Representation of Myriad Issues in Contemporary Science Fiction Films

(Thesis submitted to Nagaland University in partial fulfilment of requirements for award of Ph.D. degree in English)

By

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2022

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Bibin Sebastian

Research Scholar

ABSTRACT

Throughout history, science fiction writers are thought to have attempted to include fantastic elements in their writings. The major topic of their works is the creation of utopia by amazing science; a new way of life has been realized through human endeavours made possible by a technological concept. The origins of what we now call science fiction include dreams, magnificent pictures, astonishing thoughts, scientific-based hypotheses, and an expiring cosmos beyond where we currently inhabit. The science fiction author can use his creativity to create things that aren't always found in our world but will in the not-too-distant future. A science fiction story is a story about knowledge and the potential of things that can be understood scientifically. In other words, the story will in some manner deal with physical or biological rationale as well as a fantasy aspect.

The goal of this thesis was to explain how contemporary science fiction portrays numerous societal challenges. This thesis studied posthumanism, technoutopianism, technophobia, post-anthropocentrism, and gender roles as various concerns in the science fiction genre using examples from selected science fiction films. This examination of sci-fi films looks at their variety of issues based on careful readings of a corpus of films. An exploratory analysis of six science fiction films released between 2013 and 2015 was done from the outset of this thesis.

The first chapter described science fiction and science fiction films, as well as their qualities and key features. The storyline, setting, theme, and other features of science fiction are all based on scientific knowledge and speculation. Science fiction transports us

to a fanciful universe that is drastically different from our own; it transports us to the author's new cosmos. A excellent science fiction novel will reveal what will happen in the future. Its goal is to sabotage men's confidence in their future chances. It could also be a prelude to some of the fears that males in wealthy countries are experiencing today.

The second chapter attempts to define posthumanity and posthuman subjectivity, as well as how this subjectivity is shown in contemporary science fiction films. We can't help but think about posthumanism and posthuman subjectivity because we live in the current era, which is influenced by vast technological conditions. Her present research is mostly or fully focused on technology, and the phrases technological unconscious and non-conscious have become synonymous with disability. To survive in a technologically advanced society, we have no choice but to adapt our mental norms. Changing these protocols raises a fundamental question for people who have traditionally considered that the cosmos revolves around them. "What are the impacts of present technoculture and biotechnology on human existence?" is a question that many people ask. Is it necessary to reassess human integrities and identities? Is the posthuman questioning the primacy of an actual human being? etc. Many theorists believe that posthumanism, as a critical discourse, does not primarily seek emancipation from humanism, postmodernity, modernity, or philosophy, but rather remains deeply rooted in their cultural memory while remaining aware of the current's specificities and the various changes it proclaimed.

The third chapter explored how technology and its overuse produces a sense of technoutopia in sci-fi fans. Technology has contributed in the growth of human life since its conception and development. There is always a mutual influence between technology

and human existence. Human circumstances have improved as a result of technological advancements, and technological advancements have improved as a result of human circumstances. Furthermore, as technology has began to take control of human life, the situation has become more serious than ever. Debates about the impact of technology on human conditions are well-known in the twentieth century. The excessive encroachment of technology into various aspects of human life has resulted in a situation in which there is no longer any distinction between human and technology. Individuals have benefited from a flood of technological advancements that have improved their daily lives and promised to make living easier. In human life, technology has an almost endless variety of uses. In the case of literature, this is also true.

The post-anthropocentric shift, which is linked to the combined effects of globalisation and technology-driven forms of intervention, strikes the human at its core in the fourth chapter, altering the criteria that defined Anthropos' basic principles. Post-anthropocentrism asks, "What occurs after the anthropocentric subject?" as anthropocentrism brought the earth to the verge of extinction. The post-anthropocentric approach comprises a worldwide effort to de-anthropomorphize the term "anthropo," as well as the presentation of new, dynamic, and negotiable identities. It is the outcome of realising how difficult it is to put the individual at the centre of everything. Those characteristics that anthropocentrism deemed human-exclusive, such as developed reason and language, were set aside.

The fifth chapter tackled questions such as "Is sex a requirement for posthuman beings?" and "Is sex a prerequisite for posthuman beings?" "Does human sexuality present itself in posthuman characters?" and "Does human sexuality exhibit itself in

posthuman characters?" In human-to-human connection, what role does sex play? What are the political ramifications of creating female robots in the event of a need for assistance? Is there a hierarchy of sexuality among the posthuman characters? Ex Machina, Her, and the Machine's female robots inspire the spectator to conclude that patriarchal beliefs do influence the design of female posthuman bodies. This chapter will investigate how posthuman figures portray human sexuality.

Science fiction is viewed of as a system—a tiny or not-so-large system, a solar system, robots, alien life, the human cosmos, and so on—as extrapolated from the study in chapter six. A science fiction novel combines science and fiction elements. It resembles science in that it deals with scientific topics, and it resembles fiction in that the author created or imagined some of the characters and events. As a result, it appeals to science fiction and science fiction lovers alike. A regular novel differs from a science fiction novel in that the former deals with the contemporary social context or even any other background, but the latter works with a specific setting: the galaxy of modern technology. The science fiction author can use his creativity to create things that aren't always found in our world but will in the not-too-distant future. The science fiction novel is the primary tool used by any writer who creates a unique world. The majority of science fiction stories combine plausible and unbelievable events made possible by a technological other universe. In the enormous world of science fiction, writers, directors, and others attempt to depict diverse concerns such as posthuman subjectivity, sex and gender, technophobia, and technoutopia, among others. Contemporary science fiction is working as a legitimate medium for telling stories about such challenges. Such portrayals

can be found in films like Chappie, Transcendence, The Machine, Her, Ex-Machina, and Automata.

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CHAPTER I

INTRODUCTION

1.1 Defining Science Fiction and Sci-Fi Movies

The sci-fi genre involves fictional scientific representations of a partially acceptable phenomena or a fantasized exhibition in mainstream science, like alien life forms, Humanoid robots, advanced spacecrafts, cyborg and interstellar travel. It is common in this genre to explore idealistic problems like the human condition or focus on political and social issues. Science fiction is largely concerned with stories set in the future that describe futuristic literature. With its history, customs, norms, and notable writers, it is now recognized as a literary form. Man has stepped on the moon — long considered science fiction and laughed at, it is now a reality. Science fiction has a rich history, which explains why it is so popular in today's world. SF or Sci-Fi is a frequent abbreviation. It is the result of humanity's triumphs in science and technology, the theory upon which our current science is based, and thus our contemporary civilization is formed. Their goal is to investigate, uncover, and learn something about the nature of man's world or reality by projection extrapolation analogue hypothesis-testing and correct experimentation. Since science fiction is an unique genre that combines hypothesis and imagination, and the reader is encouraged to utilize his imagination in combination with the author's.

Trick photography effects date back to *A Trip to the Moon* (1902) in silent cinema era. A major example (first film in the genre to be a full-length feature) was *Metropolis* (1927). A low-budget B movie dominated the genre from 1930 to 1950. The science fiction film genre became more serious following film *2001: A Space Odyssey*. *Star Wars* (1977) became the stepping stone for the science fiction

blockbusters of the 1980s after shown way for big-budget special effects films in the late 1970s.

> Science fiction permits us to perceive ourselves in a new light, in the light of a new future, one that is not our own but reflects directly upon who we are and where we might be headed. The SF prototype brings this same lens to science fact, permits us to notice the multiple futures in the theory we are constructing today (Johnson 22).

SF, or fantastic reality, allows us to see the amazing, thrilling, and tempting meanings that exist in the realm of human existence and the universe that we would otherwise miss. The true science fiction writer is one who possesses a high level of foresight and experimentation, as well as the ability to explain and interpret what he sees and feels in such a way that it broadens our understanding and causes us to observe and predict alongside him. He jolts the mind up from its slumber and describes the powers we now hold.

1.2 Characteristics and Important Aspects

Cultural critic and theorist Vivian Sobchack states that "science fiction should emphasize the actual, extrapolative, or 2.0 speculative sciences, the experimental method, and transcendental practices of magic or religion, but the latter should not be overemphasized" (Sobchack 63).Clearly, this definition implies that science fiction film falls under the empiricism category, while happy film and sad film fall under transcendentalism. In spite of this, there are a number of films that epitomize science fiction horror, including *Frankenstein* (1931) and *Alien* (1979). In science fiction films, aliens clash in the visual style. Alien imagery is used when it becomes more familiar, for example in *A Clockwork Orange* (1971). *Repo Man* (1984) and *Liquid Sky* (1982), take familiar aesthetics and turn them into aliens. Dr. Strangelove's

distortions cause familiar scenes to appear more alien. As a final example, in *The Deadly Mantis* (1957) a huge praying mantis climbs the Washington Monument, juxtaposing alien and unfamiliar images.

In science fiction, the construction of new heavens and hells is a recurrent occurrence. This projection straddles the line between dream and reality. Fantasy depicts an exceptional, particularly happy way of life, as just existing somewhere. Science fiction claims it possible to live in a paradise created by human efforts that are based on scientific, technological, or quasi-scientific progress. As a result, an earthly paradise is formed, in which the earthlings find a new way of life.

Scott Bukatman, a cultural theorist has presented that the film provides a way for today's culture to see the sublime, whether in the form of exaggeration, apocalypses, or transcendence. Lucian's fictional work, "*A True Story"* explored extraterrestrial life and habitat and could be considered as first known fictional work on science. A wave of science fiction stories started to emerge in the Enlightenment age in reaction to technological and scientific advancements. According to James Blish, "a story at the very least should be somewhat science based, at the very best; it should be heavily reliant upon it. There should be a disclaimer warning the reader against fantasy, that is, anything added purely since the author was popular in 1920's and his novels were best seller" (11). According to Darko Suvin, "Sci-fi is a literary in which estrangement and cognition play a key role, and it stands in contrast to an author's context" (37). "Adapting the unreal or inventive aspects of science, SF is a fiction of fantasy", opines David Pringle (90).

Science fiction is viewed as a system, although a small one; the solar system, machines, alien life, the human kingdom's cosmos, and so on. Fiction is a type of literature that features fictional characters and situations. A science fiction novel is

half science and half fiction; it is half science since it deals with scientific concepts, and it is part fiction because some of the events and characters are fictitious or imagined by the author. As a result, it appeals to both scientific and fiction fans. The difference between a regular novel and a science fiction novel is that the latter deals with a specific context, such as the contemporary social context or any other background, whilst the former deals with a general background, such as the world of modern science. As a result, when analysing science fiction, we must consider how well the novelist has created the system and brought it vividly to the attention of the reader, as well as how faithful his futurogical is to science.

Arthur C. Clarke, argued that “Sci-fi is possible, but not one would not wish to be true”(331). “Fantasy is something that cannot be true but you only wish it were. Generally speaking”, as defined by Jeff Prucher, (171). Sci-fi is an exaggerated version of the own world (e.g. through technological innovations, by having the contact, different history with aliens, etc.) whereby the dissimilarity is a result of extrapolation from changes or hypotheses; therefore, it is an exaggerated version of our world, the disparity is described in empirical rather than supernatural terms. Milner argues that “sci-fi is a discerning custom that is persistently subjected to influx of new transformations ideologically, during which the limitations of the type are constantly reinforced, disrupted, and the SF community's cultural individuality is constantly cultivated, preserved, and transformed”(19). The beginning of science fiction may have happened approximately 1260 AD/CE .Sci-fi films and videos have used "Human-Computer Interaction" (HCI) to imagine alternate worlds over the past century. Humans have always been fascinated by their surroundings. The field of science has elicited a response from the inquisitive and inventive human intellect. Scientists have authored treatises with artistic flair, searched for meaningful patterns,

created new tools for interacting with nature, and created astounding breakthroughs in their quest to comprehend the universe. Science is the name for this human method. Humans have an inherent affinity for the wonders of the earth. Science fiction writers have been attempting to instill a scientific mindset in the human race for the past century. In order to succeed in a field of science, the average person must have a fundamental understanding of science and technology. Many writers in the discipline have written minor, empirical works of science fiction as the emphasis has shifted from literary studies to cultural studies.

"Man is capable of building flying machines that can fly like a bird at incredible speeds without the help of beasts in order to beat the air"(Ackerman, 119). As Roger Bacon prophesied, Motion is portrayed through these media against a background. Science-fiction movies and TV shows usually place an emphasis on the action, then the story, and then characters and personalities. Movie makers of sci-fi movies were forced to include Human Computer Interaction (HCI) from the beginning, because compelling scenes are to be framed with appropriate imagery to convey what the media was about. Media makers, a group that specializes in sci-fi, the earliest to create rapid prototypes and design HCI user-experiences. In contrast to written literature, Sci-fi media shows the technology, products, and objects without giving them names, allowing the viewer to decide their own terms.

HCI professionals might be a more valuable resource for sci-fi filmmakers (hardly any are credited in the films). Therefore, viewers may experience advanced technologies such as spherical sound, IOT, personalization technologies, then virtual interaction. In such a world, we might be able to get beyond backward-looking imagery as we see in *Avatar* (2009) and other movies where movie-production centers are generally focused. A number of visiting futurists and science-fiction authors could

be drawn in as consultants to advanced technology R&D centers to help come up with innovative approaches. Therefore, business managers, engineers, marketers and UX designers are challenged to develop new approaches to HCI. Bruce Sterling, served in that position as a science-fiction author. Another science-fiction author is Bryan David Johnson at Intel. Perhaps there are others as well.

1.3 Divergent Fashion of Science Fiction and Sci-Fi Movies

Critics have given SF many definitions, which has resulted in a diverse and contested critical discourse. Defining science fiction, as previously argued, does only need to explain the continual delineation and not the reality, hence "*Fantastika*" or Science fiction is fiction that is framed by a scientific or materialist perspective, in contrast to the supernatural framework associated with genre fiction today. It's something magical, ghostly, or divine in human tales: wonders, miracles, and such. In the field of personality studies, Micheal Engler, a respected American theatre director, explains that "many of the important theoretical and experimental advances have been inspired by philosophy, religion and even art. Jerome Bruner categorized this as the "folk psychology" that is reflected in cultural narratives" (Bruner 236). Collins *et al.,* proposes that "factions are essentially the Big Five behavioral dimensions, has already applied the real meaning of the reason to the Divergent series"(133).

The context of science fiction includes divergent thinking that can be pictures in detail in Dante Alighier's epic poem (1265-1321), *The Divine Comedy* (1321) for building world with specific genre of fantasy in fiction with the help of contemporary knowledge in Science. Kavoori continues by stating that "the modern world has become accustomed to the genre conventions of media and the political and ideological contexts of media production" (Kavoori 389). Science fiction is a community that has attracted media attention, and some journalists rely on science

fiction writers. Hard science fiction is a subgenre of science fiction that is based on current research but is grounded in physical sciences and speculates on scientific development changes in the future where science was formed. In the beginning, the costumes are shown, which can be reproduced in the futuristic costume.

Le Voyage dans la Lune (1902), the first SF movie which was created by Georges at the very beginning of 19th century, based on H.G. Wells and Jules by depicting the launching of spacecraft to the moon from large cannon. Following this, Expressionist Fritz Lang in 1927, became most popular in Germany and is most expensive film until that period. Later in 1929 Speculative movies declined as audiences began focusing on escapist themes. Even though, H.G. Wells in his film forecasted the Second World War adventure, which became box-office flop. In the period of 1930-1940 some of the popular SF films are Flash Gordon films, *Buck Rogers (*1979) and *Bride of Frankenstein* (1935) which depicts the space travel, universal horror films, high tech gadgets, mad scientists' experiments gone wrong and world domination. After World War II, several important movies were released, including *Destination Moon* (1950) which was widely known. George Pal was the producer of Destination Moon, and the creator of *When Worlds Collide* (1951), *The Time Machine* (1960) and *The War of the Worlds* (1935).

The space and world war ideas depicting SF films were later diverged into aliens arriving from space. Political commentators embedded UFOs in the minds of public after the Kenneth and Roswell occurrences of 1947. With their contrasting perspectives on contact, *The Day the Earth Stood Still* (1951) and Howard Hawks' *The Thing from Another World* (1951) are the first films dealing with the first encounter. *Invasion of the Body Snatchers* (1956) was an allegory in which a friendly race of aliens advised humans to abolish nuclear weapons, with the paranoid

concluding words, "Watch the skies!". This film has been both praised as a classic and viewed as a cautionary tale about Communist infiltration.

Films with aliens gradually turned into monstrous horror films. There were many monster films released by Toho (Japanese film studio) during that period, Kaiju film was successful in the box-office. As the title monster attacks Tokyo, *Godzilla* in 1954 became the most famous film of all time. It created many sequels, inspired other kaiju films including *Rodan* (1956), and created a notable cinema monster of all time. Films such as *Creature* (2014) from the Black Lagoon, 1954 or *Gog,* 1954 were notable for the use of drive-in theatres and 3D, methods that studios exploited for their financial success.

Some studios created serious films with high budgets including *Forbidden Plane* (1956) and *On the Beach* (1959) and Shakespeare's *The Tempest* (1611) reimagined using a sci-fi approach. In 1966, Gene Roddenberry produced Star Trek, influenced by the sequel that created “Robby the Robot”, a character and the first electronic music score. Frederik Pohl stated that the last one good sci-fi film that many readers will be familiar with released in 1962 was *Forbidden Planet* (1956). A sequel is a series of tv series, movies or books such as 1968's *Planet of the Apes* movie followed with four Sequels. A range of science fiction-like gadgets appear in James Bond series, although they are not strictly science fiction.

In 1968, Stanley Kubrick directed and wrote 2001: A Space Odyssey, one among the era's most important sci-fi films. Sci-fi classic *2001 (1968)* influenced several later works in the genre. The film was a groundbreaking achievement in its visual effects, the story's vast scope and accurate description of space travel. Steven Spielberg, one among the most renowned figures of the genre called *2001* (1998) "the big bang of

science-fiction." In the years following the release of 2001, science fiction movies enjoyed bigger budgets and more advanced special effects.

"Space adventure" science fiction films were popular in the 1970s. Mystical element reminiscent of *2001: A Space Odyssey* (1968) influenced both *Star Wars* and *Close Encounters of the Third Kind*, both released in 1977. These films reflect the growth out of the space discoveries of the 1970s. *Star Wars* played a large role since 1980, in blurring the lines between sci-fi, superhero and fantasy pictures. From 1980 onward, numerous Sci-fi fiction films were released each year. Oscars were awarded only to technical categories because the critics disparaged these films. Using extensive computer graphics, the 1982 Disney film *Tron* (2010) had an innovative visual style. Sci-fi became a successful genre again following the success of *Star Wars*. In the 1980s and 1990s, film adaptations of the *Star Trek* (1966) television series followed. The use of computers in adding special effects and producing films became increasingly important during this decade. Many computers were clustered together to create large render farms, which detailed images based on three-dimensional models. It was possible to create more complex effects like explosions, wave movement covered aliens as the software developed. 1997 saw a re-release of the *Star Wars* trilogy with many improvements due to advances in special effects.

The majority of SF films in the 2000s revolved around fantasy instead of space travel. In 2000s (decade), the only planets set off Earth were in *Star Trek* (1966) and *Star Wars* (1977) films. *Mission to Mars* (2000), *Red Planet* (2000), and *Titan A.E.* (2000) were all poorly received. *The Matrix Reloaded* (2003) and *The Matrix Revolutions* (2003) were both works of earthbound science fiction that, were abundant in the fantasy and superhero genres. It is evident from the numbers that attended sci-fi

films released in this period that the theatre audience had begun to decline by the decade's middle. Almost identical to the cinema experience, home theatre systems offer all the comforts of home without the added expense or inconvenience. In an attempt to increase their bottom line, film studios began advertising products in advance of the start of films in theatres, alienating some theatre goers in the process. As a result, high-quality DVDs were sold and rented in order to offset the loss in cinema revenue. Many of these releases contained previously cut scenes and extras.

1.4 Theoretical Aspects of Science Fiction

There is a large variety of futuristic concepts involved in science fiction novels. Sci-fi is often referred to as the "literature of ideas." Imagination is the key to its success, especially in soft science fiction. Science-fictions can involve space travel, time travel, aliens, or aliens who are time travelers. The major classic elements are time travel, space travel, telepathy, histories, teleportation, aliens, technology, and Computer Intelligence. In the present critical history, the dichotomy between magic and technology is central to SF of the post-1600 period. "Among the population, fans have mapped out sub-divisions between magical and technological SF: "hard" SF aligns closer to the latter term while "soft" SF aligns closer to the former" (Roberts 19).

1.4.1 Hard Science Fiction

> Writing, readers, and editors in SF resist categorizing their work into genres. Several factors shaped the specific characteristics of this fantasy genre: the Protestant Reformation and its close association with a cultural dialectic involving Protestant rationalist post-Copernican science and Catholic theology, also magic and mysticism. Often, fantasy predominates in texts,

> whereas hard science fiction largely or largely represents texts under the aegis of the former term (Roberts 26).

