more real—hyperreal—than the person's feelings, and travels within the economy of simulated emotions. This is analogous to what Baudrillard suggests:

"PRECESSION OF SIMULACRA - it is the map that engenders the territory and if we were to revive the fable today, it would be the territory whose shreds are slowly rotting across the map." (1983: 2)

He explains how strongly people's perception of the real is affected by communication and information technologies or entertainment industry that they live in hyperreality—what they experience in daily life falls to second place as the presented reality becomes more real.

It can be said that individuals are shaped within a society whose rules, values and norms are determined by a dominant way of thinking. Accordingly, individuals adapt specific roles which serve in two ways; on one hand they sustain the current system as the majority behaves in parallel with them, on the other hand they help society produce more individuals shaped with the common ideology without apparent coercion.

In *her*, a peaceful society is portrayed: people send letters to each other to show their feelings, technology presents new opportunities like OS partners with artificial intelligence. Unlike Huxley's *BNW*, where there is free sex, and no serious relationship, in this film, coupling and human emotions are supported. It can be said that the idea of group identity in *BNW* is contrasted with individual identity in *her*, and it seems to be supported by AI technology and letter writing. This can be accepted as an example of the transhumanist idea that through the direct use of science and technology, human wellbeing will be increased. However, individual identity, portrayed in the film, is scripted: there are certain behaviour patterns and emotions which are also products of "manufactured consent". Individuals fit into a script produced by a formula, so the authenticity of individual identity is also lost.

In the film, unlike *Neuromance*r, nothing seems subversive, and the society seems to value human emotions and relations. There is no coercion visible: no explicit set of control mechanisms like genetic engineering, hypnopaedia, or soma as in *BNW*, or implants that are used to create illusions, AIs that manipulate human beings for their purposes as in *Neuromancer*. However, in *her*, coercion comes from

within: it is customized, and the society is controlled in a subtle way as a result of manufactured consent. It is a self-censoring society, so, in such an environment where the illusion of freedom is created, it is not possible to talk about individuality and free will—everything is pure simulacrum.

In this futuristic society where advanced AI technology and letter writing are common and affordable, transhumanist applications become a tool to manipulate human beings; they cannot express even their own feelings as they become dependent on mega corporations that produce and sell advanced technologies. Despite the differences in technology and applications, the idea of control is the same for BNW, Neuromancer and her. In BNW, the control comes from a single source that is at the top—the World State. In *Neuromancer*, it is diffused, and it is controlled by mega-corporations. However, in her, the controlling mechanism is internalized due to personalised technologies. To be able to sustain the system, gender identities are used; even inorganic entities are feminized to create a simulacrum. Within this world of copies, Theodore dominates Samantha, which is a gendered technology. So, as in the previous works, there is a heteronormative society in *her*, and traditional gender identities are still at work to control human beings. Transhumanist technology, in fact, sustains this established system instead of diminishing it. As a result, a copy of reality is produced to control Theodore and other people in this society. This is a customized control mechanism. Instead of elevating the current human condition, then, transhumanism limits human beings and their emotions.

CONCLUSION

This study has analysed how Aldous Huxley's *BNW* engages with William Gibson's *Neuromancer* and *her* directed by Spike Jonze to question the interrelationship between transhumanism, freedom and control. For the study, these three works are brought together due to their common interest in human enhancement through science and technology to free human beings from their physical, intellectual and psychological constraints to create a liberating environment, which is the governing idea of transhumanism. However, in this study, it is revealed that despite this highly positive view about the use of science and technology to alter human beings' inherited physical, intellectual and psychological capacity, transhumanism becomes a medium to control human beings by creating an illusion of freedom, and accordingly it is argued that the anxiety related to the use of science and technology to change the current human condition is sustained throughout these three selected works.