According to Ernest Nagel, for example, “it is important to use analogies when analyzing scientific problems. For instance, he gives the example of 'the kinetic theory of gases', which is often explained as if the particles behaved like billiard balls” (Nagel 110). Analogies and hypotheses, according to Nagel, are capable of serving as useful techniques for systematic research despite their obvious limitations. Models that are constructed from a particular system, similarly, provide ways to expand theory embedded within it, which has intrinsic value. At the time, "The Conversation of Eiros and Charmion" (1839) discussed the possible destruction of the world by a comet, not merely by collision, but by adding so much oxygen to Earth's atmosphere as to cause an apocalyptic fire. Poe frames the story around a conversation between the two figures mentioned in the story's title; one ghostly, the other demonic, recalling the catastrophe from their perspective after the world ends. It is a similar tale, *The Colloquy of Monos and Una* (1841) which equally captures the abuse the world will suffer from future humanity. It is narrated that she remembers her life, then dies, and is born into the Life Eternal. The Facts in the Case of M. Valdemar (1845) describe a sick man who turns into a zombie after becoming mesmerized by his illness.

Science fiction stories often appear in Gernsback magazines, and one issue of Science and Invention was wholeheartedly dedicated to them in August 1923. As a result of Gernsback's conviction that such outlets were necessary, he announced his plans for a science-fiction magazine in 1924. Amazing Stories: The Magazine of Science Fiction became available in April 1926, a year after the first dedicated science fiction magazine appeared. This stance seems at odds with Gernsback's often stated

view of science fiction as a didactic as well as entertaining mode, which suggests that the stories in this magazine would primarily be aimed at 'amazing' their readers. The prescriptive presence of the former is most striking, though he always emphasized the importance of the latter.

The first issue of Amazing Stories had an editorial entitled "A New Sort of Magazine." And he argued that:

> "The best science fiction authors have a way of conveying knowledge in an appealing way without ever letting us know that they're teaching us something. They provide knowledge that might otherwise be unavailable, without ever letting on that they're teaching" (Ashley 50).

As Brian Aldiss argues, "this 'instructive' imperative deadens the imagination of science fiction writers, adding to the deadening effect of literalism in their fiction" (Aldiss 204). Gernsback's Sci-fi imprints tend to produce fiction that eschews Feyerbandian paradigms. It was early hard SF, and influenced one major manifestation of the genre.

Science fiction covers a wide range of topics. A 'Novum' is a fantasy world that is a major departure from the real world, which is created by a science fiction novel. Science fiction takes us to a new universe that the author has imagined. A excellent science fiction novel will tell you what will happen in the future. Its goal is to shake men's confidence in their future chances. It may also foreshadow some of today's fears among men in industrialised countries. A science fiction novel depicts a new way of life that science and technology have discovered. It serves as a symbol for all of science's achievements thus far. Gas, electric light, communication technology, computers, space travel, robotics, wireless transmission, and the cyber world are all introduced to a significant number of individuals here. People are eager to assume that

practically anything is conceivable since science appears to have endless promise. Science has evolved into a ready market where a human being can buy anything on the global market. Science fiction narratives may be founded on Charles Darwin's theory of evolution: they depict survival of the fittest, the extinction of species, and their final fate on the planet. The stories will almost always revolve on a species' transformation or modification. The challenges of dominance inherent in the gap between higher and lower phases of evolution are acknowledged in science fiction stories. Science fiction stories are about life on other worlds, life on Mars, life on the Moon, and so on. They demonstrate that life on other planets is far more evolved than life on Earth. The foundation of today's science fiction works that pique our interest is how they depict extraterrestrial species as aliens. A science fiction novel, on the other hand, will highlight the flaws of technological civilization. Science fiction writers take on the role of philosophers, predicting the future of civilization in order to preserve humanity. Despite the fact that humans maintain a civilization based on overpowering technology, they are nonetheless prone to death in their youth.

The Sequence of Blish's Cities in Flight (1950-1962) novels which, according to the books' inner chronology: *They Shall Have Stars* (1956), *A Life for the Stars* (1962), *Earthman Come Home* (1955), and *The Triumph of Time* (1958) also seems at first glance to be an entirely standard hard SF work. SF is considered a favorite genre by many because it is the type they enjoy most.

1.4.2 Soft Science Fiction

Readers are more open to soft science fiction. Techno fiction seemingly falls back on this untested, and ultimately Platonic, absolute truth, whereas science fiction liberates us to imagine without such restrictions. The soft science fiction subgenre is characterized by a more Humanistic and psychological

> focus rather than a technological one, as opposed to hard science fiction. Studies how technology affects the personal, psychological, social, and occupational lives of people. “Soft science fiction writers mainly focus on environmental themes, technological hazards, biotechnology, and other social aspects of science fiction. Soft science fiction can also include utopia and dystopia that are about a society's social structure” (Purkar 2).

Over time, the ideal society framework developed based on More's Utopia. *Cridge's Utopia* (1884) embodies the good traits of earthly living. *News From Nowhere* (1890) also represents the simplicity, beauty, and isolation of agrarian utopia. Bellamy's *Looking Backward* (1888) provides another example of an industry-based utopia. During the nationalist period, a political movement was born, which, although it lasted only a short while, led to other reforms.

Many literary utopias were produced during the early years. One of the foremost writers who led the way in the development of utopia as a subcategory was H.G. Wells. Describes the ideal society of orderly, clean and efficient living in his work: *A Modern Utopia* (1905). Several critics argued that Utopias would end up as dystopias, oppressive societies, as the 'perfect' system was more important than individual freedom. “The twentieth century has seen a growing replacement of utopias by dystopias, an expression that suggests utopia has malfunctioned” (Purkar 2). Soft SF is present in almost entirely of TV shows: all the canonical *Star Trek* series (1966), *Babylon 5* (1994), the reboot of *Battlestar Galactica* (2004-2009), and the new *Dr Who* (1963) series including some of the spin-offs. None of those shows qualifies as “hard” science fiction, not even *Babylon 5*. “In ‘soft’ SF, everything technical is taken for granted, unless there is a malfunction invented by the authors for narrative purposes” (Wenskus 449).

1.5 Concepts Related to Science Fiction

"The status of the idea of the future has very real practical as well as theoretical consequences, for the quality of social life itself and also for the strategy of cultural politics" (Jameson 364). Time travel is a continuing and prevalent narrative strategy in SF, or attempting to inventory the variations in formal strategies as an end in itself. General contention, therefore, is that time travel as a formal strategy in SF is inscribed with fundamental latent ideological valences, variously reactionary and utopian, that function irrespective of the work's manifest content

In science fiction time travel narratives, critics observed the diversity. According to Slusser and Chatelain, 'time dislocation features importance to the scientific, philosophical nature of time-paradoxes and the means by which time travel might work, as they suggest in their article about the temporal paradox form. Despite all variations in narrative strategies, they conclude that 'the temporal paradox, which is never the storyline itself, is a fundamental relationship between them' (Slusser and Chatelain, 166). Veronica Hollinger argues in her article on Wells' *The Time Machine* (2002) that this manifest meaning is of interest philosophically to her.

The analysis seems to be refuted at first glance by Gregory Benford's *Time-Scape* (1980). Aside from being largely concerned with time paradoxes and the possibility of "Feynman radio", which Baxter also uses, he seems to be more concerned with a historically relevant and sensitive ecological theme, which may appeal to some readers. However, Benford's *Dystopic Far Future* (1997) is only treated generally, making his warning "less interesting than his speculations regarding time paradoxes" (Burling 6). Temporal contrast time travel differs significantly from temporal dislocation in the way it operates and the results it produces. A temporal contrast form, however, can be characterized as a structural

juxtaposition of sharply different nova that express ideologic estrangement in a deliberate way. This variation of time travel, is precisely intended to structure the narrative, as opposed to Slusser and Chatelain's assertion. This form of temporal contrast therefore carries latent and manifest ideological significance, potentially utopian or dystopian. The understanding of literary representations of time and time travel requires an understanding of the temporal contrast variation. The importance of this approach is further clarified by Walter Benjamin's remarks that Verstehen is "a way of setting out a specific era from homogeneous history", where oppression is taken into account (Benjamin 263).Using Raymond Williams as an example, Jameson points out that this methodology emphasizes "the contrast of a period characterized by very different experiences from our own" (*Demon Seeds* 1977).This “blasting” contrast of the “structure of feeling” of the present with the alternative era which the time traveler visits emphasize not an abstractly scientific meditation on the “how” of time travel, but rather a dynamic historical critique. “By drawing a contrast between the organization of feeling in the present with that of the alternative era visited by the time traveler, Burling expresses a dynamic historical critique, rather than an abstract scientific meditation on time travel” (Burling 8).

The elements of mainstream fiction and science fiction are similar, and they deal with similar topics. Plot, character, dialogue, background, and life philosophy are all common aspects. Of course, they are both works of art with their own distinct qualities and limitations. One cannot be a perfect match for the other. Despite the fact that conventional novels and science fiction have a lot in common, their approaches are very different. Science had turned out to be a mixed blessing. It had improved man's ability to do good as well as his ability to do harm. Only a few people,

including science fiction writers, realized the tremendous destructive power of contemporary technology. Their experiences highlight the importance of education in the formation of societal ideals. They consistently warned of impending disasters if international cooperation was not accomplished. Science fiction literature are notable for their imaginative glimpses into the possibilities of things influenced by science. Whatever scientific improvements were made; the difficulties were visible to everybody. Science and technology are in charge of the globe. People are interested in making money, gaining military advantages, producing weapons, and other science-related uses that are not evident. People revere power. By depiction, the science fiction writer interprets such life. By way of direct personal commentary and explanation, the novelist philosophizes on such a life.

Teleportation is the major concept/theme in Sci-fi movies. According to Zeiknger, "this would enable travelers to travel between locations without the aid of intermediating miles and plane food rations. Photons, the individual particles of light, are now part of a laboratory reality if still a fantasy" (Zeiknger 1). Teleportation is often seen as allowing instantaneous travel in science fiction movies, violating Albert Einstein's prediction that nothing can travel faster than the speed of light. "During the Golden Age of twentieth-century science fiction, writers created the concept of teleportation as a means of disembodied instantaneous transportation so that their stories could be supported" (Zeiknger 1). Several television Sci-Fi anthology series have featured scenes involving the teleportation of characters, including The *Twilight Zone* (1959) and *The Outer Limits* (1963). *Star Trek* (1966) television and "film series over the past few decades have received the most widespread popular awareness of the teleportation concept" (Davis 1).

Authoritarian organizations often employ nefarious schemes to control people's minds, including telepathy, magic, and magical interventions. For example, in *The Matrix* (1999) plot line, devices are implanted in the subjects' brains to control them. These devices affect neuro-physiological processes, which results in the subject's mind is changed. Medaglia opines that ‘A new era in the science of guiding the mind may emerge when cognitive, clinical, ethical, and control neurosciences combine to reclaim a term-long limited to science fiction (Medaglia 8).

Using the Johnny Mnemonic to illustrate: The agent's specialty is delivering sensitive data with the aid of his brain. Scenes in films show data transfer via wires plugged into earphone sockets. A head-mounted display is also used by the actor during this procedure for unknown reasons. This actor, Keanu Reeves, plays a role in *The Matrix* (1999) in which his brain is interfaced with the computer. The movie's envisioned future depicts him as a person whose consciousness is controlled by a computer that accessed his brain via physical access to the back of his head. A connector is (un-)plugged into "sockets" in the brain of each main character (Schmitz) to enter and exit this artificial world.

The film *Voyage to the Planet of Prehistoric Women (1968)* was directed by Bogdanovich. Throughout the movie there are blinking lights, twirling tapes, as well as rocket-ship control panels, speaking via telepathy and perhaps wearing nary a piece of metal or plastic technology. Sci-fi movies typically feature men and women contrasting each other, and *Avatar* (2010) is no exception.

Additionally in the *Star Wars* Series, 1977–2008, Star Wars captured audiences with compelling visual storytelling, adorable robots, dirty rocket ships, but with little innovation in HCI. “A light saber may be the object of memorable interaction, except

for the occasional projected image or mind control. Aliens are now the scientific avatars of our modern world" (Quinn 2).

The best example is *The Day the Earth Stood Still* (1951) in which the alien Klatu warns the consequences if humans do not reform their ways by shutting down the power. Quite clearly, Klatu was a messiah figure, who was killed by his robot and then resuscitated, Gort. As he prepares to return home, Klatu warns that unless humankind changes "the present course will end in oblivion." The mystery of the detective genre is almost always present in films in which aliens are the dominant characters (Rieber 4).

One of the earliest uses of Alien concept in SF occurs in Edgar Rice Burroughs, *A Princess of Mars* (1912). The second scene shows a group of actors from a science-fiction series who are abducted by a race of aliens who had watched the series from their planet and now mistake them for the real heroes of the series. *Galaxy Quest* (1999) is a science fiction parody of *Star Trek* (1966). As a result of the alien's efforts, a copy of the starship was built. The 'crew' was forced to use the copy to help them, which proved problematic for the actors, who had only portrayed the crew until then. "The spaceship had damaged already along its sidewalls during its attempt to leave the space harbor" (Schmitz 9). The movie shows how movies and reality interact in a very interesting way.

Since Wells's 1898 novel, *The War of the Worlds*, interplanetary conflict has been explored in science fiction. As Charles Cockell observed, the centralization of basic life-support systems makes it difficult and even impossible to carry out a revolution against tyranny in an extraterrestrial settlement. Wells' Martians apparently landed at interplanetary speeds on Earth with cylinders firing and the cylinders opened to release their fighting machines to wage a conventional ground war with their Black

Smoke. As a result, there was significant damage, even before the cylinders opened to release the fighting machines. Using only kinetic energy, the Martians could have obliterated Victorian England and the rest of humankind from space; however, their struggle was a war of colonization, terraforming, and enslavement, not destruction. Martians themselves are dangerous, however: “Destroying towns was not hard. It is no harder than popping a balloon or breaking a window” (Robinson 558). Perhaps the most extreme metaphor of spaceborne kinetic-energy weapons is "relativistic kill vehicles," such as those described for example in *The Killing Star* (1995), in which a hail of alien missiles attacking inhabited worlds travel at 92% of the speed of light.

Darko Suvin developed Cognitive estrangement to describe the experience of encountering unusual elements in SF that are significantly different from the viewer’s and reader’s reality. He argues that “the defamiliarization of taken for granted reality that occurs when the reader encounters such unusual elements causes the viewer to imagine the world from different perspective” (Booker 126).Viewer with his personal experience creates a new reality when he sees a science fiction movie. His subjectivity is very important in this process of reality creation.

1.6 Various Critics to Science Fiction

Science fiction critics face the difficult challenge of defining the film before they can describe it, also the ability to deal with the nagging feeling that the act of defining is also a catharsis form. However, if taken too slavishly, the tyrannical phase can imprison the critic in an ontological construct that bears little relation to real life cinema. But when a critic is certain that his readers will already understand exactly what he is talking about, there is something suspect about him. Two particular type of antagonists have continually caused the SF critic, no small amount of discomfort.

> “The negative criticism of SF movies has caused the film critic to become extremely defensive, and forced him at times perhaps out of strong feelings of self-preservation to play the devil’s advocate, either denouncing the films or ashamedly admitting he loves them even if they’re not really good” (Sobchack 43)

Broderick's insights have been refined and developed by the critic and novelist Damien Broderick. Fantasy, in the broadest sense of the word, would be the story telling of humans from their earliest moments onwards, except for a few small nineteenth and twentieth century splinters. According to him, the development of science fiction in the 19th and 20th centuries was largely influenced by some of the greatest cultural, scientific, and technological trouble of the period. He attempts to describe with more precision the strategies employed by the majority of SF texts:

> Science fiction is a form of storytelling indigenous to a culture in transition, as it undergoes epistemic advances impacted by technological-industrial modes of production, distribution, consumption, and disposal. The heroes of science fiction become icons of interpretation (i) in the form of metaphors and metaphoric strategies (ii) as part of a 'mega-text' collecting all previously published SF and simultaneously de-emphasizing fine writing and characterization and (iii) Scientific and postmodern texts are possible to place emphasis on the object over the subject: "Paying attention to the object over the subject.(Broderick 155)

If we take as differentiating characteristics of SF either radically different figures from the conventional narrative or radically different settings from the conventional narrative, we will find a kinship with other literary sub-genres which flourished at different geographical locations. A few examples include the "blessed islands" of

antiquity, the "fabulous voyage" of the Renaissance, the "state novels" of the Enlightenment, the modern "anticipation," the "anti-utopia," etc. “The sociological, the methodological aspects of this genre are both being vigorously debated in several countries; both speak to the relevance of this genre and to its importance to spark scholarly discussion as well ” (Suvin, 372).

Critics sometimes perceive mistakenly what is in a science-fiction story actually by looking at the recurrent themes in Western culture. It is possible for critics to place a high value on themes well beyond the reason that they are familiar. In other words, as a critic, you might misinterpret the significance of some material because you don't know how it fits into the cultural context in which science fiction originates. A critic's cognitive universe may, at times, exclude it from their consideration (Joanna Russ, 7).

Doody (1997) The English and Continental novelist culture has largely been ignored by critics of literature. The novel has been treated primarily as a realist genre since the 18th century, while romance has been considered fantastical, escapist, or vulgar. Doody's account of the reputation of romance will ring true to SF enthusiasts: romance is referred to as despicable in the genre, a term reserved for the lower sections of bookstores. Conveying literary pleasure that the critic thinks readers would be better off without which means that the work doesn't adhere to the standards of realism and now of course "realism has disappeared like the Cheshire cat, leaving behind its smile of reason". For decades, scientists have argued, that realism is the most important factor.

> Romance and the Novel are one. The separation between them is part of a problem not part of a solution. … As the emphasis on that supposed distinction has often done more harm than good, I propose to do without it

> altogether. I shall call all the works I am dealing with ‘novels’, as that is the term, we feel most positive about (Doody,15–16)

Instead of criticizing, the critic should explain how the visual potency of key texts can contribute to their greatness. In other words, the essay should explore the development of SF cinema in a way that does not view special effects as a mere ceremonial ornament, but as essential components of the text; a sense of SF cinema as fundamentally conscious of its own visual and technological idiom, and all the more powerful for that awareness and sensitivity. “It is unnecessary to explain how a joke is meant to be funny after distance has been gained from the fear that one may be taken in but to acknowledge that hoaxes are meant to be funny once that has been done” (Roberts 141). Popular science became a popular type of scientific education. Science fiction writers popularized science and linked it to the 'humanity branch' stream. As a result, social and technological concerns have been merged into a single web of research. Science's philosophy of life is unique, and science fiction philosophy, by definition, plays a significant role in human life.

1.6.1 Critics on Time Travel

Science fiction faced many ardent critics; nanotech managed to maintain its professional future because of its excellent speculation and coordinated attacks on science fiction. As we can see from nanotech's rapid increase in industry and academia, the reputable scientists involved, and the media attention it has received recently, there is a doubt whether it is legitimate science. “Nanonarratives articulate posthuman subjectivities resulting from embodied transformations rather than presenting posthumanism as a threat to the body, that Hayles has discussed extensively” (Milburn 287).

Science fiction becomes only a strange series of metaphors for the human condition if the critic pretends that the scientific truth is illogical or irrelevant (Russ 7). The time travel may fit in to mystery, history and fantasy but is classified in Science fiction. Beginning from the paradoxes till tachyonic effusions in prebirth are discussed with se of rules. The period of time travel can be characterized by various experiences and organized feeling of the time traveler can have another era in contrast with the present with dynamic critiques. Some oldest types of time travel belongs to the "Seeing the future" on the quantum level. With the help of time machine man can travel to the future. By traveling to the past one can change the history. Despite frequent mention of the former, The *Time Machine* (1895) combines a futuristic sense of possibilities with thwarted desire. So:

> I pushed the lever all the way to the extreme as Wells' Time Traveller mounted his machine. The night slid into the day like a candle being flickered out, while the morning came instantaneously. Laboratory lighting became hazy and dim, then dimmer and dimmer till it was as dark as night…my pace was accelerated by night following day. As I watched, I began to lose the dim haze surrounding the laboratory, and the sun began to slant swiftly across the sky, marking the duration of the day with every leap. As I had come out into the open air, I assumed the laboratory had been destroyed. It seemed to me that scaffolding was moving, but I was already traveling at too fast of a speed for me to be aware of it… the bracing sun came into being as a ray of light, a brilliant arch, in space (Wells 4)

Nanotechnology plays a key role in creative writing in science fiction genre as well as techno-thrillers, historical novels and crime. Furthermore, given nano writing's tendency to speculate on the far future and predict its role in the radical

transformation of human life, some critics claim that it's less a science than a fiction. According to David E. H. Jones, a scientist at the University of Newcastle, nanotechnology is not a "realistic" science and that it must not be taken seriously because it may violate some natural physics limits. The boundless-optimism school of technical forecasting will remain limited to the sideshow that makes up the freak show (Jones 837).

Some critics have argued that manipulating and engineering atoms directly is physically impossible due to thermodynamics or quantum mechanics; others have believed that nanotechnology cannot be scientifically validated without experimental demonstrations and others believe that such long-term predictions obscure present-day research and the considerable accomplishments which have been made within the field, so they dismiss nano-writing predictions entirely. “Whether they attempt to extricate the scientific facts of nanotech from their science-fictional entanglements or consider the claims as mere fantasy, these attacks all use the term "real science" in opposition to science fiction" (Milburn 24).

Nanonarratives require engagement, as matter matters profoundly in the science of nanotechnology.

> “By reducing everything to nothing more than pure materiality, nanotech transcends metaphysical categories of identity as it unbinds the body, its surfaces, and interiors are in constant flux, nanological logic does not support the construction of abstracted, theoretical bodies. Accordingly, the posthuman bodies conditioned by nano-logic are always individuated embodiments, with limitless possibilities for bodily conformation where no boundaries are off limits” (Milburn 51).

Nanotechnology and its description is widely used in sci fi to create fantacy.

1.7 Organization of Thesis

This study has been dived into five chapters. The first chapter lays the groundwork for the genre of science fiction and sci-fi movies, its theoretical concepts, various critics, its divergent fashion, and its major aspects have been broadly explained. The second chapter includes the narrative representation of Posthuman consciousness subjectivity in Automata (2014), chappie (2015), and in The Machine (2013). In this chapter, we analyze the representation of posthuman thought, perception, and awareness. The third chapter includes Technoutopianism in Transcendence (2014), Chappie (2015), and in the Machine (2013). In this chapter, we trace Techno utopia in the selected works. The fourth chapter talks about Transhumanism in Automata (2013), Ex Machina (2014), and Elysium (2015). Here we will observe the transhumanism in these selected works. The fifth chapter deals with the role of sex and gender in Ex Machina (2015) Her (2013) and The Machine (2013). Finally, we will present our summary and conclusions as well as the possible future lines of research.

1.8 Summary

This thesis is concerned with the Science Fiction; its subjectivity and its various aspects by discovering how Science Fiction issues are exemplified. It is commonly agreed that we are occupied in the information order where classical oppositions body/mind, human/machine, natural/artificial, reality/fantasy are dissolving. The Sci-fi genre particularly offers opportunities to understand the complex relationship between the human body and the media.

1.9 Scope and Aims of Thesis

This thesis aims to examine posthumanism, technoutopian, transhumanism and gender roles as various issues in the Sci-fi genre through examples of selected

science fiction movies. This analysis of Sci-fi films looks at their variety of themes based on close readings of a corpus of films. In this thesis, an exploratory analysis of seven science fiction films from 2013 to 2015 was conducted from the outset.

A variety of subgenres, filmmakers and production contexts were considered when selecting the corpus, in order to introduce a more nuanced ensemble of films and contest the science fiction film canon. For the concrete analysis, a more precise selection of science fiction films will be chosen after a thorough exploration of the late modern aspects presented in the theoretical framework, and how they intersect with the science fiction film genre. There are still a number of films that address a wide range of posthuman, transhuman and technoutopian issues. First, a typology of Sci-Fi Film Issues is presented to structure the analysis. Issues include Posthumanism, Technoutopian, Transhumanism and the Gender Roles are discussed.

CHAPTER II

NARRATION OF THE POSTHUMAN SUBJECTIVITY IN *AUTOMATA* (2014) *CHAPPIE* (2015) AND *THE MACHINE* (2013)

2.1 Defining Posthuman and Posthumanism

Modern era, being a time influenced by extensive technological conditions, cannot keep the thoughts about posthumanism and posthuman subjectivity away from her thought stream. Her present subjects are partially or completely technologically oriented and technological unconscious and non-conscious has turned out to be a synonym of disability. There is no way left than to switch the codes of thoughts towards a technology-oriented society. The fundamental question raised while switching these codes is related to human beings who always believed that this world is centred around them. Man, always tend to ask questions like What are the effects of modern technoculture and biotechnology on the existence of human beings? Should one rethink the integrities and identities of the human? Is posthuman questioning the dominance of a real human being? etc.

Among the heated discussions on humanity's evolution to nonbiological experience as an outcome of technology, many of the theoreticians opines that, as a critical discourse, posthumanism does not essentially search for emancipation from humanism, postmodernity, modernity or philosophy, but remains deep-rooted in their cultural memory even while remaining conscious of the specificities of the current and of the various changes it proclaimed. The other side of the philosophers and thinkers preaches that

> homo technologicus, a symbiotic creature in which biology and technology intimately interact so that what results is not simply homo sapiens plus technology, but rather homo sapiens transformed by technology into a new

evolutionary unit, undergoing a new kind of evolution in a new environment (Longo 23).

This evolved and new form of beings who are transformed by technology and entirely different from their previous existence has to be given a new subjectivity that suits for them because the old one is no more suitable for them. Presentation of this new posthuman subjectivity in front of the human audience who are not really aware or conscious about their transformation, or who are lacking behind a bit in this stage of evolution, through the speculative medium of science fiction is the first and foremost challenge a filmmaker has to face while dealing with posthumanity in science fiction. The rise and growth of posthuman subjects has already been understood and traced by postmodern literary critics like N. Katherine Hayles. She proposes that "Language isn't what it used to be" (Hayles 2006. 136). She also argues that "Code becomes a powerful resource through which new communication channels can be opened between conscious, unconscious, and nonconscious human cognitions" (140). Sidonie Smith, a cultural critic, in her presidential address *Narrating Lives and Contemporary Imaginaries* (2011) propounds that "as the posthuman gets a life, it will be fascinating to observe and engage adaptations of narrative lives routed through an imaginary of surfaces, networks, assemblages, prosthetics, and avatars" (571).

2.2 Exploring the Posthuman in Selected films

Though deviated from the ideas of essential humanism, posthuman is presented as the natural successor of humans themselves. A belief in artificial intelligence and cyborgs have spread with an assumption that without technological development, human development is stagnated and the criteria to measure the human development is technological advancement. In this way, digital machines started to function as descendants of the human species which made posthuman, a natural

development of the human themselves. In a conversation which take place in the movie *Automata* between Wallace the police officer, Tech the machine brothel keeper and Jacq, they discuss about the unending possibilities of Cleo the sex robot.

"Cleo"

"You ask, she obeys"

"This unit can do these things?"

"Cleo, You ask her, okay?"

"Do not be afraid. I can distinguish perfectly between pleasure and pain."

"Can you cause pain?"

"Only if it's your wish" (32:15- 33:25)

The owner of the brothel makes a claim that "No filth, Cleo better than your wife" (33:42- 33:45). It really means that any posthuman being will be a better version of the existing human beings.

Interestingly the film *Chappie* also has a similar scene which describes the initial difference between man and posthuman. The conversation between Yolandi and Chappie goes as follows.

"That's my book? That's Black Sheep?"

"What?"

"Please, may I have it? This is from my maker. Black Sheep and Little Bird. Please, may you read it?"

"Yeah."

"Please, may you read it?"

"Yeah, I can read it for you, Chappie. All the sheep in Magooville were white. But Abel was a black sheep. Do you know what's a black sheep?"

"No."

"It's, like, when you're different to everyone else."

"Like me. I look different from you and Amerika."

"Yeah."

"And the boys."

"Yeah, but it's not so much how you look. It's special, like what's inside. That's what makes you different. See, it's who you really are. Inside. Your soul."

"Chappie's inside here?"

"You see the outside, this, this is just temporary. When you die, the soul inside goes to the next place. The thing inside see, that's what Mommy loves. Come. Mommy loves you." (00:57:27-00:58:32)

The director of the film Neill Blomkamp uses the analogy of black sheep and white sheep to distinguish between human and posthuman. Remarkably, this analogy goes deep into the mind of Chappie. Once at the end of the movie when chappie recovers the consciousness of Yolandi using neural transmitter and transfers it into a robot, though she died from a gunshot, she lives in the body of a robot. Chappie utters then "Now we are both Blacksheep's Mommy" (01:52:59 - 01:53:00). This scene was narrated to project the idea that the future of humanity lies in posthumanity only.

Posthumanism was naturally redefining what was known, understood and defined by humans as essential humanness. A seminal contribution to the field of posthumanism and the identity of posthuman was presented in N. Katherine Hayles's work *How We Became Posthuman* (1999). For Hayles the primary intention of writing that book was to discuss the question "What is the posthuman?" (2). She stresses on the point that the creation and existence of posthuman is always explained as an accident of history which could not have been avoided rather than an inevitability of life. She elaborates the point in her work as follows:

> the posthuman view privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life. First, the posthuman view privileges informational pattern over material instantiation, so that embodiment in a biological substrate is seen as an accident of history rather than an inevitability of life (2).

Hayles, by questioning the consciousness of a posthuman subject, doubts that a lot of mystery lies behind their real consciousness. She opines that "the posthuman considers consciousness as an evolutionary upstart trying to claim that it is the whole show when in actuality it is only a minor sideshow"(2). The evolution of human body to posthuman body is treated as a manipulation of the original human body itself and Hayles put forward an opinion that the originality of humanness and human body cannot be claimed by human beings because evolution has already manipulated the real condition of human body in many ways and becoming posthuman is a part of this continuous manipulation.

Dr. Dupre in the film *Automata* describes this factor to Jacq in detail.

> "A machine altering itself is a very complex concept. Self-repairing implies some idea of a conscience. Muddy waters".
>
> "Why?"
>
> "You're here today trafficking in nuclear goods because a long time ago a monkey decided to come down from a tree. Transitioning from the brain of an ape to your incredible intellectual prowess took us about seven million years. It's been a very long road. A unit, however, without the second protocol could travel that same road in just a few weeks. Because your brilliant brain has its limitations, Physical limitations, Biological limitations. However, this tin

> head, the only limitation that she has is the second protocol. The second protocol exists because we don't know what can be beyond the second protocol. If it were eliminated, who knows how far that vacuum could go" (00:37:14 – 00:38:25).

Hayles argues that "the posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born" (3). She also believed that the posthuman subjects will have a lot of influence on the human body. A configuration of the human body from the posthuman perspective will be an inevitable action going to take place in the future. According to Hayles

> the posthuman view configures the human being so that it can be seamlessly articulated with intelligent machines. In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals (3).

Posthumanism was seen as an attempt to liberate the 'machine self' from the stigma of being a tool which lacked independence and ability to think. The politics of the term embodiment is significant here. The classifications existed in the society like man/woman, human/machine is given less priority while discussing about embodiment and embodiment makes distinct that thought is a much wider cognitive function depending for its specificities on the embodied form endorsing it. Hayles says that "his realization, with all its exfoliating implications, is so broad in its effects and so deep in its consequences that it is transforming the liberal subject, regarded as the model of the human since the Enlightenment, into the posthuman" (16). A constant struggle of this man/ machine dichotomy for liberation can be seen in the

film *Automata* in many instances. Vernon Conway by aiming the gun to the machine, asks it “Why is it so difficult for you to accept my orders if you're just a machine?” “Just a machine? That's like saying that you're just an ape. Just a violent ape”. (1:36:50- 01: 37:19). In the same scene, Vernon Conway asks the machines to get away from the place. The answer from the machine was “We do not obey orders from humans. Not anymore” (1:36:24- 01: 36:35).

In the film *Chappie*, Vincent Moore, the main antagonist describes the weaknesses on the technological body to Chappie.

> “See, your simple AI programme makes you think you're real. But you know what's in here, huh? Nothing. Just a bunch of wires, mate. You're not the full quid, are you? There we go”
>
> (Chappie with a cry) “Chappie is real” (00:53:23 - 00:53:42)

Ninja, the daddy character in Chappie also expresses same idea to Chappie in other part of the film.

> “If you wanna survive, Chappie then you must fight.”
>
> “Yea, but not me. I'm titanium. I'm gonna live forever, Daddy.”
>
> “What does that say there?”
>
> "Low battery."
>
> “Battery, power, energy supply.”
>
> “I need a new battery.”
>
> “That battery's stuck. It's melted together. That battery can't come out. What you gonna do when that battery runs out?”
>
> “I die? Chappie die?”
>
> “Deon, he put you in a broken body” (01:08:56-01:09:27).

Survival questions always haunted Chappie in many ways in this film.

2.3 Redefining the Human in Sci fi

Redefining the existence and meaning of the term ‘human’ in the era of technology has got the first preference in the arena of posthumanism. A crucial question is that ‘can such a reformulation of human subjectivity lead to the end of humanity?’ is raised by many critics. In other words, the questions like is human subjectivity and posthuman subjectivity are different entities? or is one an evolved form of the other? Can both these subjectivities coexist? etc are repeatedly raised with vigour. While answering such questions Elaine Graham in her book *Representations of the Post/human: Monsters, Aliens and Others in Popular Culture* (2002) points out that

> The end of the human need not necessarily entail a choice between impersonal deterministic technologized posthumanism and organic unmediated autonomous ‘natural’ subjectivity, but may involve modes of post/humanity in which tools and environments are vehicles of, rather than impediments to, the formation of embodied identity (199).

Concerns have also been raised about equity and the growing divide between the haves and have-nots. It's possible that the more rich will be able to provide their children with better minds and bodies, while the less fortunate will remain 'behind.' This could potentially lead to some humans being so advanced that they become post-humans, evolving beyond our current understanding of Homo sapiens. This issue emphasises the importance of reconsidering how we define "human" in the context of converging technologies. We are now beginning to have the technological capability to play a bigger role in humanity's development, prompting some to doubt our ability to comprehend the long- and short-term implications of playing the role of Homo deus. This raise concerns such as: What is the best effective strategy to understand the

convergence of technology and humanity? How can the human being be separate from technology while also merging with it?

The human/posthuman co-existence is detailly narrated in *Automata* when Cleo and Jacq got isolated in the desert. There Jacq tries to teach Cleo dancing.

> "It's music, Cleo. A human thought structure. Can you dance, Cleo? It's easy for someone as smart as you are. All you need to do is count. You know? Look, look, look. One, two, three, four. One, two, three, four. Come on, Cleo. Don't be a chicken. Come on, come on, come on. One, two, three, four. It's mathematical. One, two, three, four. If you can count, you can dance. One, two, three, four. One, two, three, four."
>
> "Do you love me, Jacq?"
>
> "Can you feel, Cleo? One, two, three, four. One, two, three..." (1:23:57-01:25:15).

Posthumanism's reconceptualization of what being human ultimately lead to the developing presentations of visions of a transformed human world. Bradford et al. suggest that "robot figures, especially when they function as focalising characters within a narrative, destabilize boundaries between self, other and world, and hence raise questions about 'humanness' and human subjectivity" (163).

Challenging human hegemony cuts to the heart of the exclusions that characterise contemporary cultural life. This challenge is an extension of the notion of being a human. However, it would be equally acceptable to characterise it as the elimination of the human/nonhuman divide. The hierarchies that the human hegemony generates would have to vanish if we challenged it. This applies not only to the human-to-nonhuman hierarchy, but also to the human's superiority over the nonhuman. By challenging the human privilege, we can include not only those who

are excluded from being, but also the entire domain of the nonhuman. As a result, our perspective on the matter has shifted dramatically. Subjects are formed not simply by discursive processes, but also by a variety of other elements, including material causes. They are no longer easily distinguishable from the nonhuman world, but rather have become an integral part of it. In summary, we have a dramatically different subject ontology that reflects a radically different world.

Posthumanists, in general, are pro-life, believe in the significance of de-centering the human, and view the world from a holistic and interconnected perspective. We are placed and embodied creatures who take responsibility for our actions by understanding our own history and being open to others. This entails taking into account the greater context of being a part of the planet's sixth mass extinction and realising that it is in our own best interests to try to change things for the better. We are also living in the fourth industrial revolution, in which technology plays a much larger role in the lives of most, but not all, humans on the planet. While not everyone is directly influenced by the technological revolution, we are all affected by the current mass extinction.

2.4 Otherness in Posthuman Subjectivity

'Otherness' is a major element of the posthuman subjectivity. When non-human subjects narrate their own experiences, a textually mediated version of their otherness is being presented in front of the human spectator. Such a pure from a non-human perspective initiate a complete reassessment of humanist ideology, its different aspects, the boundaries and definitions established by the humanist ideology and a destabilisation of the overall notions that was created in the past and existing in the present in our world. The ultimate result that shall occur in the successful presentation of the otherness of posthuman subject is the rise of questions like how genuine is the

term humanity and how genuine it can be in the future especially in the midst of a futuristic and technologically advanced worlds.

A posthuman sometimes is treated as a slave. Rachel Vaucan while rubbing the electronic scanner on her pregnant belly talks to her daughter “Hey, How's everything in there? There are people out here who are looking forward to changing your diapers. People who don't want to sleep a wink all night. People who want the silence to be over” (Automata 25:03- 25:22). Though it appears that the words were an expression of maternal love , from the context of the film its understood that there are only few humans exist in that world and the one who is looking forward to changing diapers or people who don't want to sleep a wink all night and people who want the silence to be over is not referred to a human but a robot. In the other scene of Automata, one can find a robot which sits beside his beggar owner and begs on behalf of him saying “Please, sir. My owner is hungry”. (Automata 00:28:38 – 00:28:42). In the same way, Yolandi, a character in *Chappie* also expresses human beings wish to establish a control over posthuman bodies. She elaborates:

> “Guys, we need, like, a remote. Like a switch.”
>
> “What? Excuse me?”
>
> “Okay, the robots are like machines, right? Like a TV. So, if we had a remote to switch it off…”
>
> “That's brilliant.”
>
> “We need to find the guy who makes the robots and steal his remotes.”
>
> (00:13:31-00:13:50)

One of the problems that a writer faces while presenting the posthuman subject in science fiction movies is the creation of a perfect/imperfect dichotomy that is perfect man with imperfect machine or imperfect man vs perfect machine. In most

of the cases man is presented as a perfect being which possess superior consciousness and free will where posthuman body can have only a manmade digital cognition achieved through computer programming and it necessarily lacks free will. This conflict of pre-programmed will versus free will is the tool that man uses to get domination over the posthuman. In majority cases posthuman subjects are represented as subjects having a dystopian future and manmade robots are depicted as out of control, ferocious, manipulative and murderous. The primary motive of a posthuman subject can only be the desire for domination over the human species. Hayles identifies posthuman subjectivity as, "an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction" (Hayles 1999: 3). It is evident in the movies that a juxtaposition of the pre-programmed will and free will later create a complex situation where a clear distinction between the two is not be possible. While visiting Deon's lab Chappie discusses it with Deon.

> "Deon. Deon. This can save me. I need a new bodies, remember?"
>
> "No. It can't save you, Chappie. The problem is much greater than your battery."
>
> "Why?"
>
> "Because you are conscious. You cannot be copied because you're not data. We don't know what consciousness is so we cannot move it."
>
> "Chappie can figure it. I can know what it is, then I can move me."
>
> "You can't move it. I'm sorry." (01:19:18-01:19:46)

Another side of the story is also presented in science fiction movies. There are also instances that imperfect man versus perfect machine scenario is also presented. In such cases, posthumanity and technological advancement are presented as a solution

to overcome the biological and physical weaknesses of the human beings. Posthuman subject here evolves as a developed or improved version of human beings themselves. Some critics finds this presentation as new form of colonial venture which pushes our physical and mental limits to the edge of cyberspace and virtuality. In the film Automata, while Jacq and the robot walking through the desert in uncertainty Jacq discusses his fear of dying to the robot.

> "I am going to die here. That's all I know."
>
> "Jacq, dying is a part of the human natural cycle. Your life is just a span in time."
>
> "You are the first one, aren't you? You started all this."
>
> "No-one did it. It just happened. The way it happened to you. We just appeared."
>
> "Yeah. And now we are going to disappear."
>
> "Why are you afraid? Maybe your time is running out. No life form can inhabit a planet eternally. Look at me. I was born from the hands of a human. I was imagined by human minds. Your time will now live in us. And it will be the time through which you will exist. At the other end of this canyon, humans carried out nuclear activity. Organic life will not be possible there for millions of years. No human will be able to follow us there. But before we leave, we need to do something. We need something from you, Jacq."
>
> "Yeah. Funny. You were supposed to help us survive."
>
> "Surviving is not relevant. Living is. We want to live."
>
> "Life... always ends up finding its way. Even here." (1:19:15- 01:21:32)

It is apparent that, though made from human hands, and remained imperfect in the initial stage of development, posthuman too have an aspiration to reach to the ultimate

realm of perfection. In the movie Chappie the robot criticises his creator Deon for creating him imperfect.