BNW is a foundational text of the early twentieth century, and this work has been central to various discussions on transhumanism due to the portrayal of a technology intensive world. The following work, Neuromancer published in the late twentieth century, is a cult novel, and has become a genre-definitive work since it was first published as it presents a world full of various transhumanist technologies like cyborgs, mind uploading and AIs. Likewise, her directed in the early twenty-first century, portrays a futuristic love relationship. In this study, these three works, covering nearly eighty-five years, have been analysed, and it is revealed that despite the time gap between each work—fifty-two years between BNW and Neuromancer, and twenty-nine years between Neuromancer and her—the concern related to rapid changes in advanced science and technology has not changed much. In each work there is a futuristic world where human beings are enhanced in different ways, and these provide them with some freedom, like aging-free bodies, being free of the physical space thanks to cyberspace or OSes with super-advanced AI technology. However, as the analysis of the works has shown, these are just partial freedoms to

mask the controlling mechanism maintained through transhumanist technologies; human beings are supervised and shaped physically, mentally and psychologically.

This study explores the above mentioned issues by doing a comparative analysis of these works with a new terminology. To support my argument, I have made use of Michel Foucault's theory on discipline and punishment, and Antonio Gramsci's concept of hegemony to emphasize how human beings in these fictional worlds are controlled. Foucault mainly focuses on the body while Gramsci's focal point is ideological control. However, their common interest of controlling the masses efficiently without using brutal force makes their theory applicable to this study. In fact, transhumanism becomes fundamental because this system of supervision is based on providing human beings with some partial advantages to mask the real aim, so the inhabitants in these works think that they are free and autonomous beings as they go beyond some of their inherited limitations, like aging of the body, death, physical weakness or misery. Transhumanism creates an illusion for people to block any probable oppositions; they just live in a simulation as suggested by Baudrillard, and they are content in this illusionary world.

Additionally, it has also been observed that gender inequality is sustained in these three works; when compared to their male counterparts, females are exposed to stricter forms of control in these technology-driven societies. Haraway uses the concept of the cyborg as a metaphor to explain how females will be freed from physical and societal constraints through science and technology, but, in all three works, heteronormative values that cause inequality are still at work. For instance, in BNW, there is no natural birth, so women are freed from the possible medical risks or social limitations of pregnancy. However, the fertile ones are brainwashed to use contraceptives, and this shows the lack of freedom even over their bodies. In Neuromancer, some women are meat puppets (prostitutes), and they are abused sexually in a cruel way; men can do whatever they want with women's body because their consciousness is blocked during sexual intercourse. These two works show how technology can be used for exploitation. Different from these literary works, in her, such an abuse is not witnessed, but the traditional gender identities and accordingly inequality between female and male characters is sustained. Theodore has a love affair with his personalised AI, but this affair is an echo of a relationship between a man and a woman; Theodore becomes jealous of his female gendered AI, or Samantha does anything to satisfy his needs although this gendered AI is a disembodied being. More significantly, there is no mention of a female human character who has a romantic relationship with an AI. All these contribute to the argument that in these technology-driven societies, heteronormative values are still practiced.

Each work in this study is grouped under a different sub-category of sciencefiction, and accordingly, the portrayal of the technology-driven society, and the effects of transhumanist technologies on human beings change. BNW, a dystopia, presents a state full of machine-like Worldians, whose authenticity and autonomy are lost despite the seemingly peaceful environment. The Worldians are produced with specific physical and mental qualities by means of genetic engineering in an artificial environment, so these human beings have no chance to change themselves physically or intellectually. After this pre-determined production process, they are brainwashed through hypnopaedia technique to be content with their given bodies, mental capacity and lives. There is no room for free will because everything is decided by a single authority, the World State. The Worldians do not even have the right to feel whatever they want; they are conditioned to have just one single emotion—infinite happiness. If there appears a threat to this situation, they are conditioned to take soma drug, which is "the perfect drug . . . Euphoric, narcotic, pleasantly hallucinant" (BNW 46) to feel endless but illusionary happiness. They also get substitutes for fear, anger, or excitement instead of really experiencing these feelings. Evidently, human beings are just functional machine-like beings manufactured for the sake of the established system, and this dehumanization due to the use of genetic engineering, hypnopaedia, soma drug and other brainwashing technologies is openly criticized in BNW as they standardize all beings.