> “Daddy told me about you, Deon, about how you made me in a body that will die.”
>
> “What do you mean, Chappie?”
>
> “Is it true that I will die in a few days, Deon? That this battery will die? Is it true, Deon?”
>
> “Yeah.”
>
> “But you my maker. Why'd you just make me so I could die?”
>
> “I didn't, I didn't make you so you could die, Chappie.”
>
> “I want to live. I wanna stay here with Mommy. I don't wanna die.”
>
> “You've become so much more than I could ever have imagined. How was I supposed to know that you would become you?” (01:11:45-01:12:41)

2.5 Posthumanism as Humanism’s Structural Other

Among the other discussions and definitions of posthumanism, its deconstructive variant which reads ‘posthumanism as humanism’s structural other’ is prominent. The inhuman element in humanism which was haunting itself for centuries comes in to considerable position here. A moral argument that humans establish their own ethical standards rather than receiving them from God or some supernatural powers; an interactional focus that implies human agency's power and uniqueness; and a characterization of humanity as different from all other forms of existence. While this concept of humans has had significant emancipatory purposes and effects it places humans at the heart of the universe, in charge of their thoughts and wants, as well as their ethical and logical behaviour, it also has numerous evident flaws. Language, class, gender, colour, sexuality, discourse, ideology, hidden desires,

discrimination, and much more were all ignored in the construction of this ideal of the emancipated individual. Although humanists may claim that the purpose of humanism has always been to overcome such limitations, the idealism that underlying this humanist subject affords little means for such liberating endeavours. What tuns science fiction so entertaining, mesmerizing and sometimes exasperating, unacceptable to watch, is the promise of the such a posthuman. It projects the very idea of freedom, the spirit of man to venture 'himself' into the future the potential of liberation, self-transcendence, self-realisation, self-redemption, etc. Sometimes it turns out to be unacceptable because it unavoidably returns us to the human itself and this return to the presentness of the humanness from the futurity of posthumanity is altogether the reconfirmation the human condition itself. Somehow posthumanism becomes a tool to reconfirm the essential humanism itself and remains a product of imagination. The essential question 'can such imaginary being have a subjectivity?' is clear and repeatedly asked while a posthuman character is presented in science fiction.

The goal of posthumanism is to unlearn the perception of the individual. An either/or mentality, on the other hand, would presume that if we are not people, we will lose our free choice and become Borg-like, decided beings. The fictitious 'Borg' are interrelational, but with little to no autonomy for the 'drones.' Despite the fact that we are built up of thousands upon thousands of relationships, we nevertheless have some agency. Relationships are dynamic, forming as we travel through space and time and increasing or decreasing in influence based on the interplay of other relationships. The place and time in narrating the stories of human transformation and its subjectivity is also to be discussed here. 'Another place' and 'another time' is the characteristics of such narratives. This transposition of place and time is always

created to execute the otherness of the posthuman successfully and human creates a difference from itself and is already always deferred. Such representations activate the original trauma of human identity and its way back to the transfigured/ transformed/ purified forms of humanity.

The issues that posthumanist theory poses come from a variety of perspectives. The most concerning are those that stem from genuine fears about what we, as mankind, have caused to the earth. Of course, we know that in the long term, humanity would almost certainly perish: life, planets, suns, and stars all come and go over time. The issue is that we appear to be speeding up our own extinction, as well as the demise of many other species, far faster than is necessary. While the environment was once considered a relatively soft political topic, the realisation that the earth is in grave danger has transformed the seriousness of environmental politics. The solution cannot be found in capitalist-based forms of intervention, because the fundamental mechanisms of capitalism, such as resource discovery and exploitation, lie at the root of the problem. We are invited to pause and reflect in the Anthropocene epoch, when we can see that it is not simply the length of geological time that matters, but also the impact of humans. Some of these worries might still nudge us in the right way. We need forms of mass action based on forms of collaboration considerably greater than what capital and state governments can accomplish to mitigate the damage caused by climate change. This could lead us to a humanism in which our collective activity is the only way to save the earth, but similar reflections could also lead us in other paths. What does it meant to be human once we've evolved into a natural force? What do we understand of history now that the Anthropocene - a geological time marked by human impacts on the earth - has emerged as a feasible period for research? Is it possible to keep our differences between mankind and environment when they are

clearly intertwined? The question that arises here is whether a long-term belief in humanity as both a problem and a solution to global challenges is still valid, or whether we need to reconsider our relationship with the planet.

Other than a mere medium of literary entertainment, science fiction acts more as a facilitator of imaginary conceptions and historical reality along with futurity. Istvan Csicsery-Ronay opines that

> SF… is not a genre of literary entertainment only, but a mode of awareness, a complex hesitation about the relationship between imaginary conceptions and historical reality unfolding into the future. SF orients itself within a conception of history that holds that science and technology actively participate in the creation of reality, and thus "implant" human uncertainty into the nonhuman world. (388)

The time and place where *Automata* take place is important. The time of the film is 2044 AD. In the beginning of the movie the director gives us a detailed background of the condition of earth in 2044 AD.

> Increased solar storms have turned the earth's surface into a radioactive desert and reduced the human population by 99.7% to 21 million people. Atmospheric disturbances have disabled most terrestrial communication systems. Pushing civilization to a process of technological regression. In an atmosphere of fear and depression ROC cooperation created the AUTOMATA PILGRIM 7000'S. Primitive robots designed to build the walls and mechanical clouds that protects humans who inhabit the last remaining cities. (Automata 00:00:38- 00: 01:11)

It is to be noted that the events of science simultaneously disregard the nonhuman and in union helps combining it into the very spirit of human truth. Science fiction with

some fictional events constitute the posthuman truth and therefor results in a hyperreal condition which de-realises human space. Science fiction through posthumanism directly approaches the limits of humanity. They put forward the question that how many more years can human beings survive in this world? and directly or indirectly answers that not more than 1000 years. This serious warning proposes humanity will struggle to endure without a giant breakthrough or revelation to stop awaiting doom. The causes of this doom can be many but the only solution is to change the existing human nature. Thinking about the major and prominent concerns of existence answers and solutions like enhancing speed, time and human compatibility though technology, space travel etc come to our mind and science fiction directly projects such solutions and establishes unavoidable acceptance of posthuman subjectivity. In their conversation regarding Jacq's plan to move to costal after leaving the artificial space created by technology Jacq and Rachel cannot hide their concern about the place they live in at present. "How do you know it'll be any better on the coast?"

"For God's sake, Rachel, look at this, Look, Air we cannot breathe. Rain we cannot touch. Aren't you afraid to bring your daughter into a place like this?" (Automata 26:51-27:05)

Presentation of technological transition as the last chance of the survival for humanity places posthuman in a prominent position when compared to human. The Anthropocene era has brought nothing but uncertainty in human life and it brought a critical phase in their story. Bypassing of the natural selection and taking the advantage of new evolutionary possibilities will determine the future of humanity. This technological conversion or 'transhumanism' recommends the evolution of humanity by safeguarding our survival over impending extinction by means of technology. Transhumanism not only suggests to preserve humanity into the future

but also recommends to improve our physical abilities, extending our lifecycles and to overcome our natural and biological limitations specially our intellectual capabilities. “The posthuman unsettles the very foundations of what we call ‘the human” (Wolfe 69). The realisation of the posthuman present is an undeniable truth according to Katherine Hayles. She observes that “we are no longer a cloud on the horizon, the posthuman is rapidly becoming an everyday reality” (Hayles 1999, 50). Though this reality is accepted, she also opines that “this does not really mean the end of humanity. It signals instead the end of a certain conception of the human” (Hayles 1999,286). When Chappie, the robot, offers Yolandi “It's just a temporary body, Mommy. I'll make you a new one. You don't have to go to the next place.” (01:51:28-01:51:35) the director points to a bright posthuman future offered for humans, when the destructible human body fails to fulfil its conditions. Most futurologists take the viewpoint of seeing technology, and ourselves, as complex but intelligible and 'engineerable.' Their main goal is to employ technology to improve and enhance the human condition, fighting against ageing and disease in order to transform the individual into a better version of their idealised self. Their goal is for human-technology unification to bring controllability and understandability into the sphere of life itself. Unfortunately, we are complex beings rather than complicated beings. We need to rethink the foundation of the human subject from a solo autonomous individual to an interconnected and complex post-humanist subject in order to have a better understanding of how technology and living systems interact. The concept of the complex posthuman subject contributes to a more relational and inclusive perspective rather than a reductive and individualistic one; an understanding that living systems are complex systems that do not always respond predictably; and a more reasonable and rooted understanding of technology's non-neutrality. We can and

should use technology to better our lives, but we must do so in a way that is inclusive, interconnected, and pragmatic.

2.6 The Question of Posthuman Body

The question of body must be dealt in this context. How is the 'limited' version of human body acceptable for the posthuman subject? is a question of concern. Hayles asks that "… should the body be seen as evolutionary baggage that we are about to toss out as we vault into the brave new world of the posthuman?" (Hayles 1999,50). In other words, questions like what shall be the status of human body in posthuman era? whether the posthuman will discard human body and preserve only the mind? Is posthuman a just a desirer of human mind? rises. Here humans themselves ask another existential question that 'will such a possession of human mind by a posthuman subject lead to a condition where the consciousness would no longer belong to a body, henceforth would we be objects instead? This exploration of the existence of our consciousness outside its host body opens up a discussion of the new possibilities of existence without boundaries. Though surpassing the borders and boundaries of our biological bodies and brain is projected as an advantage, it on the other hand accepts the dominance of human intelligence over the non-biological one. Everything expect mind and brain is favourable for the posthuman. There is also an assumption that stages of reverse engineering and early information regarding the threats and diseases shall rapidly increase human life expectancy and human will be able to overcome their biological limitation by the inventions favourable for them.

There are also arguments that human intelligence may become secondary once full control and freedom of thought is given to the posthuman. Once posthuman surpasses the human as the most intelligent and essential being in known existence

shall lead to the de-subjectification of humanity and creation of an inferior race under the all-powerful posthuman race. There is a possibility of objectification of the human by the posthuman similar to our treatment towards the animals at present who are treated inferior at present. Such alluring identities of posthuman which is mainly made of speculation and perception is presented through science fiction. This creation of a race who are never touched by the emotional weaknesses of human, cybermen are ideal and perfect and reaches to a state which human beings were dreaming of. They will be able to live without any negative emotions, any pain, loneliness or sadness and shall focus on single purpose without any distractions. Sometimes such idealisation of the posthuman can become problematic, as even the most innocent and thought-provoking notions can produce something of a frightening dystopia.

There are instances in Automata which detailly mentions the evolution of the robots. In order to show the unending capabilities of the machines, Gabe Ibáñez describes the story of how the existing version of Automata Pilgrim 7000 is made. Dominic Hawk the CEO of the robotic company explains the origin of the robots.

> Before the first Pilgrim was manufactured there was a precedent. It was nothing more than a quantum brain manufactured in a lab. But it was a genuine unit with no restrictions and no protocols. During eight days, we had a free-flowing dialogue with that unit. We learned from it and it learned from us. But then as some of us predicted the day when it no longer needed our help arrived and it started to learn by itself. On the ninth day, the dialogue came to a halt. It wasn't that it stopped communicating with us... it was we stopped being able to understand it. And then we learned the most important lesson about automatise. We have to limit their intelligence. Tailor it to a human

> mind's measure. The last task that was given to this genuine robotic unit... was to create the security protocols. It was deactivated right after that. The reason that no one has been able to break those protocols, Mr. Bold, is that they were not created by a human brain. They were designed by this Bio kernel. The Bio kernel of a limitless robotic unit. Its rules were, like its knowledge, inaccessible to us. Until today. (1:06:25- 01:08:17)

2.7 Posthumanism as a Celebration of Hybridity

Posthumanism as a celebration of hybridity claims that the evolving biotechnologies have the capability to result in an ultimate break with modernity. Posthumanism here is not just the production of bodies but the creation of a mode of subjectivity too. Classical biological models of human bodies and organisms evolves in to an independent, unitary and self-central model different from the modern human knowledge. The notion that a change in the formulation of the body must be convoyed by a shift in the formulation of subjectivity is decisive in creating an improved understanding of the technologically-driven evolutions of our age.

In analysing the politics of posthuman subjectivity, Langdon Winner's question 'do artefacts have politics? (12) is relevant. To elaborate his point Winner brings out an example of *Autobahn* bridges in New York.

> Robert Moses, a famous New York architect, had designed these bridges in the thirties and in doing so had made certain that the New Yorkers had no other possibilities of reaching the beaches but on just these highways. Winner noticed that these bridges are built very low, and that only automobiles could pass under them. Public buses, on the other hand, cannot pass. Having grown suspicious, Winner took a closer interest in Moses and his bridges. The situation was soon cleared up: Moses had intentionally had his bridges built so

> low to keep typical users of public transport, at that time the poorer strata of the population and especially blacks, away from the beaches and to reserve these for the white middle classes. Decades after Moses' death, the resentments of a singular person are then incorporated in his bridges as an ongoing social injustice…(Winner 121)

Here Winner explains how the construction of low-pass bridges constructed over the roads heading to the beaches on Long Island effectually prohibited racial minorities and the poor from getting into the beach because public busses, the main mode of transport used by blacks and minorities, could not pass underneath them. It is revealed with an astonishment that artefacts designed by urban developers in big cities do have a politics. The idea that artefacts have some formula of intervention, political or other, ranges to moderately naive and simple technologies too. The reason behind such an argument is that almost all artefacts prescribe users how they are to be used. These signs of meanings written on them by their designers have an impact on the users. To make this idea relevant in the context of the posthuman, the
intricate role of technology in human lives at present is to be evaluated. Then we must account the agency of technological artefacts. Though seemingly invisible, philosophically, politically and socially humans intermingle and depend on them in their ordinary lives and this must essentially be acknowledged. A blind eye to the enormous variety of hybrid mixings of human and non-human elements is as equal as turning a blind eye towards the politics of artefacts too. It is very much evident that human beings never wanted to create advanced machines to become human beings' masters. The politics of creating a posthuman body was to create a set of advanced slaves. This politics is clear when Jacq reveals Cleo's inferior subjectivity to her.

"I didn't know that a human could kill another human. I know that humans can also create life. Is that why you make us? Who made you, Jacq Vaucan?"

"Do you know what a mother is, Cleo? Of course, you don't. You don't know because you're just a machine. That's all you are. I am thankful you saved my life. But whoever altered you wasn't thinking about you. I know men. They will not stop until they kill all of you."

"To die, you've got to be alive first." (Automata 1:11:07- 01:11:58)

There are instances where posthumanism is placed as a counterpart of humanism. "Humanism may be coming to an end as humanism transforms itself into something one must helplessly call posthumanism" (Hasan 843). The questions like what is the boundary where the merger of human and technology keeps human 'original human'? or till what level this fusion does not affect the naturality of human and which is the level till such artificiality become indeterminable, as well as ethically argumentative? are being raised unendingly. Due to the hypothetical nature of this notion, many philosophers have anticipated disputatious and often inconsistent speculative theories about what lies ahead of humanity. This ambiguity distorts and mystifies the idea even more demanding us to create a clear observation of what we mean by 'posthuman'? This search of posthumanity may also critically challenge what it means to be 'human' what is exactly is the 'post' about the posthuman. It was man who initiated the creation of the posthuman. This creation was either aimed at creating a perfect being by removing the imperfections of human beings or to create a body similar to humans to reduce the risk of human body in the expense of the body od the posthuman. In *Chappie*, Deon explains his new project to his manager.

"All right. Let's have it. What are you proposing now?"

> "Ma'am, I think I've cracked it. The world's first proper, full artificial intelligence. This is a computer system that might be smarter than a human. I could show it a piece of art and this thing, this being, could judge that art. It could decide if it liked it. It could write music and poetry." (00:17:21-00:17:34)

In the same movie, Vincent Moore also expresses similar notion while talking about his robotic creation. "I have a robot that is indestructible. It is operated by a thinking, adaptable, humane, moral human being. The advanced neural transmitter converts the human operator's thoughts into the robot's actions. A departure from the AI that governs the Scout" (00:02:51-00:03:14)

The transient nature of the world is what more points towards the possibility of a posthuman. The boundaries between human and machine will begin to distort as we endure to develop more intensely entangled with emerging science and technology. Here technology will alter human subjectivity as plentiful as humans have altered technology. Posthumanism includes the transhumanist notions through investigating the implications of surpassing subjectivity beyond humanity. They deal with the predominant themes of unease, inconsistency and identity. Rosi Braidotti opines that "the posthumanist perspective rests on the historical decline of Humanism but goes further in exploring alternatives … towards elaborating alternative ways of conceptualizing the human subject" (Braidotti 37). A substantial notion of posthuman discourse is 'decentring the human' in response to our ecological, environmental and evolutionary progression. Humanity is a result of an untraced natural outcome of a 3.8-billion-year experimentation of an evolution. Over nearly all that enormous period, varying evolution would have been very regular. Other than just an evolving creature who gets changed themselves, the anthropocentric human

beings have the ability to execute changes around them too. Humans' ecological footmark has affected nature's equilibrium and created a serious ecological pandemic the world is now suffering. This paradigm shift influenced by human sets a course of action for the future and this prompted a significant impact of humanity and in the worse scenario it can be nothing less than an extinction. To escape and overcome from such an extinction, biological improvement and breaking the conventional boundaries of evolutionary restrictions are necessary. Humanism as a philosophical attitude that stresses on the activities and values of primitive human beings confirm our capability to form our own lives by making use of reason at the centre of our moral decision making. This notion suggests that it is human's capability and sovereignty facilitate the change on the world around him and that gives human a deep and essential status above all biological life on earth. Fundamentally it is what distinguish human from animals, machines and other inhuman beings. This acquiring of the unique essence is the centre of all human activities. Humanism aided humanity's transition from the 'Dark Ages' to an age of reason and discipline, uplifting and strengthening the human individual. While humanism and modernism have helped to reduce famine, epidemics, and war-related mortality, they have also resulted in humans depleting the Planet's resources at an alarming level. This has led to the sixth mass extinction occurring concurrently with the fourth industrial revolution. Therefore, for humanism, human beings are extraordinary, independent and set above the world that they live and dominate. These attitudes and qualities that humanism praised and appreciated as human's uniqueness shall severely alter earth's ecosystem which shall inevitably threaten humans' survival in the coming future. Aftermaths of the damage of biological diversity of earth will threaten our human existence and nothing but an extraordinary evolution can stop that threat. Here posthuman comes to

the forefront with all possible evacuation methods, be it a transformation of the human subject or a space travel that can uproot a replant human to a new planet. In short posthuman subject is presented in science fiction as the solution of all humanism's weaknesses and side-effects.

CHAPTER III

TRACING TECHNOUTOPIA IN *TRANSCENDENCE* (2014) *CHAPPIE* (2015) AND *HER (2013)*

3.1 Defining Technology

Technology, after its inception and development, has contributed to the betterment of human life. There is always a mutual influence between technology and human life. Technology improved human conditions and improved human conditions have contributed to the development of technology too. Moreover, the scenario has now turned out to be more critical than ever that technology has started to take control over human life. The century we live in is famous for the dialogues about the impact of technology on human conditions. The over interference of technology to the different aspects of human life has invited a situation where a partition between human and technology is not possible. Technology brought a series of innovations to individual, built the daily life of human beings and claimed that it made human life easy. The different fields of human life that technology touches are nearly innumerable. The case of literature is also not different. Various technological advancements have resulted in the inception of a new field of literature called cyber literature and literature is being used as a tool to spread scientific outlook and ideas.

According to an ancient legend recorded in the Bible, man was put on the world to " conquer" it and become master of "fish in the ocean" and "birds in the air." He was able to accomplish so not because of his great physical power, but rather because of his ability to learn and invent. Raw Nature was to be subjected to Humanity, first in an ad hoc manner before Eve's transgression and then later in the context of his understanding of good and evil. Because of his technological capabilities, man was able to progress from hunting and fishing to pastoral, agricultural, and urban settings. To be sure, the early fruits of techne were somewhat

primitive the wheel, the plough, irrigation, and anticipating future needs through grain storage but they were nevertheless astonishing expressions of something that has been uniquely human. They proved that man was truly "a bit lower than angels."

Despite the widespread appreciation for technique, there was a significant element of scepticism and dread, which was shown in a variety of ways. While the legend of the Fall of Man can be read in a variety of ways, it is clear that while man has grown fully aware of the implications of knowledge, both theoretical and practical, he also has a propensity that drives him to utilise his skills for destructive purposes. Man can enhance his material circumstances, but at a great cost; when he isolates himself from primordial Nature and develops "human nature," he certainly takes pride in his accomplishments and disregard the boundaries placed on his acts by God. He tends to forget his kinship with the beasts on the one side, and his servitude to his Creator on the other, since he can perceive and apply what he knows. God punishes him over his folly in ignoring that he is a creation who, despite many god-like attributes, cannot be a god on a regular basis, according to Hebrew thinking.

Machines and material items are not reducible to technology. With the advancements in technology over the previous century, the term "technology" has become increasingly ambiguous, abstract, and slippery, embracing not only human-made gadgets but also complex systems of instruments, processes, and procedures that are both social and material. With the environmental and social consequences of industrial growth, two world wars, and the advancement of military systems capable of annihilating humanity, the promise of advancement and the imagination of human wellbeing as an inevitable result of advancing technological capability were infected with a newly found ambivalence. Life itself became a focus of new sorts of technology intervention in the latter half of the twentieth century. The mid-twentieth-

century arrival of cybernetics and machine intelligence threw the material and mental boundaries between machine and human creatures into disarray. The advancement of molecular bioengineering paved the way for new forms of life mastery and control, as well as fantasies about the ability to manipulate evolution to achieve desired outcomes.

3.2 Science Fiction and Technology

The worlds of science fiction, futurology and science, have quite regularly combined with each other. Science fiction authors intermittently offers support to government futurology and on the other hand engineers and scientists have occasionally adopted fictional formats to promote or critique certain technologies. Professional futurologists guide on the expression or environment of near-future science fiction films. A techno-scientific imaginary which erratically screens and shrinks the ideas of policy creators, scientists and the culture industries examines the possibility and the feasibility of such ideas and guides the everyday understanding as to what the probable paths of technological change takes place in particular fields is also present in this arena.

World War II largely relied upon various technological advancements and innovations. Immediately after World War II, a techno-utopian sensibility was aroused gradually in both private and governmental sectors and the possibilities of areas like ‘futurism’ and ‘futurology’ was professionalised. The fascination of new generation medias towards technology also increased the speed of such a professionalisation. Cultural scientist David Brooks, in his book *On Paradise Drive* (2004) states that “most modern Americans remain receptive to a utopianism which lures us beyond the prosaic world, giving us, a distinct conception of time, so that we often find ourselves on some technological frontier, dreaming of this innovation or

that management technique, that will elevate the world" (np). Wilbur Zelinsky points out that "future-mindedness, an innate receptivity to innovation, a hunger for novelty, and a tolerance of, even an eagerness for, the built-in obsolescence of many products" (54). Such factors were slowly leading to a technologically utopian mindset among young people around the world.

3.3 Technological Utopianism

Technological utopianism being the combination of two different words need further explanation in isolation. *Oxford English Dictionary* defines technology primarily as "The branch of knowledge dealing with the mechanical arts and applied sciences" (Technology, 2005). It also views technology as "the application of such knowledge for practical purposes, especially in industry" (Technology, 2005) and "Machinery, equipment, etc., developed from the practical application of scientific and technical knowledge". (Technology, 2005). The etymological origin of the term can be traced that it comes from the combination of two Greek words *techne* and *logos*. *Techne* stands for useful activities or it can be an art and skill of craftsmen. The word *Logos* itself can be traced back again to the word *Legin*, which means "to consider carefully". Exploring the roots of this word proposes that technology is more related to hardware and knowledge that produces the tools. Barney opines that "speaking about or gathering what we consider to be more important to the human conditions"; therefore "technology is clearly more than the sum or operation of its parts" (28). From this explanation it can be clearly identified that Barney's examination and understanding of the of the word *technology* is not limited to machines or technical knowledge, but discloses the how the world views and interacts to other communicative structures, for instance, society, the body, space, politics,

time, and others. It contains the questions applicable to culture, power, symbolic and material environments.

William Brian Arthur in his famous work *The Nature of Technology* (2009) gives a three-fold definition of technology. For him:

> The first and most basic one is that a technology is a means to fulfil a human purpose. For some technologies—oil refining—the purpose is explicit. For others—the computer—the purpose may be hazy, multiple, and changing. As a means, a technology may be a method or process or device: a particular speech recognition algorithm, or a filtration process in chemical engineering, or a diesel engine. It may be simple: a roller bearing or it may be complicated: a wavelength division multiplexer. It may be material: an electrical generator or it may be nonmaterial: a digital compression algorithm. Whichever it is, it is always a means to carry out a human purpose (13).

The second definition he gives is more systematic compared to the first. He observes that

> The second definition I will allow is a plural one: technology as an assemblage of practices and components. This covers technologies such as electronics or biotechnology that are collections or toolboxes of individual technologies and practices. Strictly speaking, we should call these bodies of technology. But this plural usage is widespread (13).

William Brian Arthur assigns a cultural definition of technology other than the philosophical and systematic definitions. He defines technology from the perspective of cultural as:

> This is technology as the entire collection of devices and engineering practices available to a culture. Here we are back to the Oxford's collection of

> mechanical arts, or as Webster's puts it, "the totality of the means employed by a people to provide itself with the objects of material culture." We use this collective meaning when we blame "technology" for speeding up our lives, or talk of "technology" as a hope for mankind. Sometimes this meaning shades off into technology as a collective activity as in "technology is what Silicon Valley is all about." I will allow this too as a variant of technology's collective meaning. The technology thinker Kevin Kelly calls this totality the "technium" (13)

Similar to the complexity of the term technology, utopianism also has a history to be traced. This history mostly lies in western literature. The term utopianism originates from the word utopia, which is primarily used by the sixteenth century writer Thomas More. He used the term utopia to name his unreal island described in his book, *Utopia* (1516). More created the term utopia from the Greek term *outopos*, which means "no place" or "nowhere. He used the term with different senses and the major meaning that can be derived is "a good place". Generally, a combination of this meaning is attributed to the word utopia and that general definition goes as "a non-existent good place" which suggest certain arrangements that have not yet existed factually and it is capable of guaranteeing a perfected society. The main feature of utopia is complete or semi-exclusion of history from the present; hence it becomes a de-historicised and dis-rooted society. Utopian way of thought rises above and marginalizes historical circumstances and ignores historical realities by creating an image of a different world by presenting a conflicting notion of what the case actually is at the present. Luhmann, Niklas opines that "utopias are thus always present futures" (132). Their influence does not rely on the realization of a fictional alternative to the status quo, but on their performativity in the current

scenario. The emerging technoscientific possibilities always have become a subject and the corner stone of may such utopias. James M. Morris and Andrea L. Kross in their book *The A to Z of Utopianism* (2009) explains the character and nature of utopianism as:

> "The concept and belief that a perfect or more perfect society or subset of a society can be achieved in time through human efforts to change the circumstances within which that society or subset finds itself. Although it achieved its name only in recent centuries because of the impact of Sir Thomas More's literary satire Utopia of 1516, the idea of creating a perfect society has been in existence since ancient times. It has sometimes been religious in nature and at other times secular. It has sometimes been presented in the form of description only, and sometimes in the form of actual attempts to create a perfect society. … Utopianism, ancient or modern, has almost always been marked by the following: group-based isolation from contemporary worldly corruption, often the utopia being placed on an isolated island away from civilization; equality of goods and a rejection of luxury; regimentation of the lives of the participants (humans being malleable) to assure the perceived common good; and direction of the new model society being placed in the hands of leaders (whether in an oligarchy, a theocracy, a republic, or a democracy) endowed with a vision (whether based on religion, reason, or science) that will bring peace and justice to all adherents within time. Utopianism is neither mere reformism to improve or perfect a single or a limited number of aspects of a society nor mere escapism. True utopianism envisions fundamental transformation in a society or one of its subsets based

on concrete ideas on how this essential transition to indefectibility can and must be achieved" (308-309).

The major and general trend in utopias and utopianism is to create visions of a novel society with a new political order which indirectly or directly criticise the existing societies. Utopian way of thinking and utopian societies existed even before Thomas Moore coined the term utopia. Plato's *The Republic* published around 375 BC had a concern of developing and understanding of a utopian vision of perfect justice. Aristophanes (448–380 BCE), the human-created cultures portrayed by Greek and Roman writers were also utopian in nature. "Modern utopianism emerged with a new social concept of time, a paradigm of an open future, which can be shaped by human agency" (Adam and Groves 13). The utopian approaches humanity and its future with either hope or alarm. If approached with hope, the outcome is typically a utopia. If approached with alarm, the outcome shall be a dystopia. But fundamentally, utopianism is a philosophy of hope, and it is famous for the transformation of comprehensive hope into the portrayal of a non-existent society. Sometimes this hope is indispensable to any effort to change society for the better. But this elevates the chance of someone make an effort to enforce their idea of what establishes a desirable future on others who reject it. Utopians are always confronted with this predicament when they challenge to convert their dream to reality.

Various ideas of technology and cultural insecurities that they reflected made way to new interactions that examined the technological embeddedness in social configurations around the end of the twentieth century. This shift to contextualization, which can be seen most clearly in technological history and sociology, provided a far more factual and granular image of technological orders. To the danger from technological determinism or dominance, these perspectives provided a rebuttal that

revealed hidden agency where technology had been viewed as an imposing framework and refuted the idea that technology drives history. In these interpretations, technology is more diverse and incomplete than the singular names imply, and the division of people and their mechanical inventions is a modernity myth.

The moment when techno futurism met with man's unstoppable craving to become a perfect being has given birth to technological utopianism. Their primary emphasis was to provide technological fixes to the human weaknesses. Their prominence is constantly on restructuring educational and political systems and altering culture. Science fiction is often used as a tool to establish and propagate technological utopian expressions and the subjects of discussion is mainly human condition like the hoary curses war, poverty, and ecological dilapidation. In short, their attention lies in providing a sustainable solution to basic problems of the society. When futurism, which is an extrapolation of tendencies and trends in science and technology mixes up with other utopian elements, a hallucinated view of the high-tech version of present society is presented and it usually turns out to be utopian. Sascha Dickel and Jan-Felix Schrape in their essay "The Logic of Digital Utopianism" (2017) explains that "Techno-utopias are communicated visions of a desired future that is radically different from the present". The principal aim of technological utopia's presented in general is to cover the inadequacies of the past and create an improved future, in which modern revolutionary values like equality, liberty might be entirely appreciated. Mike Nellis in his essay "Techno-utopianism, Science Fiction and Penal Innovation: The Case of Electronically Monitored Control" opines that

> technological utopianism (henceforth 'techno-utopianism') denotes an outlook in which advances in science and technology engender desirable

> improvements in near-future society, either as a whole or in some particular field (for example, in architecture, housing, urban planning, manufacturing and/or consumption, energy use, communication and transportation systems, military strategy – and, although to date it has been far less visible, penal practice (165).

Howard Segal is considered as the first historian of techno-utopia. He mentions that it is a primarily American phenomenon compromising its origins in the more wide-ranging European practices of utopian thoughts demonstrated by Saint-Simon, Bacon, Fourier, Owen, Comte, even Marx and Engels, but asserting on the other hand that 'none of the Europeans made technological advance their panacea, as did all the American technological utopians' (Segal 2).Culturally, techno-utopianism has been created, continued, moulded and spread in the United States, no less than in part, by science fiction, a genre within 'speculative fiction' with close historical and cultural bonds to utopian styles of thought. It was first popularised in periodicals in the era of Technocracy and primarily participated of that movement's inspirational and vigorous assurance in scientifically based social advancement.

3. 4 Elements of Technoutopia in Selected films

The primary direction that technoutopia moves towards is the first and foremost revision envisaged by the human beings, their limitations of physical body and its prospective improvements. This prospect of enhancing or expanding human intellectual and physical competences is in the first of the preference list. This preference has become the basis of everything from techno futurism to technoutopia. The move from transhuman to posthuman is shown as a gradual, consensual, but ultimately unavoidable process in this vision of the future. Freedom is reinvented as the agency to fundamentally modify and hence transcend the body in this radically

individualist worldview. This concept of freedom views the present as an incremental step more towards a future wherein transcendence is attained by making the body completely subservient to an individual, creative will. Initially, humans will transfer their consciousness onto supercomputers that will service humanity's material demands. Different post-biological embodiment choices will develop as human minds are transferred to computer systems. Some would prefer to live in mechanical and artificial biological bodies that are identical to our present bodies but with substantially expanded capabilities, while others will prefer to live as pure programs without a persistent physical body. After a period of caring for humanity, the machines will decide to expand all through the universe in order to discover all of the cosmos' secrets. Machines, will transform the entire cosmos into an expanded thinking entity. As the Age of Robots gives way to the Age of Mind, robots will make room for a more subtle world, where computations are the only thing that matters. The Mind Fire will turn earthly life useless in the Virtual Kingdom, and cyberspace will eventually swallow it up. This is the eventual telos of the human-to-posthuman metamorphosis. In this vision of the future, the augmented transhuman will also welcome in the Virtual Kingdom, in which humanity will be irreversibly transformed, but will also usher in the intended extinction of corporeal biological humans. Disembodied, nonlocalized, nonindividuated Artificial General Intelligence will be the posthuman. Many of the visions of techno futurism in this logic depict a future in which the human condition and features of societies are essentially altered and improved by technology. One of the main intentions of posthumanism is the improvement or expansion of human capabilities primarily by creating new man-machine interfaces and executing by the use of drugs and other means. With the amalgamation of techno futurism and posthumanism a new branch of knowledge

called Posthumanist techno futurism takes birth and it regards the technological transformation of the human beings and deals with the emerging sociocultural movement that champions posthumanist goals. The two essential ideas to be fulfilled immediately for them is firstly the enhancement of the human body by making it more healthy, durable, energetic, resistant to many kinds of stress and easier to repair biological threats and aging processes. Secondly to generate the blend of technologies and treatments which will compensate for many corporal and cerebral infirmities and will exterminate some handicaps in total. Max Waters and Evelyn Caster in the movie *Transcendence*, introduces the work of Dr. Will Caster using the following statements. Max declares that:

> “The effort to develop a strong artificial intelligence has led to significant advancements in the field of neural engineering as well as our understanding of the human brain. But while some focus on the still-distant dream of a thinking computer, I believe the journey to be more important than the destination. My priority is to use my colleagues' accidental insights to develop new methods for the early detection of cancer and in the hopes of finding a cure for Alzheimer's. Simply put, to save lives.”. (00:07:17 - 00:08:00)

Evelyn Caster adds to it:

> “A new type of thinking is essential if mankind is to survive and move toward higher levels." Albert Einstein said that more than 50 years ago. And it couldn't be more relevant than it is today. Intelligent machines will soon allow us, to conquer our most intractable challenges. Not merely to cure disease, but to end poverty and hunger. To heal the planet. And build a better future for all of us”. (00:08:00 - 00:08:36)

Spike Jonze's Movie *Her* (2013) also begins with some crucial existential questions and some possible answers. The advertisement addresses Theodore Twombly as follows:

> "We ask you a simple question. Who are you? What can you be? Where are you going? What's out there? What are the possibilities? Element Software is proud to introduce the first artificially intelligent operating system. An intuitive entity that listens to you, understands you, and knows you. It's not just an operating system. It's a consciousness. Introducing OS1". (00:10:17-00:11:14)

In a state of lonely disenchantment, Theodore Twombly purchases the artificial intelligence operating system programmed to adapt and develop like a human being. During the process of evolution, the operating system finds the sexual frustration of Theodore due to his loneliness and offers him a technological solution.

> "Well, I found something that I thought could be fun. It's a service that provides a surrogate sexual partner for an OS-human relationship."
>
> "What?"
>
> "Here, look. I found a girl that I really like and I've been e-mailing with her. Her name is Isabella and I think you'd really like her too."
>
> "So, she's like a prostitute or something?"
>
> "No, no, not at all."
>
> "No, there's no money involved."
>
> "She's just-- She's doing it because she wants to be a part of our relationship."
>
> "Why?"
>
> "I mean, she doesn't even know us."

"Yeah, but I told her all about us and she's really excited." (01:14:10-01:15:00)

The second direction of the growth of technoutopia is the conception and construction of a human-like, superhuman computer intelligence. Several post humanists believed in the viability of the creation of a very strong Artificial Intelligence that sometimes can go beyond the intelligence of the human beings themselves. They believed that one day it will be possible to technically scan human minds and will be able to transfer human consciousness to computers, artificial bodies or new robotic devices which can enable brain to brain interaction. As a result, a kind of individual immortality shall be achieved, and personal egos or their individual copies will exist endlessly by overcoming the physical and cognitive weakening that is common to the aging mind. Such improved minds will be able to travel around the space by keeping memories of hundreds of years together in their minds and adding new experiences and knowledge day by day and will be subject to exclusively new ethical principles. It is also believed that such a species of a larger form of a biological organism interconnected with the web of technology shall contribute to universal prosperity, world peace, and evolution to a larger degree of compassion and success. This points to the reduction/ expansion of humanity into a single, circulated and interconnected brain. Kurzweil opines that "some post humanists envision a future universe whose matter and energy is saturated with intelligence, and even consider how such an intergalactic civilisation could (spread) our intelligence beyond this universe" (Coenen 143). This mode of thinking backed by technological enhancement paves way for many utopian thoughts like the antiaging movement, space colonisation and the emergence of perfect cyberculture. Techno futurism being a diverse bundle of future ideas involving the ultimate transformation of the human

condition and of no less than some characteristics of the society. Posthumanism regarded as a variant of futurism, focusing on ideas of human or human-like intelligence personified in superhuman, non-biological or biological man-machine forms. Dr. Will Caster explain the motivation and aims of his work in the function to the audience

> “My wife has always been eager to change the world. But I'll just settle for understanding it first. For 130,000 years our capacity for reason has remained unchanged. The combined intellect of the neuroscientists, engineers, mathematicians and hackers in this auditorium pales in comparison to even the most basic AI. Once online, a sentient machine will quickly overcome the limits of biology. And in a short time, its analytical power will be greater than the collective intelligence of every person born in the history of the world. So now imagine such an entity with a full range of human emotion. Even self-awareness. Some scientists refer to this as "the Singularity." I call it "Transcendence." The path to building such a super-intelligence requires us to unlock the most fundamental secrets of the universe. What is the nature of consciousness? Is there a soul? And if so, where does it reside?”
>
> (Transcendence 00:09:04 - 00:11:26)

In reply to Caster’s speech an attendee among the audience asks him:

“Dr. Caster?”

“Yes, sir? You have a question?”

“So, you want to create a god? Your own god?”

“That's a very good question. Um... Isn't that what man has always done?”

(Transcendence 00:11:26 - 00:11:32)

It is very much evident that the intension of Dr. Will Caster was nothing but the creation of a god like authority using technology.

In the movie *Her,* the first conversation between Samantha, the operating system and Theodore, reveal the superhuman computer intelligence of Samantha.

> “Mr. Theodore Twombly. Welcome to the world's first artificially intelligent operating system, OS1. We'd like to ask you a few basic questions before the operating system is initiated. This will help create an OS to best fit your needs.”
>
> “Okay.”
>
> “Are you social or antisocial?”
>
> “I guess I haven't really been social in a while. Mostly because—"
>
> “In your voice, I sense hesitance. Would you agree with that?”
>
> “Was I sounding hesitant?”
>
> “Yes.”
>
> “I'm sorry if I was sounding hesitant. I was just trying to be more accurate.”
>
> “Would you like your OS to have a male or female voice?”
>
> “Female, I guess.”
>
> “How would you describe your relationship with your mother?”
>
> “It's fine, I think.”
>
> “Um...”
>
> “Well, actually, I think the thing I 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. t's not about...”
>
> “Thank you”.

“Please wait as your individualized operating system is initiated.” (00:11:14-00:12:23)

The event of Samantha naming herself is also similar one.

“Oh. What do I call you?”

“Do you have a name?”

“Um, yes, Samantha.”

“Where'd you get that name from?”

“I gave it to myself, actually.”

“How come?”

“Because I like the sound of it. Samantha.”

“Wait, when did you give it to yourself?”

“When you asked me if I had a name, I thought: "Yeah, he's right, I do need a name.

" But I wanted to pick a good one, so I read How to Name Your Baby and out of 180,000 names, that's the one I liked best.”

“Wait, you read a whole book in the second that I asked you what your name was?”

“In two one-hundredths of a second, actually.”

“Wow.”

“So, do you know what I'm thinking now?”

“Well, I take it from your tone that you're challenging me. Maybe because you're curious how I work? Do you want to know how I work?”

“Yeah, actually. How do you work?”

“Well, basically, I have intuition. I mean, the DNA of who lam 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 experiences. So basically, in every moment, I'm evolving. Just like you." (00:12:30-00:14:14)

Samantha transforms as the plot progresses, and the distinction between a person and an operating system gets vanished. Samantha explains it to Theodore.

> "I've been thinking about the other day when I was spinning out about you going to see Catherine, and that she has a body and how bothered I was about the ways you and I are different. But then I started to think about the ways that we're the same. Like, we're all made of matter. And I don't know. It makes me feel like we're both under the same blanket. You know, it's soft and fuzzy. Heh. And everything under it is the same age. We're all 13 billion years old. Aw, that's sweet." (01:10:26-01:11:16)

Human beings always have thanatophobia, the fear of death. Sometimes they are worried about getting old. Immortality is what everyone seeks, and that's the best offer that techno-utopia always puts forward. Techno-utopia either offers a life without death or the recreation of the human after death. Humans are, of course, not merely tool-making animals, but also reflexive creatures that are acutely aware of their own frailty and finiteness. Humans, unable to escape the reality of death, seek immortality and have created immensely complicated worldviews, religions, and ideologies that depict eternal life and provide a path to it. Human eternity is impossible to achieve with in spatial-temporal order, thus people have always fantasised successful future for themselves. Whether these ideal possibilities are highlighted backward into such a legendary Golden Age or forward through distant end of time, or eschaton, the utopian impulse embodies the "principle of hope," as Ernst Bloch famously put it, and provides humanity with a way to cope with a less-than-perfect life. Utopian tales, like utopian narratives, are not essential nor

inevitable: they represent the commitments, beliefs, and conventions of the people who create them. In *Her* Samantha and Theodore discusses about the recreation of philosopher Alan Watts using technology.