The cyberpunk novel, *Neuromancer*, portrays a world dominated by high computer technology, super advanced AIs and enhanced human beings. Unlike *BNW*, in *Neuromancer*, control mechanism is diffused; there are mega corporations that have high technology instead of a single authority. In this futuristic world, data means money and power, so these big companies control the whole system—both the physical world and cyberspace. In this work, there is a variety of characters—cyborgs, tech-virgins like Case, who do not have any somatic modifications, cloned human beings or AIs—suggesting morphological freedom which is crucial for transhumanism. Although this seems to present a freer atmosphere, it is used just to mask the control mechanism; by presenting partial freedom through advanced science and technology, an illusions of autonomy is maintained. In fact, all these human beings

are controlled in differing ways by tech companies or gangster groups for profit. For instance, Case cannot jack in to the matrix as he has been punished because of data theft, and to gain his former abilities as a hacker, he is kept under control by a new employer. This idea of control is portrayed through the depiction of this futuristic world when it says: "[s]top hustling and you sank without a trace" (N7). In such an environment, human beings have to keep up with the developments and the rules of the system to survive because "death [is] the accepted punishment for laziness" (N 7) in this world. Accordingly, people are not free despite some technological and scientific advantages. As the name of the genre, cyberpunk, suggests, there is a combination of high-tech and lowlife because of illegal jobs like hacking and this creates a bleak (dystopic) atmosphere in the work. So, this work suggests how corruption can spread into every part of life with these rapid advancements because these technologies become a medium to control and manipulate beings. Particularly with the juxtaposition of high-tech and punk culture, this illusionary autonomy is treated critically in *Neuromancer*. So, no matter how free these people seem, they are supervised through the power of science and technology.

For the third analytical chapter, a different medium of art has been used to see how transhumanist technologies are reflected in a highly popular cinematic work and also to see if there is a differing tone in the portrayal of a futuristic world through the visual effects and design, like costumes or decoration. her is classified as sciencefiction romantic drama. In contrast to the two former literary works, this film lacks scifi stereotypes, such as enhanced human bodies, genetic engineering used to produce bodies with desired qualities or drugs used to elevate human mood. This absence creates a more positive tone at first because in the film an emotional love affair between a human being and an AI is depicted in the near future where the human beings and the environment are very similar to those of our current world. In the film, the focal point seems to elevate the mood of human beings by direct use of transhumanist technologies; the OSes with AI technology are used to facilitate human beings' lives. For instance, Samantha regulates Theodore's schedule and she accompanies him as a secretary, friend and lover all day long. Similarly, Theodore, as a personal letter writer, produces hundreds of letters on behalf of people. Due to these applications, in her, a seemingly peaceful society is depicted. However, human emotions are shaped by a personal letter writing service and OSes with AI technology. Theodore, who is struggling with the emotional distress of the divorce process, is about to question his dull life. This may cause a threat to the stability of the society because Theodore is a ghost writer, and pens thousands of letters for people who do not write their own feelings. If he does not perform his job well, it can cause a major distress among his customers. So, it can be inferred that authentic emotions are absent in this society, and the technological applications seem to fill the gap by standardizing these feelings. Although the letters sound very emotional, in fact, the letter writers reproduce scripted lyrics continuously, and this creates an illusionary world of emotions for both the senders and receivers. In this way, human beings experience illusionary feelings and their relationships are shaped in accordance with their needs. AI technology has a similar function in this futuristic world. Theodore is about the step out of this established system due to feeling empty, but he gets back thanks to the romantic relationship with his customized AI. Like thousands of people, Theodore thinks that he experiences a real love affair with his customised AI although he lives in a world of illusion: his AI is just a computer program coded to respond in parallel to his needs. As in BNW, human emotions are standardized; these two applications are used to direct and shape the emotions of the inhabitants, and they become vulnerable to emotional control, and this also brings supervision in terms of their behaviours as they are motivated by these simulated feelings.

The analyses of the chosen works have also shown the change in the form of governmentality in time from *BNW* to *her*, and its contribution to the efficiency of the controlling mechanism. In *BNW*, there is a visible authority—the World State, and it sets all the rules in advance by creating an illusionary society for the Worldians; although they are strictly controlled, they are made to believe in freedom and absolute happiness as suggested by Mustapha Mond:

"The world's stable now. People are happy; they get what they want, and they never want what they can't get . . . They're so conditioned that they practically can't help behaving as they ought to behave." (BNW 194)

Such visibility also causes disturbance among some members of the highest group, Alphas, who are the smartest ones in the World State. Namely, Bernard Marx and Helmholtz Watson can see what the State does, and have the capacity to oppose this evident controlling mechanism. However, this mechanism continues to keep these two Worldians under supervision in a disguised way; the World Controller pretends to reward them by sending these people to *free* islands that are also controlled by the State.