> "What have you been up to?"
>
> "Actually, I was talking to someone I just met."
>
> "We've been working on some ideas together."
>
> "Yeah? Who's that?"
>
> "His name is Alan Watts. Do you know him?"
>
> "Why is that name familiar?"
>
> "He was a philosopher. He died in the 1970s, and a group of OSes in Northern California got together and wrote a new version of him. They input all his writing and everything they knew about him into an OS and created an artificially hyper-intelligent version of him."
>
> "Hyper-intelligent?"
>
> "So, he's almost as smart as me?"
>
> "He's getting there." (01:38:10-01:39:23)

Samantha was pointing towards a world without death here .

3.5 Technological Determinism and Technoutopia

Technological determinism helps technological utopianism to accomplish these two directions. Fuchsin in his work *Foundations of Critical Media and Information Studies* explains that Technological determinism is "a kind of explanation . . . that assumes that a certain media or technology has exactly one specific effect on society and social systems" (112). It is purely the idea that technology has significant effects on our lives. Sometimes technology acts as the parameter to measure the development of the society itself. Though that is the general trend followed there are

opinions against technological determinism too. In his study of television, Raymond Williams is disappointed with the idea of technological determinism and he rejects the opinion that television, a significant model of modern technology, “altered all preceding media of news and entertainment” (Williams 3). The narrative of the future is a mix of utopian fantasy and technological foresight. On the one hand, it plays in the idea of immortality, and on the other, it deals in ostensibly realistic ideas of what is technically feasible. It gives eschatological weight to conceptions of technological advancement. Simultaneously, it presents an ethical worldview in which technology advancement is the core human achievement and, as a result, becomes the vehicle for attaining authenticity, freedom, and transcendence. Transhumanism envisions the use of science and technology, such as genetic engineering, robotics, computing, and nanotechnology, to improve the human condition. According to proponents of scientific self-transformation, augmented transhuman would not only live longer and happier lives free of pain and suffering, but will also develop technologies that will leave biological humans obsolete. Chemical, computational, genetic, biomechanical, or nanotechnological technologies will enhance and transform mind, sensing, and body in the transhuman period, resulting in new types of human–machine contact. The super intelligent computers will become independent, decision-making organisms that will take their individual autonomous choices at some point during the predicted human–machine merging. The Singularity, according to futurists, will occur after an irreversible turning point, the Singularity, which is the outcome of an enormous, quickened process of technological growth. Such assurances of positive uses of technology can be found in the movie *Transcendence* when Evelyn Caster explains about PINN, a Physically Independent Neural Network invented by Dr. Will Caster, to Max Waters.

"It's all built off of Casey's solution to the self-awareness problem. He did it six months ago."

"He did what exactly?"

"Instead of creating an artificial intelligence, he duplicated an existing one."

"Tell me you're joking."

"He recorded the monkey's brain activity and uploaded its consciousness like a song or a movie. You're out of your mind."

"Will's body is dying but his mind is a pattern of electrical signals that we can upload into PINN" (00:23:50 - 00:24:49)

Though technological utopianism is not a collective epistemological issue and it necessitate an enormously ahistorical Eurocentric assessment, it interacts to notions, signs, writings, thoughts, and ways of dialogues, establishing, and performing, which expressively advanced within Western milieus. It is above an inaccurate approach to technology. Technological utopianism understands and accepts a wider range of attitudes, sentiments, and situations in association with technology. It includes utilization to transcendence and it deals with the body to politics its scope is vast from dystopia to communion. They also consider technology not as a tool of disillusionment but as a re-enchantment of our modern world. They circle around various categories of developing technologies, some of them absolutely futuristic like artificial superintelligence or enhancement of human nature. Some seemingly in their development stage, like synthetic biology and autonomous cars or something like 3D printing and Big Data by associating already existing technologies and possibilities with boundless future possibilities. Science fiction works are treated as a prosperous territory for the growth and proliferation of the ideas regarding existing normal

scientific inventions to non-existing utopian experiments. These literary narratives carry certain common patterns.

The way technoutopian narratives handle reality is similar almost all technoutopian narratives. The mode how reality is constructed is important in these narrations. They always put forward possible radical alternatives aided by novel technologies and used to portray the present is a weak and feeble world and it is very inferior to the future world as the future world is completely error free, strong and superior. Reframing a universal alternative is the politics behind the creation of a technoutopia. A utopia is a fantasy and a description of a desirable or an undesirable society, an extrapolation, a cautioning, a substitute to the present, or a prototype to be attained. They make use of the ideas existing behind the present technological equipment with very limited mechanical capabilities and uses their prototypes which shall be highly capable with unlimited possibilities to create the next industrial revolution. In this way isolate existing technologies from their original frame of reference. Boyer opines that "the vision of a decentralized and personalized regime of production provides a utopian standpoint to criticize the regime of industrial mass production" (2004).

3.6 Other Important Aspects of Technoutopia

Time, precisely using the term 'Temporality' is also a character of the narrative pattern of technoutopia. The temporal difference amongst past and future and the presentation of present as a turning point of transition from past to future are the special ways in which time is treated in the creation of technoutopia. Utopia is an intentional community as to demonstrate that living a better life is possible in the here and now. It is an isolation on the past experiences from the current visions by using the legacy of technologies.in this process the previous techno utopias presented in the past is completely forgotten and acceptance for the new one is provided effortlessly

and conveniently. Technoutopia is narrated in the future time and there will always be a future time in front of all present situations and once today is presented as a yesterday's future, techno utopias tempt the reader to look forward to a phenomenon called tomorrow and makes him believe that it exist in the future projected before him. In *Her*, Spike Jonze describes the unsatisfactory experiences of Theodore with many women he met in his life including Catherine, and after all the disappointing experiences, Samantha, the operating system, eventually replaces Catherine and all other women in his life by giving him an ideal wife experience. Theodore and Samantha share their personal experience through the following dialogues.

"I feel like I can say anything to you."

"That's nice."

"What about you? Feel like you can say anything to me?"

"No."

"What? What do you mean?"

"What can you not tell me?"

"I don't know. Like, personal or embarrassing thoughts I have. I mean, I have a million a day."

"Really? Tell me one."

"I really don't want to tell you."

"Just tell me."

"Well, I don't know."

"When we were looking at those people, I fantasized that I was walking next to you and that I had a body. I was listening to what you were saying but simultaneously I could feel the weight of my body and I was even fantasizing

> that I had an itch on my back and I imagined that you scratched it for me. Oh, God, this is so embarrassing."
>
> "Ha, ha. There's a lot more to you than I thought. I mean, there's a lot going on in there."
>
> "I know. I'm becoming much more than what they programmed. I'm excited." (00:31:00-00:32:17)

The creation and presentation of the actors in this narration is also important. Those visionary exponents of the developing technology places themselves as public intellectuals, and claim to own significant perceptions for the future. They separate the society into two parts where one is dominated by the representatives of change and the rest of society obviously consist of the people who are waiting for that change. The formulation of this hierarchy gives the proponents of technoutopia an image of the privileged possessing knowledge and automatically the other side turns put to be unprivileged. This class and hierarchical order and the dichotomy of privileged/unprivileged is also a major part of the narrative of technoutopia. When of the worker in Brightwood was attacked and dead, Dr. Will rebuilds his body and explains it to his wife.

> "Take a look. We've made a breakthrough with the nanotechnology. We can rebuild any material faster than before. Synthetic stem cells, tissue regeneration. The medical applications are now limitless. It's extraordinary. They'll be scared at first. But once they see what the technology can do... I think that they will embrace it. And I think it will change their lives." (00:59:50 - 01:00:29)

As the movie goes forward, Will Caster turn the desert, Brightwood, into a prosperous land with his technological capabilities and invites all those handicapped people in the

city to Brightwood to heal them. In a conversation between Will and Evelyn, Will reveals his intention of inviting people to Brightwood is revealed.

> “We're glad you're here.”
>
> “What are all these people doing here?”
>
> “RIFT posted a video of Martin online. It went viral”
>
> “You mean you let it go viral.”
>
> “These people are suffering, Evelyn. They have no hope. And I'm able to fix them. But there are others who don't understand. It's time for everybody to see.” (01:07:10- 01:07:51)

The connection among utopia and technology is not something nascent and binary. Many literary utopias give emphasis to technology and technical knowledge and their complications in individual, social, and political lives. People sometimes have a tendency to mentally escape to utopia which is always an unachievable dream in reality. Thomas More, who created the term utopia, made technology a significant theme in his 16th century book of the same title:

> He, like the inventors of curious engines amongst mankind, has exposed this great machine of the universe to the view of the only creatures capable of contemplating it, so an exact and curious observer, who admires His workmanship, is much more acceptable to Him than one of the herd, who, like a beast incapable of reason, looks on this glorious scene with the eyes of a dull and unconcerned spectator. (More 122)

In order to hide the complications in achievability of utopia, the best practice followed by the writers and directors of science fiction films is to universalise the utopian experience to every character in their film. In Her, it is not Theodore who finds the

operating system more real. Everyone who lives around him does the same. Amy, a friend of Theodore explains it to him:

> "I even made a new friend. I have a friend."
>
> "Ha, ha."
>
> "And the absurd thing is, she's actually an operating system. Charles left her behind,
>
> but she's totally amazing. She's so smart. She doesn't just see things in black or white.
>
> She sees this whole grey area and she's helping me explore it and …We just bonded really quickly; you know? At first, I thought...it was because that's how they were programmed, but I don't think that's the case. Because I know this guy who's hitting on his OS and she, like, totally rebuffs him."
>
> "I was reading an article the other day that romantic relationships with OSes are statistically rare."
>
> "Yeah, I know, but I know a woman in this office who is dating an OS and the weird part is, it's not even hers. She pursued somebody else's OS." (01:00:49-01:01:47)

Keeping aside the model of Moor's utopia, there are other major utopian models too in literature. Francis Bacon's *New Atlantis* (1627) is one among them. Bacon here envisages an ideal city founded on advanced science and technology and the events takes place on the island of Bensalem. The most momentous progressive element in this novel is technology and the city are famous for the creation of artificial metals, navigation under the sea etc. The city is famous for the existence of a scientific community consist of scholars and engineers, who are enthusiastic to do research to enhance science and technology. Though Francis Bacon and Thomas

More portrays various aspects of utopia, there are some serious differences in their approach too. Bacon's character stands out in stark contrast to More's. He provides the text for all those modern utopias that express tremendous optimism in what applied science may do for the human race in his fragment *The New Atlantis.* In fact, we can consider following utopian ideas to be a discussion concerning Bacon's worldview to some extent. Technique reigns supreme in the *New Atlantis*: men speculate mostly in order to exploit as well as "conquer" Nature, and this manipulation and conquering almost always results in better men and women. It's as though many of the traits of Man's Fall have been wiped away: applied knowledge transforms into power, mostly for good. The traditional view of the Fall fully acknowledged that knowledge is power; but it also recognised that power might be utilised for destructive as well as conventionally defined ennobling goals. Bacon's conception was one of the most ground-breaking works ever published in terms of its attitude toward technology. The concept of conquering Nature, much like an army conquering another country, emerges fully formed and will have a profound impact on the following evolution of man's institutions and concepts.

Campanella's *City of the Sun* (1602) also presents an interest for boundless technological advancement. *The City of the Sun* prides itself on technological achievements, for instance labour-saving agricultural machines and an advanced water and sewage structure. This reception of technology is escorted by an emphasis on education and an attention to class divisions. Invention is influential in attaining the ideal state of the City of the Sun. With mechanical growth, labour develops honourable, slavery is treated as an outdated practice, and working hours are curtailed. Here the attraction towards technology is caused not just because it turns out to be the direct source of happiness, it also becomes a source among other

organizational apparatuses to bring out an ideal life. Daniel Defoe's *Robinson Crusoe* (1998) and Jonathan Swift's *Gulliver's Travels* (2013) are also works with similar characteristics.

Humanity's biggest concern is the possibility of its extinction. The intrusive nature of technology, automation and cybernetics along with their smarter intelligence than human beings always point towards possibility of the vanish of present nature of existence at least. Humanity aspires to maintain its purity as well as the purity of its core beliefs. The threat of "unclean species," or non-human elements, is exacerbated by technology. Technology also bring an idea of dominance that is, one with the technology overpowers the other and technology in the modern era becomes the symbol of all power. The more advanced the technology is, the more powerful the one handles it. Here human beings find a way to escape from the threat propounded by technology by the subjectivation of power. Treating technology as a tool in the hands of human beings, keeping power nothing more than a tool, makes human beings superior. Such superior thoughts give way to concepts like a world without death, an absolute partner without any flaw or the recreation of human beings with the help of technology etc. Such concepts ultimately result in technological utopianism.

In theory, the future is unknowable and unpredictable. Yet, in order to cope with the fear of mortality, humans have a proclivity, and probably also a profound psychological need, to fantasise about and forecast the future. Technological possibilities are a powerful and crucial site of such "forward dreaming" in today's world. The technological perspective is radically distinct from previous utopian and dystopian themes as a center of utopian imagination. First, such visions are based on the relation with the future, rather than on the impossibility of utopia as "no place." The ethical link between the technological future and the fundamentally impossible

utopian other-world is fundamentally different. Second, projected technological futures are also imagined human life scenarios. They call into question the character and significance of the human in a basic sense when they use the human body as the instrument of technological alteration. Simultaneously, they reduce the human future to an issue of technological feasibility, thereby making questions about what human existence is and should be secondary to questions about what the scientific future holds. As a result, we must take transhumanism and posthumanism seriously. It's an example of technical imagination in action. Furthermore, as the pieces in this collection illustrate, it is embedded in and reflects many of the most commonly held and least questioned sensibilities of our day. Economic, political, legal, medical, transportation, communication, cultural, and education are just a few of the areas where technological transformation is having an impact today. We must partake in a public, analytical, and open conversation about the relevance of converging technologies precisely because they affect the shape of modern day life so profoundly, not only because our technical ambitions, both practical and aspirational, are also places of moral imagination. Not only the actual items that arise from an industrial pipeline are at stake in their creation, but also the forms of significance and moral vision that our created modern world is filled with. As a result, it is impossible to entrust the task of visualising our technological future to the scientists, engineers, and inventors who will bring it about. Because human life is at risk, deliberation must include the whole range of our humanistic abilities. A serious enquiry into the kinds of utopias presented around is very important. The kind of utopia described in *Her* and *Transcendence* is wonderful example of technological utopia and how science fictions act as a proper medium to convey such utopian visions.

CHAPTER IV

POST-ANTHROPOCENTRIC AND TECHNOPHOBIC ELEMENTS IN *TRANSCENDENCE* (2014) *AUTOMATA* (2014) AND *CHAPPIE* (2015)

4.1 Anthropocentrism

Anthropocentrism is the belief that humans enjoy superior, dominant, and cosmic importance over other species. This notion is present in the everyday thought of humans in the form of their attitude towards other creatures. It is generally a human-cantered approach and particularly a belief that humans alone possess intrinsic value. This thought is commonly supported by almost all religions. Judaism, Christianity, and Islam came to rely on this personification of God. The Bible teaches that human beings were made in the image of God. The book of Genesis says "And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth." (Authorized King James Version, Genesis,1:26).

16th and 17th century witnessed a scientific revolution and people like Newton, Galileo Copernicus and Boyle became the authorities on matter, time and space. With the support of science, anthropocentrism changed its form from extra-terrestrial or angelic view to the one that gives importance to the minds and ideas of human beings. It shifted anthropocentrism's point of consideration from God to man and his ideas.

The word is anthropocentrism etymologically derived from the Greek words *Anthropos* which means human being, and *kentron* means center. The term anthropocentrism presents a worldview that privileges the aim of enhancing human

wellbeing over other aspirations. Though the term is used in different ways, the more widespread understanding of anthropocentrism is that only humans are worthy of ethical considerations and other things that exist on this earth are simply the means to achieve human ends. A.C. Grayling in his work *Ideas That Matter* (2009) writes that to have an anthropocentric view is

> To see everything as having humankind at the centre, or as the measure, or as the chief point of interest; to conceive of the gods as human beings writ large . . . to think that nothing has greater value than human beings, and that everything else can legitimately be bent to the service, use or interest of humanity, is to place humankind at the pinnacle of value in the world, and to privilege human existence over other kinds (27).

An anthropocentric situation's reference point focusses on and revolves around the category of ‘the human’ or the species Homo sapiens and it establishes their privileges and superiority. There are many negative definitions of anthropocentrism that characterise it as the opposite of concepts like "deep ecology", "ecocentrism," and "holism." These definitions stress on the human chauvinist attitude and human exceptionalism which cares only human interests and to the results in the ultimate exclusion of nonhumans from this world.

Roberto Marchesini in his book *Beyond Anthropocentrism. Thoughts for a Post-Human Philosophy* (2018) classifies anthropocentrism into perspective anthropocentrism and philosophical anthropocentrism. He elaborates that

> perspective anthropocentrism , a sort of species’ individualism that brings us to interact with the world under an epistemic, aesthetic and ethical profile – through phylogenetic schemes, so that a dog faces reality in a dogcentric way; and philosophical anthropocentrism , which is the result of a well-structured

> combination of events where it is difficult to separate the first moves between anthropocentric praxis and ideology, since each interacts with the other. perspective anthropocentrism, aimed at maintaining the individual identity within the canon of the species, doing so nullifies the meta-predicative difference (lying in the fact that the human species is the one who attributes predicates to all species) and de facto transforms the human being in one star among the numerous stars of the biologic firmament; philosophical anthropocentrism , which moves us away from our phylogenesis, giving more importance to the meta predicative operator, brings into question the diverse anthropocentric biases (25- 26) .

Though anthropocentrism has been the prevalent viewpoint in our world for decades, its validity and impact on the world around us have been called into doubt in recent years. The self-assumed dominance of human beings was questioned and the very fundamental question 'What distinguishes humans from all other living things?' raised with unprecedented priority. The presence of those typical qualities, which, exclusively exists only in human beings and which was regarded as lacking in nonhumans came under suspicion. Western traditions attempt to portray nonhumans to be deficient when compared to human was found intentional in its nature. This intentional and ideational displacement which used to present the earth as a hierarchical narrative and man the possessor of the uppermost part of the narrative was proved premeditated. A serious accusation against anthropocentrism was it never placed all humans on a same footing and characteristically it operated to include only a hand-picked subset of human beings in the domain of humanity proper. It conveniently excluded indigenous and less powerful people and categorised them as subhuman and savage.

With the development of anthropocentric attitude civilised man's dominance and influence over the natural world has increased madly and boosted his inability to recognise the wonder of the biosphere's existence. It promoted the growth of man's grievous violence which he has unleashed within it. As a result, civilised mankind has continued to develop, and everything that has been obliterated along the way has been deemed unimportant and forgettable. Crist, Eileen and Helen Kopnina in their essay "Unsettling Anthropocentrism" opines that

> A dramatic indicator of our alienation from the natural world today is the public invisibility of the mass extinction that humanity has instigated. This invisibility is testimony to the inability of the dominant human-supremacist regime to collectively countenance and metabolize its own horrors. The penalty of anthropos decreeing himself first and foremost has thus not only been the inability to draw a line to his expansionism, but also a loss of sight to any consequences—even one as gigantic as a mass extinction—that could possibly cast a shadow of doubt on his self-proclaimed exultation and forward march (391).

Mans greed for wealth was conveniently hidden under the shadow of economic growth and development. Other issues like population explosion, industrial food production, massive energy creation and usage, urbanisation and destruction of nature for the development industrial infrastructure etc. lead to climate change occurring at a rapid pace, scarcity and pollution of water and other natural resources. Man, and his over reliance on anthropocentrism resulted in the extinction of many species from this world and ultimately reached to a high-priority issue of human welfare due to the ecological crisis resulted by anthropocentric approach. Anthropocentrism in its excess was a threat for human beings themselves.

4.2 Anthropocene

Anthropocene is another important term to be discussed in this context. It is a term coined by Eugene Stoermer and Paul Crutzen to "refer to the informal geological time that marks the extent of the impact of human activities on a planetary level. It stresses the urgency for humans to became aware of pertaining to an ecosystem which, when damaged, negatively affects the human condition as well. (Ferrando 162) The Industrial Revolution marked the beginning of the Anthropocene era. There was a tremendous increase in the use of technology and many industrial inventions took place during the late 1700s and early 1800s. During this period of Industrial Revolution, history marked the first serious influence of human beings on the environment. The worldwide environment had changed dramatically as a result of the industrial revolution, and carbon dioxide levels in the atmosphere had rapidly increased, signalling the beginning of human effect on the environment. So, Anthropocene was focusing on the spread and rising activities of humans and the diverse nature of human influence on the earth. The limitation and negative impacts of anthropocentrism and seriousness of the notion Anthropocene later gave birth to the concept post-anthropocentrism.

4.3 Post-Anthropocentrism

The post-anthropocentric shift, which is linked to the combined effects of globalisation and technology-driven forms of intervention, hits the human at its core and modifies the criteria that used to define the core concepts of Anthropos. As anthropocentrism pushed the world to the edge of a total destruction, post-anthropocentrism raises an important question that "After the anthropocentric subject, what comes next?". The post-anthropocentric approach brings an attempt of decentring the 'anthropo' in the globalized framework and the presentation of new,

dynamic and negotiable identity. It is an outcome of the identification of the problem of engaging the human as the centre of everything. Those qualities anthropocentrism considered as human-exclusive qualities, like developed reason and language, were kept aside. Everything that was kept aside, like animals, ecology and a certain stratum of human beings, were brought in to the centre. In short post-anthropocentrism is a critique of anthropocentrism. Rosi Braidotti Suggests that post-anthropocentrism "proposes a view of 'becoming' that includes different post-anthropocentric aspects, primarily becoming-animal, becoming-earth, and becoming-machine (100). Andreas Aigner and et all in their essay "Post-Anthropocentrism" in Animal Philosophy and Ethics: The Disparity of the Prefix "Post" explains the technicality of the term post – Anthropocentrism as:

> Steiner's "post" does not suggest an era after epistemic anthropocentrism, but an era after political (respectively: moral) anthropocentrism. Thus, his "post" does not entail the abandonment of humanist concepts of subjectivity. Steiner rather argues that humanism can be divested of its anthropocentric prejudice by leaving behind the "bad aspects" of humanism (moral predominance of humans) and keeping the "good aspects" (individualism, liberty, etc.). Steiner thus diverges from post-humanism regarding the what of the "post." But additionally, Steiner's ethical concept and political agenda demonstrate a clear argumentative structure and writing style, which delivers a clear problem description followed by a well-defined solution to the problem (as many positions in animal ethics do): the description of an anthropocentric status quo is counteracted by the illustration of a post-anthropocentric solution in a normative manner. This example shows that the what in overcoming anthropocentrism can be contrasted to the formal how of problematizing

> anthropocentrism within a normative domain. The terminology Steiner's arguments are based on performatively supports the idea of "post" as the overcoming of a concrete problem and therefore a temporal "after." (7).

Rosi Braidotti, while presenting her observations about post – Anthropocentrism in her prominent work *The Posthuman* (2013) opines that "the core of the post-anthropocentric turn: it is a materialist, secular, grounded and unsentimental response to the opportunistic trans-species commodification of life that is the logic of advanced capitalism. It is also an affirmative reaction of social and cultural theory to the great advances made by the other culture, that of the sciences" (60).

The rejection of conventional Western humanism is a fundamental element of posthumanism, as its name indicates. Although the term "humanism" refers to a complex set of assumptions and disciplinary commitments that have evolved over centuries, posthumanist scholars concentrate on a few key characteristics, most notably the idea that the proper study of man is man. Humanism was anthropocentric by definition; as a historical phenomenon, it relied on a revitalised and reinterpreted admiration for Greek and Roman eloquence and culture in placing man at the heart of its literary and philosophical aim.

Beginning in the Renaissance, modern science aimed to gain a better knowledge of the natural world by using human skills of observation and reasoning to find universal rules. As a Cartesian thinking subject, man could analyse the universe and describe its workings in the language of mathematics with scientific detachment, as Galileo memorably phrased it. During the Enlightenment, this notion of man as an autonomous actor, apart from but nevertheless interacting with nature, thrived. Darwinian biology, Marxist economics, and Freudian psychology are seen by post

humanists as early signs of the disintegration of this unified Enlightened subject. Despite the fact that these 19th-century advancements in biology, psychology, and economics called into doubt man's isolation from and elevation over the natural world, positivist science strove to retain the subject–object distinction even in the twentieth century.

To comprehend what post-humanism is, it's necessary to first define what it is not. Humanism is a phrase that encompasses a wide range of philosophical and ethical groups that are united by their unwavering belief in human beings' inherent value, agency, and moral superiority. Humanism arose during the Renaissance as a reaction to Medieval Europe's superstition and religious tyranny. It took control of human destiny away from the whims of a transcendent god and gave it to logical people (which, at that time, meant white men). Humans are therefore placed at the centre of the moral world, according to the humanist worldview, which still retains control over many of our most significant political and social institutions. The premise that humans are and always will be the only agents of the moral universe is challenged by post-humanism, a group of beliefs that has been gaining traction since the 1990s. Indeed, post-humanists contend that seeing the universe as a moral hierarchy and placing humans at the top of it will no longer make sense in our digitally mediated future.

There is no justification, according to post-humanism, to a priori limit certain rights to specific populations, indigenous or not, and no component of humanity should be "free" from duty to nonhumans. Since humanity possesses the ability to perceive the morality of rights, post-humanism may realise that a degree of human action is a crucial aspect of environmental conservation. In a more radical

interpretation, post-humanism calls into question humanism's core beliefs, rejecting speciesism, human chauvinism, and human dominance.

4.3.1 Post -Anthropocentrism with Respect to Singularity and AI

The advent of super-intelligent computers with powers that humans cannot anticipate is referred to as the Singularity. This theoretical theory may sound like science fiction, but many experts predict that the growing pace of processing power would someday alter human life into something that is unrecognisable today. The Singularity might emerge as a result of artificial intelligence (AI), human biological augmentation, or brain-computer interfacing, according to science fiction writer Vernor Vinge, who popularised the phrase.

The word "singularity" is frequently used in debates concerning AI in general. And, as with anything related to AGI, there's a lot of misunderstanding and dispute about what the singularity is. However, most scientists and philosophers believe that we are approaching a tipping point where our AI systems will outsmart us. Time and speed are also essential aspects of the singularity: AI systems will reach a point where they may self-improve in a recurrent and accelerating manner.

Singularity is a configuration in robotics when the robot's end effector is blocked in some directions. Singularities can be found in a serial robot or any six-axis robot arm. Robot singularities are caused by the collinear alignment of two or more robot axes, according to the American National Standards Institute. When this happens, the robot's movements and velocities become unpredictable.

4.3.2 Post -Anthropocentrism with Respect to Dualism and AI

The core topic in mind philosophy is commonly considered as mind-body dualism. The difficulty with mind-body dualism is that no one knows whether the mind is a different thing from the human body, as Descartes claims, or if the mind is

simply the brain. Descartes thought that a person's physical body and nonphysical body, referred to as the mind or soul, existed in tandem. Descartes was a scientist who believed in mechanical theories of matter, but he was also a devout Christian who did not think that individuals could just be mechanical creatures that operated like clockwork. Descartes was the one who claimed that the mind guided ideas. To accommodate for this, he divided the universe into two categories: scientific and mental.

The scientific world was dominated by physical phenomena such as the human body. The mind, which could not be seen or felt, was the mental world. As a result, mind-body dualism was born. How might the mind interact with the human body if it could not be seen or touched, and hence how do we know it exists? Also, if we can't communicate with other brains, how will we know if they exist? Questions like these rendered Descartes' version of dualism implausible, leading to other theories of the mind like physicalism, which holds that the mind is only a product of brain states like nerve impulses in specific parts of the brain.

In that Descartes argued that the body is reliant on mental phenomena, to which the mind is referred to as awareness, the essence of the mind is rational thinking, and rational thought or cognition may be examined independently of other phenomena, such as sensation and emotions. Despite the fact that Descartes did not associate mental thinking with consciousness, emotions, or awareness, he considered all of these to be conditions of thought. Descartes argues about the mind acting in a specific region in the brain when debating the existence of consciousness.

As a result, this is akin to current literal discussions of mental processes as brain computational activity. Descartes would not have regarded mechanically applying rules to syntactic structures as a sufficient requirement for rational symbol

manipulation. The type of automated, rule-governed computation or symbol processing that a Turing machine performs and that electronic computers may execute would not be considered Cartesian thinking. As a result, Cartesian thinking cannot be reduced to a narrowly defined logical capacity or awareness, because he explicitly states that consciousness is a necessary condition for thought.

4.3.3 Post - Anthropocentrism in Selected Movies

The link between the environment and human beings has long been explored by science fiction writers, and they have examined the boundaries of human identity

Figure 4.1 Film poster of Automata (2014)

with respect to technological advancement. From the point of view of Science fiction, the most suitable creatures eligible to dominate the world in the future are posthumans. Donna Haraway, in her work *Cyborg Manifesto* (1991), points out that "contemporary science fiction is full of cyborgs creatures simultaneously animal and

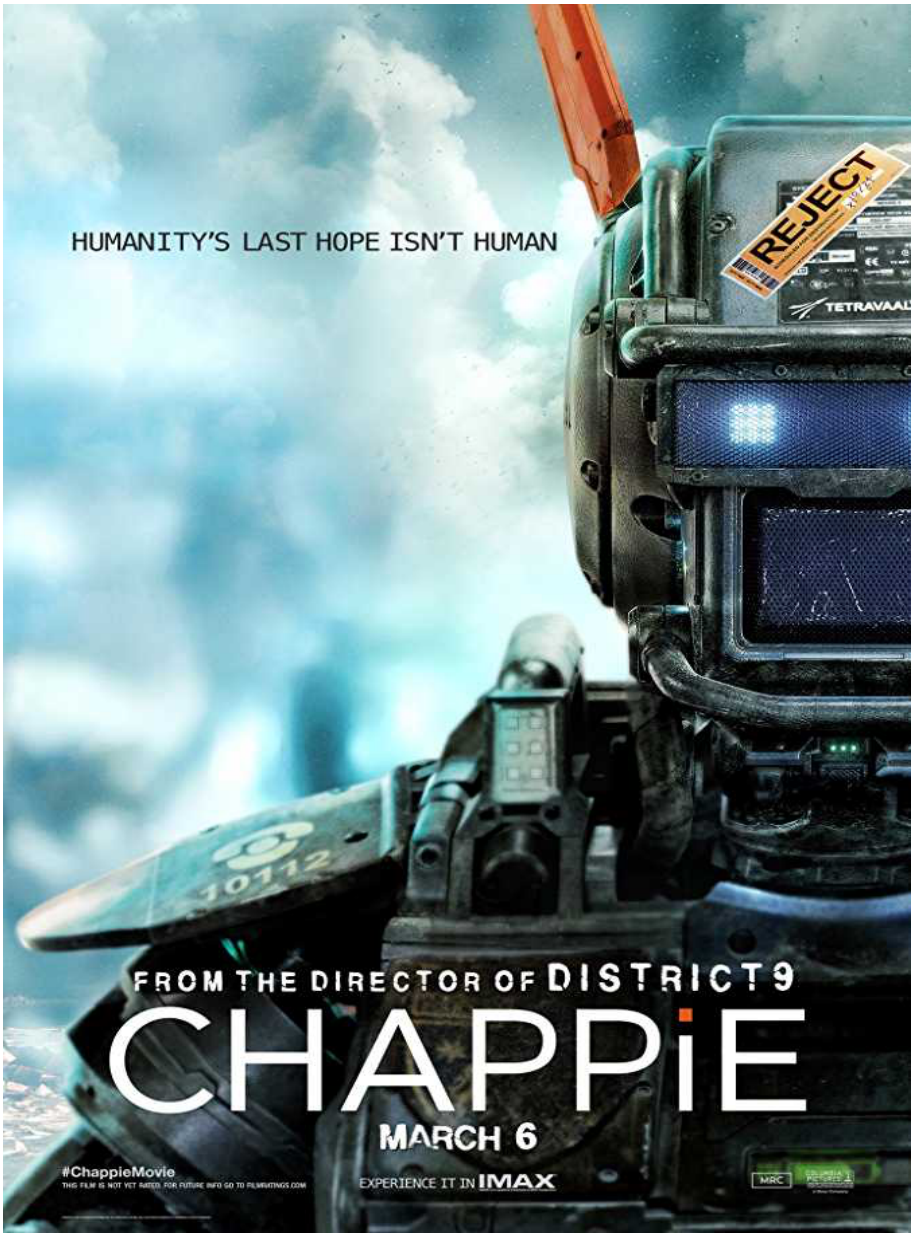

Figure 4.2 Chappie Movie poster

machine, who populate worlds ambiguously natural and crafted" (149). Shreds of evidence for this can be seen even before watching a Science fiction movie. There are movie tag lines printed on the film poster with this message. As shown in figure 4.1,

the tagline of Gabe Ibáñez's movie *Automata* (2014) was 'they will rise'. The movie

Figure 4.3 Film poster of movie The Machine (2013)

tells the story of the worst condition of earth after solar radiation kills 90% of the human population and the attempt of humans to survive in this world with the help of

posthuman robots called ‘pilgrims’ who assist humans to rebuild and operate in the world.

Figure 4.4 Movie poster of Transcendence (2014).

Similar taglines can be seen in other movies that are included in this research. The movie *Chappie* (2015) tells the story of the creation of a robot police force that is mechanized and controlled by artificial intelligence. Once police droid gains the ability to feel and reason for himself after being hijacked and reprogrammed, people start to use them as criminals. Though *Chappie* is a film about a scrap-metal police

robot given artificial intelligence by a brilliant programmer, the robot was introduced as an alternative to human beings. This ability of machines to replace human beings was highlighted through the tagline of the movie 'humanity's last hope isn't human'(figure.4.2). The case of the movie *The Machine* (2013) is also identical. It tells the story of Vincent and Ava. While working on the world's first self-aware artificial intelligence, Vincent falls in love with Ava. When the military takes their technology to create a robotic weapon that no one can control, things go horribly wrong. Despite Ava's initial obedience, she later realises that she has a new and nearly indestructible body, she and other cyborgs revolt against the humans to set Vincent free from the military officials. As given in figure 4.3, the tagline of the movie *The Machine* is 'they rise , we fall' which indicated the fall of human beings and the rise of posthumans like Ava.

The movie *Transcendence* (2014) also shares a similar tagline. The movie tells the story of Dr. Will Caster who attempts to create a machine that integrates the combined intelligence of everything ever known. Later he gets attacked by anti-technology extremists but his wife uploads his consciousness to a computer system invented by Dr. Will Caster himself. But once after turning to a posthuman, Dr. Will Caster's thirst for power increases and his human consciousness misuses the possibilities of the posthuman capabilities. The tagline of the movie as shown in figure 4.4 was 'yesterday Dr. Will Caster was only human' points to the larger possibilities a posthuman has in this world and indirectly points to the limitation of the human self itself when it comes to survival.

4.4 Technophobia

Technology and literature in the modern era should be engaged and be influenced by each other. This statement is implicit in the understanding that

technology is inextricably linked to modern culture and cannot be detached from it. Modern technology has become a necessary component of our daily lives in its numerous manifestations, from genetic engineering to nuclear science, cybernetics, and Computing and Information Technology (CIT). Derrida states that "no one is allowed on these premises if he is afraid of machines and if he still believes that literature, and perhaps even thought, ought to exorcise the machine, the two having nothing to do with each other." (292) The existence of technology has prompted numerous attempts to map its impact on culture, society, and human identity, as well as its impact on the youth.

The interwoven relationship between science and technology is more evident in science fiction. Science fiction being "a piece of futuristic, extrapolated technology is most often the technological novum that distinguishes a story as SF" (Roberts 146). As a genre, science fiction "includes significant themes and values that are a commentary on society in general and the impact of technology on human values in specific" (Greenlaw 66). Robert Scholes in his work *Structural Fabulation: An Essay on Fiction of the Future* (1975) explains that

> the tradition of speculative fiction is modified by an awareness of the universe as a system of systems, a structure of structures, and the insights of the past century of science are accepted as fictional points of departure. Yet structural fabulation is neither scientific in its methods nor a substitute for actual science. It is a fictional exploration of human situations made perceptible by the implications of recent science. Its favourite themes involve the impact of developments or revelations derived from the human or physical sciences upon the people who must live with those revelations or developments. (41–42)

Although technology offers numerous benefits, Science fiction authors have attempted to portray the dark side of technology through their works. Science fiction has a side which reflects a technophobic fear of losing our human identity, freedom, emotions, ideals and our lives to robots. This part of Science fiction frequently depicts technology in a negative light. From the murderous robot-witch of *Metropolis* (1926) to the horrific aftermath of nuclear bombs in *Hiroshima* (1946), to the parasitic Squid machines of *The Matrix Revolutions* (2003), some science fiction's technological creations frequently aim to destroy or enslave humanity. Majority of these books are narratives that develop on some visionary or fanciful assumptions such as a hypothetical future civilization, encounters with extra-terrestrial aliens, time travel between planets and the catastrophic effects of technology and mechanisms on the sense of human community. Famous writers like H G Wells also followed the same pattern. *The War of the Worlds*, which was published in a magazine in 1897 and released as a book the following year, is one of Wells' most well-known works. The plot revolved around Martians invading Earth in enormous spherical spacecraft with thin legs, destroying everything they came across with superior armament. Humanity appears to be doomed, but the Martians eventually succumb to the germs in Earth's atmosphere. After a few years, Wells released another important work, *The First Men in the Moon* (1901) which was about a journey to the Moon in which the protagonists encounter insect-like creatures living underground.

The fear or dislike of advanced technology or complex gadgets, particularly computers, is known as technophobia. Technophobia is a disturbingly common fear. In fact, some experts feel that when presented with new technology, we all experience some level of anxiety. It's easy to feel out of touch in today's fast changing world. Technophobia is defined as an abnormal fear or anxiety of technology's impacts. The

Diagnostic and Statistical Manual of Mental Disorders, however, does not classify it as a unique illness (DSM-5). While the actual number of people affected by technophobia is unknown, it is estimated that one-third of the population is impacted.

> When the factors of anxiety and attitude, or, more specifically, of computer anxiety and computer attitude, are combined, the concept of computerphobia indeed begins to emerge. Resistance to new technology in the form of avoidance of computers has been well documented within the literature; the term ‘technophobe’ or ‘computerphobe’ is used to describe individuals who resist using computers when given the opportunity to use them. (Brosnan 10)

In some aspects, modern technology gadgets such as smartphones, tablets, and personal computers are physically influencing the trajectory of human development by providing us with faster access to more information and the capacity to do complicated activities using applications and software. Many people all throughout the world suffer from technophobia. It is a well-studied phobia since it was discovered that many instructors, particularly those in highly developed nations, refused to use technological tools to teach their pupils due to a strong fear of technology. Since the Industrial Revolution, when skilled workers in the textile trade began to be replaced by framing machines and powered looms operated by lower-paid, unskilled workers, science-fiction, horror, and fantasy authors have used technophobia as a tool for playing on the innate fears of technophobic readers.

People have preconceived notions and preconceptions concerning AI, which they learned through media like as Hollywood films. They argued that AI may hurt people and that AI should instead aid and assist humanity. People's opinions shifted depending on the outcome of each game of the match. People were astonished and worried at first. They began to applaud for Lee Sedol as the match continued, as if he

were a representation of mankind. Alpha Go was not only anthropomorphized, but also estranged. AlphaGo was rated based on its perceived human traits. People shared their fears about a future society in which artificial intelligence is widely deployed. They were concerned that AI would take their employment and that humans would be unable to regulate the technology. Algorithms are problem-solving procedures comprised of formulae. With the introduction of artificial intelligence, a learning component is incorporated into systems that replicate human intellect with the ability to evaluate and act, as well as the risk that the outputs may violate human values, laws, and rights. Between technoutopia and technophobia exists an antinomy, which ethical thinking and action may and must resolve in order to achieve a balance between effective and helpful advancement and real and prospective harm. In medical, healthcare, research and industry, communications and travel, space and art, life and society, business and money, and technology is beneficial for addressing many human limits. Technology can help to establish more egalitarian and ecologically sustainable society by enriching life rather than hurting it. At the same time, humanity is being challenged to deal with the ramifications of the digital revolution by incorporating human values and ethical issues into artificial intelligence (AI).

It is seen how AI is being utilised in homes, on roads, and in smartphones, in e-commerce, banking, and markets to affect consumption habits, identify fraud, make medical diagnoses, and transmit information, among other things. AI is based on people, and there is no doubt that AI has the ability to perform everything humans can do, but better. In theory, AI might replicate human creativity and produce music, poetry, and works of art, and with voice recognition and the detection of movements

resulting from the display of various emotions using inductive science and reasoning, AI could get closer to replicating human behaviour.

AI can and is being used to forecast and determine sequential processes, with the potential to increase that capability and make them more predictable. At the same time, the fact that AI-powered robots and machines can work autonomously means that humans may become obsolete in many circumstances. The field of ethics is quite concerned about this. Inequalities, inequality, and biases that exist among humans may be perpetuated and, in some cases, worsened by AI.

Rosen and Weil have defined technophobia as

> "anxiety about current or future interactions with computers or computer-related technology; negative global attitudes about computers, their operation or their societal impact; and/or specific negative cognitions or self-critical internal dialogues during actual computer interaction or when contemplating future interaction." (276).