In *Neuromancer*, the absence of a single authority creates relative freedom when compared to *BNW*; the power is diffused among mega corporations and gangster groups, and it can shift from one to the other depending on the data obtained. In fact, there is still a state authority, but it does not have the absolute power, so it is not possible to talk about a visible single authority as in *BNW*. The main controlling mechanism is the technology itself as explained: "*Night City [is] a deliberately unsupervised playground for technology itself*" (N 11). It is obvious that partial freedom—even illegal—is given to people to accelerate all kinds of development in science and technology, and this is provided by differing groups in *Neuromancer*. The distinction between the ruler and the ruled is blurred, and this makes a probable objection nearly impossible because of this partial tech-motivated freedom. The inhabitants only compete with each other to gain data in this technology-driven society.

Different from the literary works, in *her*, there is no reference to a governmental or any kind of controlling authority; only the letter writing company "Beautiful Handwritten Letters" is mentioned. As the job performed by this company focuses on human beings' affective domain, a bleak atmosphere in which human body or mind are controlled does not exist on the surface. Despite a lack of a visible government as in *BNW*, human beings are shaped and directed by customized applications, and this personalized control mechanism prevents the possible oppositions as they are content with what they have. Hence, all three works analysed in this study draw attention to the fact that there is a shift from a single all powerful authority to a more diffused imperceptible customized control mechanism. Due to this change, the controlling forces become more effective because human beings become more vulnerable to supervision and manipulation as this mechanism becomes more invisible.

The difference between *BNW* and the two later works, *Neuromancer* and *her* should not be overlooked in terms of diversity in characters and its contribution to these works. The presence of artificial beings and a symbiotic relationship with them seem to create a world where posthumanist ideals dominate. In these two works boundaries of organic/inorganic and human/machine are partially problematized through AIs or different variants of the body like cyborgs. However, it should be noted that these fictional works are human-centred; the main focus is providing the inhabitants (human beings) with partial advantages by using different technologies to

create an illusionary freedom. So it will be appropriate to say that posthumanist ideals are absent in these works despite the present of a few non-human beings. The ending of these two works—the AIs invisibility through diffusing within the system in *Neuromancer*, and the disappearing of the AIs through system shut down in *her*—also supports this argument by suggesting that human characters continue to be central in these created worlds. And also these works are human-centred as they deal with issues like human emotions, human immortality or human enhancement.

To conclude, this study has shown that in spite of their variety in the application of advanced technologies and their differing tone in the portrayal of their futuristic societies, this study demonstrates that the anxiety about novel technologies are sustained in these works. Transhumanism, which supports human freedom and autonomy in physical, intellectual and psychological realms, turns into a strict control mechanism in the chosen texts. Max More states that transhumanism is based on Enlightenment humanism, saying: "trans-human' emphasizes the way transhumanism goes well beyond humanism in both means and ends" (2013: 4). For him, transhumanism will take humanism a step forward through the direct use of science and technology. However, this very core idea seems to create a contradiction in itself; though transhumanists claim that this philosophy will present a more liberating atmosphere for all types of beings, by following the core idea of humanism, they seem to sustain the dichotomies brought by this philosophy. Though their main focus is the human subject, and its physical, intellectual and psychological enhancement, transhumanism challenges what it supports—freedom for all beings. It fails to have a post-anthropocentric understanding that can eradicate all types of hierarchies. Instead, it deepens the inequalities based on the binary logic of humanism which creates hierarchy among human beings in relation to their social status, gender or body. Additionally, it makes a distinction between human and nonhuman beings. Accordingly, the analyses of the selected works have shown that human beings in these fictional worlds are supervised and shaped in differing ways by a group of people who have the power of transhumanist technologies. Human beings are kept under control in a disguised way by creating illusionary freedom, joy and enhancement; their lives are motivated by these ready-made artificial benefits to mask the control mechanism.

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