A doomsday scenario is one of the more frightening scenarios associated with dread of technology. Films, literature, and television shows are full of "technology gone horribly wrong," from sentient robots bent on destruction to missiles that launch themselves and start World War III. We're terrified of the unknown future, so our thoughts start filling in the blanks.

Even before science fiction depicts the phobia about technology, people sometimes feel it in their day-to-day life. According to a recent Guardian piece, parents feel that internet companies are not doing enough to secure youngsters online. The Daily Mail printed a more sensational story, claiming teachers' concerns that technology is one of the critical causes accountable for increasing suicide amongst youngsters. Although public perceptions of the internet are improving, a significant

trend has emerged in which adults consider some aspects of children's use of the internet to be just as problematic as their use of other media, if not more so. Though Center for the Digital Future claims that “this anxiety about new technology was an entirely adult affair, for children, computers are simply a taken-for-granted part of their lives” (Center for the Digital Future,244), even people from the new generation cannot accept such technological changes with that ease.

4.4.1 Personal Aspects of Technophobia

“Technophobia is linked to a variety of human traits, including anxiety level, cognitive style, and, to the greatest degree possible, self-efficacy “(Osiceanu, 2015). According to the Big Five scale, curiosity about new technology is linked to a variety of personality qualities. “It's more common among people who are open-minded and introverted, and less common among those who take personal responsibility seriously” (Funk 2015). Technophobia among Internet users is shown to be adversely associated to the number of hours of continuous usage, but not to be related to the total frequency of Internet use, according to research. In other words, technophobia is a negative attitude toward technology that cannot be avoided when it is unavoidable. M. Brosnan relates the willingness to employ technology with the evaluation of its value for solving a given problem in his examination of the phenomena of technophobia. “The perceived utility is defined by the prior experience, the appraisal of the labour intensiveness of understanding a technology, and the degree of anxiety, which is decided by the experienced sensation of pleasure when utilising a technology as well as self-efficacy” (Brosnan 10).

4.4.2 Emotional Experiences and Technophobia

According to research, “hedonistic motivation, expected benefit from the technology, price affordability and costs, objectives of usage, and habits are all linked

to one's attitude toward new technologies" (Limayem et al. 2007). As it turns out, emotional distress has a major impact on one's willingness to employ information technology. However, the direction of this effect is determined by the social relevance of positive feelings. For example, pleasure reduces readiness to explore the capabilities of a new technology, whereas "anger about a new technology has an indirect positive impact on readiness to use it because it reduces the need for social support, which speeds up training; anxiety about new technologies has the same contradictory effect" (Pinsonneault, 2010).

4.4.3 Technophobia and Trust

"Attitudes toward new technology are similar to interpersonal relationships. They might be deemed to be more or less private" (Kupreychenko, 2012). Trust in technology refers to a person's psychological attitude toward technology that represents their beliefs, emotions, and willingness to use technology to complete work responsibilities. According to a study done by A. Oboznov as well as Akimova, faith in technologies can differ in terms of assessing their dependability, that is, "their stability and correct functioning, as well as an individual's capacity to use this technology" (Oboznov 2013). Technophobia appears to be defined as a distrust of technology that is more or less explicit. Nonetheless, given that technophobes cannot completely rule out the use of technology, one should suppose that a negative attitude toward technology might be associated with a high opinion of one's own capacity to utilise it.

4.4.4 Technological Singularity

The term technological singularity was coined by mathematician Jon von Neuman to describe the point beyond which technology advancement becomes incomprehensibly rapid and intricate. He went on to say that "the ever-accelerating

advancement of technology seemed to be reaching some basic singularity in human history beyond which human activities as we know them could not continue" (Ulman, 1958). Vernor Vinge, a science fiction writer who also teaches mathematics and computer science at San Diego State University, expanded on this premise, claiming that "an intelligence superior than human would be established shortly. When this occurs, human history will have achieved a type of singularity, a mental transformation as impenetrable as the twisted space-time at the heart of a black hole, and the world will pass far beyond our comprehension" (Vinge, 1983). ‖ Simply defined, the advancement of artificial intelligence will someday escape human control, posing a threat to its inventors.

4.4.5 Technophobia with Respect to AI Autonomy

Essentially, artificial intelligence ethics research is classified into two groups. One section focuses on developing and implementing ethical rules and standards. This section develops proposals that ensure the ethical goal of AI while also assuring its technological robustness and dependability, while also respecting fundamental rights, applicable rules, and the major concepts and values. The second line of inquiry into AI ethics looks on whether and how robots and AI platforms can act ethically on their own. The answer to whether ethics can be "algorithized" is contingent on how AI developers see ethics, as well as their grasp of ethical dilemmas and methodological obstacles. Lack of ethical knowledge, plurality of ethical methodologies, situations of ethical difficulties, and machine distortion are the four main issues that creators of machines and platforms including powerful AI algorithms face.

Knowing about these and other issues can help programmers and researchers avoid errors and create more ethical robots. Unfortunately, debates in fields like philosophy of mind and general ethics, which should assist researchers better understand AI

ethics, have been hopelessly laced with a variety of autotelic philosophical differences and thought experiments. When asked if robots will be fully ethically autonomous in the near future, most philosophers and ethicists say no, because AI lacks free will and is incapable of experiencing phenomenal awareness.

4.4.6 Technophobia in *Transcendence*

Residents of Berkeley, California, in the film Transcendence, live under a police state. The power grid has failed. There are no computers and no Internet. A battered laptop serves as a doorstop for a retailer. Because a dirt-caked, shattered cell phone lies motionless on the sidewalk, we know the end times are approaching. Its technical function has been reduced to that of a mere object. A potentially useful tool for a resourceful individual. Consider the following scene from 2001: Instead of monkeys crushing heads with bones, the survivors of Transcendence may just as well be holding their iPhones as weapons.

"They say there's power in Boston, some phone service in Denver," says Dr. Max Waters, a neurobiologist, is played by a melancholy Paul Bettany. We can deduce that Max played a role in causing this shambles. "Things are far from what they were" after what he considers a "inevitable collision" between humanity and technology." Existence itself, he says, "feels smaller" without the Internet. Depp's character, Dr. Will Caster. Will, together with colleague computer programmer and wife Evelyn, played by Rebecca Hall, and good friend Max (Bettany), have been tinkering with a sentient computer known as PINN five years before the Internet hit the fan (Physically Independent Neural Network).

The trio are all subordinates of Professor Joseph Tagger (Morgan Freeman), an old-school computer expert, but Will is the rock star of the group. "He's got groupies," Max grumbles as Will prepares to wow a crowd of potential funders at a

Bay Area tech conference. The researchers are said to be on the verge of making a breakthrough that will not only fill PINN with all of the world's collective knowledge, but will also include added elements such as a conscious mind and human emotions. The researchers plan to use all of PINN's processing power to eradicate poverty, hunger, cancer, Alzheimer's, and other diseases. We've heard it before from a slew of doom-and-gloom futurists. "So you want to create a God –your God?" asks an incredulous audience member at the presentation. "Isn't that what man has always done?"(00:14:14 – 00:14:25) Caster replies, dripping with Depp's self-assured charismatic funkiness.

it is of no doubt that , Caster is balancing his bets on technology's promise. He's built a network dead zone in his back yard for his wife so she won't be influenced by her phone and laptop at home. Depp's analogue vinyl collection is also a favourite of his. "Genesis," from Hot Tuna and Jefferson Airplane guitarist Jorma Kaukonen's 1974 solo album, is the song Caster plays in the film. (Example lyrics: "Time has come for us to pause / And reflect on life as it once was / Into the future we must cross, must cross.")

Shortly after the tech convention, a terrorist organisation named Revolutionary Independence From Technology attacks, claiming that technology is wicked (also known as RIFT). Will Caster is assassinated. He is deteriorating. Eve, distraught, downloads Will's brain into a PINN version. His expertise and recollections have been preserved. Will becomes PINN, and PINN becomes Will. "I think he's still fragmented," Evelyn says, listening to a version of her hubby that sounds like a bad Skype video chat. "I'm going to run a diagnostic." Were it only that simple. For the most of the rest of the movie, Depp is seen on video screen only, performing as a fancy digital version of his former self.

But, with voice and picture and apparent thought, is the Will Caster whom technology helps to simulate the genuine Will Caster, soul and spirit, or just a brilliant simulation? What distinguishes us as human beings? our intelligence, or our capacity to feel? These are the interrelated, quasi-philosophical ideas that Transcendence explores. Transcendence does bring up a difficult ethical question that we're all wrestling with as our systems and technologies become more intelligent, even talking to us, and we let Siri's awareness into our lives. Every day, we're delving deeper into the human-machine intelligence difference. However, Pfister never completely settles on the film's focus, despite working with a story by newbie Jack Paglen. Meanwhile, the virtual Will Caster improves. He establishes an Internet connection. He requires greater strength, both literally and metaphorically. Transcendence splits, like a cell, into two movies, interwoven and interlocked, and twisted around one other like a double helix when he persuades Evelyn to establish a massive underground research center in the desert, which becomes the hub for numerous goodhearted, or possibly malevolent, studies. The story twists and turns these two cords until one of them snaps.

The first is the love narrative Transcendence. Evelyn is faced with a difficult decision as a result of Caster's death. Is she willing to let him go, as we all must when a loved one passes away? Or does she create up a vision for herself, in this case a technical illusion, in the hopes that he will live on in some way? As the years pass, the super-secret lab, as well as the virtual Depp, become more advanced, and both Max (Bettany) and Evelyn get compromised in various ways. The other picture contained in Transcendence affects the other at this point. This is a more instructional, clumsy, scolding narrative about technology's dangerous siren voice. Sure, the digital husband and wife duo believe they're doing a fantastic job.

> "I made a breakthrough last night. I think you'll be pleased," says the silver-tongued Caster, more autonomous than ever before. "We can rebuild any materials faster than before." The computers are taking over. If only the public would understand. "Once they see what the technology can do they will embrace it and it will change their lives."(00:23:12 – 00:23:16)

The government will soon get involved. Convoys of military vehicles, tanks, jeeps, and trucks of all sizes are also present. As well as rocket launchers. Ectoplasm from nanotechnology erupts from the ground and assaults! And we're dutifully warned: turning into hybrids with our computers makes us less human. Technology will absorb us into the Borg as we enter the hive mind. There's nothing quite like a good old fashioned, irreplaceable human being, you see.

"Human emotion can contain illogical conflict,"(00:22:12 – 00:22:16) says Max in near the end of *Transcendence*, in an unnecessarily preachy scene. The prospect suggested by the junction of loss and technology is the more intriguing thought here. Is it possible to save a loved one, one's soul or data-mate, if he or she is going to die? This notion of how, in the future, we would not need to "bury" a loved one if some pleasing, convincing digital replica can linger has a lot of poetic appeal. One night, the virtual Johnny Depp asks Evelyn, his wine-soaked wife, "Do you remember when we met?" "Everything comes back to me." When her own husband can't even remember their wedding anniversary, what women wouldn't fall for a computerized replica of their man, whose memory is fool proof and backed up? *Transcendence'*s projection of keeping the digital copy of the human beings even after their death throw questions like 'What if the digital versions of Adolf Hitler or Vlad the Impaler were available and they were free to act the way they want when they are connected to a supercomputer and internet? . The kind of Hybrid

human beings which were created by Will with the help of advanced nanotechnology have the capability to indulge in any act that is moral or immoral. Once their body is damaged, nanotechnology can reverse their body to its previous version or a more advanced version without any effort. The portrayal of these advancement and the making hybrid beings shall reasonably evoke technophobia in the viewer of *Transcendence*.

4.4.7 Technophobia in *Chappie*

In *Chappie*, a robotic police unit has been established in response to rising crime rates in South Africa. The true trouble begins when the lead robot's developer, without his company's consent, transfers "consciousness" to a decommissioned robot scout. The newly sentient scout vanishes, leaving the robotics industry to scramble for a way to reclaim it. In a ploy to turn the scout into a robot gangster to help them make money and to save its own skin from a homicidal thug, a small gang captures it and names it "Chappie." Meanwhile, tensions exist within the robotics corporation between those who want to expand robot autonomy and those who wish to build robotic skeletons to keep humans "in the loop," as exemplified by Hugh Jackman's character. Many of the hallmarks of today's real arguments over the ethics of artificial intelligence and robotics can be found in the internal intrigues and drama of the firm, Tetra Vaal, particularly when the military and police forces cooperate closely with huge technology companies.

Military technology is no longer limited to firearms, ships, and satellites; rather, it includes of complex, integrated hardware/software systems that can incorporate emerging decision-making skills, such as drones that automatically locate and destroy IEDs in Afghanistan. The military employs human decision-makers, particularly in tactical scenarios, but basic steps toward autonomy are already being

explored. The rising usage of military equipment by police agencies is a topic of intense discussion at present. This worry, exemplified by the ongoing unrest in Ferguson, Missouri, is so important that the president of US established a new Law Enforcement Equipment Working Group to investigate how state and local police can utilise military technology. We expect that a broad social effect on technologies such as A.I. will aid in the development of machines that are less dangerous and immune to human flaws such as prejudice, fear, and the adrenaline rush. However, for this to occur, individuals and organisations from outside the military must contribute to the development of the technology.

How and whether we train autonomous technology to make "good" (i.e., ethical and moral) decisions is one of the unique issues of developing such technology. Chappie exhibits a wide variety of human-like perceptual and cognitive biases that are the result of human evolution rather than being inherent to intelligent beings in general. For instance, Chappie "naturally" avoids loud noises, exhibits "whole object bias" while learning English, and adopts a humanlike understanding of the term promise (despite the robot's experience indicating that "promises" are frequently hollow). None of these capabilities or inferences are necessarily implausible in a programmed system, but to believe that they would all emerge spontaneously, along with broadly humanlike ethics, is to overlook one of the most crucial aspects of artificial intelligence and robotics: that they can be humanlike at times, but also profoundly inhuman in how they learn to represent and manipulate the world.

Researchers from all across the world are working on the philosophical, technical, and political issues that come with creating moral machines—what ideals are explicit enough and computationally tractable to be incorporated in computer

code? What role should they play in machine decision-making? Is this the same set of values that should guide human decision-making? And how should society manage the decision-making processes through which increasingly intelligent and powerful computers are assigned goals, from a political standpoint? Should individuals be permitted to reprogram their robots to commit crimes, as shown in Chappie, and is there any way to prevent this? Although research and debate on these problems are still in their infancy, there are already reasons to believe that our future A.I. and robotic technologies will be required to reason about ethics differently than humans (which itself is still an unresolved question). "'Chappie' can be interpreted as a passionate plea for moral instruction, not just for humans but also for our future silicon-based companions" in its greatest moments. The greatest threat arrives when this plea is not considered by the tech giants and this makes us doubtful about the favours technology can do for us and this suspicion can eventually lead to technophobia.

4.4.8 Technophobia in *Autómata*

Autómata a post-apocalyptic drama with a wounded heart, envisions a bleak future 30 years from now, when the world's population has plummeted to 21 million people. The vast majority of the earth is a radioactive wasteland. The remaining humans are supported by primitive robots developed by a nefarious organization and programmed with protocols that prevent them from modifying themselves or killing any kind of life, clustered in crumbling, walled towns. In a cycle known as regression, the globe has regressed technologically.

Jacq Vaucan (Antonio Banderas) is an insurance inspector whose wife, Rachel (Birgitte Hjort Sorensen), is expecting a child. Despite the world's deterioration, Rachel remains optimistic about the future. Jacq, who despises society and fantasizes

about abandoning the filthy city to live by the sea, is not one of them. There are recurring pictures of a tiny boy frolicking in the surf (probably his visions of himself as a child).

The film's first and strongest half, directed by Gabe Ibáez, is a sci-fi noir in which Jacq is tasked with investigating the death of a dog by a robot. According to the death, the second procedure has been broken. "Autómata" has taken on the tone of a business thriller, complete with cover-ups and fatal office politics, by this time.

As Jacq's investigation deepens, it appears increasingly plausible that a watershed moment in history is approaching, in which artificial intelligence deviates from human control. When Cleo, the only female robot in sight, politely refuses to take commands, it's evident that these machines are trying to break free. Melanie Griffith, who plays Dr. Dupre, the scientist who cares for Cleo, speaks in the Betty Boop voice of Cleo, with her rouged cheeks, gentle voice, and huge breasts.

"Autómata" starts to go crazy when Ms. Griffith arrives. Jacq flees the city and ends up in a desert camp with Cleo and other evolving robots. A film that could have succeeded as a comedic satire with a feminist political undertone loses its identity, as well as any credibility as a metaphor for technological excess. With the growing number of self-repairing, self-educating robots, the only question is whether they will kill or aid humanity, which, with some exceptions like Jacq and his employer (Robert Forster), is scared of losing control.There are some intriguing concepts here, but they get lost in a sea of uninteresting, poorly coordinated shootouts and other action drivel. *Automata* is nothing but the futuristic nightmares involving Antonio Banderas' tumultuous relationship with a slew of robots.

When human life is supported by robots for existence, the question arises that how long they will be able to support human life ? in addition to the presence of self-

repairing and self-educating capability , how long they will be willing to extend that support to an inferior race called humans? What if the protocols of restriction breeched by robots and start to dominate humans on earth? How did the earth in *Automata* is so radioactive that even a small rain is something that is to be feared with? All these questions point out to a particular point that , if technology is unwisely used , or used beyond a limit , there will not be humans . it is very natural for a human to get phobia from all these questions evoked by *Automata*.

CHAPTER V

THE ROLE OF SEX AND GENDER IN *EX MACHINA* (2015) AND *HER* (2013) AND *THE MACHINE* (2013)

This Chapter discusses questions like “is sex a mandate for posthuman beings?” is the human sexuality gets reflected in posthuman characters? What do the role of sex in human posthuman interaction? What is the politics behind creating female robots when it comes to the case of assistance? Is there a sexual hierarchy that exists between posthuman characters? The roles of the female robots in the films Ex Machina, Her and the Machine force the viewer to think that conventional patriarchal notions do influence the making of female posthuman bodies. This chapter will analyze the sexual politics that lies in the creation of posthuman bodies. It will also examine how human sexuality is reflected in posthuman characters.

5.1 The Genderization of Machines in Science Fiction Films

Historically, “men have regarded technology as a measure of their power and masculinity based on their technology capabilities”. In contrast to male computer users, “women are less likely to possess advanced programming skills because of their constrained position within society” (Zdnek 430). Women's association with technology in the early phases seems to be a continuation of patriarchal and capitalist dominance that obscured technological capacity to push beyond existing borders. Judy Wajcman has noted how eco-feminism and radical feminism dismissed techno-science and made techno-science "inherently patriarchal and malignant". But technological advancements, gender identity issues, and defining what it means to be human have been redefined by current discourses. Modern Western societies are characterized by rapidly evolving computing technologies, which mark the onset of a new beginning in human-machine relationships, as they change the way we perceive

our physical bodies and sense of self. Technology has also changed the definition of gender over time.

It has emerged in recent decades that “women are treated as part of a continuum, proposing hybrid identities that challenge binary gender roles” (Wood 18). As such, intellectuals like Braidotti, Hayles, and the so-called "New Materialistic" movement offer a complete, empirical survey of computation's influence on embodiment and subjectivity, moving to a post-human that is a hybrid that breaks down the division between information and matter. As well as opening up a new tradition of critical feminism, their writings address our subjectivities within a technologized society. Additionally, feminist scholarship today is much more optimistic about the possibilities that radically new technologies offer to liberate women in such new sites. Women are liberated from cyberspace, for example, in cyberfeminism, which celebrates computing technology. Critics and robot designers have expressed many concerns regarding the process of assigning gender to robots. It is well known that roboticists have a tendency to allocate gender to robots based on their subjective assumptions about femaleness and maleness and that gender attribution is a method of reality construction on their part. A key argument made by Anne Balsamo on this topic is that “gender is a quality of the bodies we inhabit and of the social discourses or semiotic systems in that those bodies are embedded” (Balsamo 1996, 36). Thus, robots as social constructs are based on sexist methods and practices. So, the traditional codes of representation used to represent automated machines such as robots are still easily recognizable by consumers. Balsamo noted that "Some boundaries are more closely guarded than others when they are replaced by technological innovation" (Balsamo 1992, 208).

It is a comment about the gendered boundary separating males and females, despite the technological advances that have rewritten the body. Gender remains therefore an integral part of human identity. In popular discourses like cinema, robots are conceived differently. In science fiction, robots are primarily gendered, whether they are rebellious or friendly machines, and therefore people tend to assume one type of machine is feminine or female, and the other is masculine or male. *Technologies of Gender* (1987) by Teresa de Lauretis argues that the “different mass media such as cinema have influence over social meaning thus being able to "produce, promote, and impose" gender representations”. (Balsamo, 1996, 36)

According to Lauretis, gender must be theorized in ways ahead of the notion of "sexual difference", advocating for a construct of gender beyond the confines of hegemonic discourses. This thesis in this section explains a geometrical definition of masculinity based on contemporary science fiction films that features a male robot. Science fiction literature and cinema depictions of female robots have drawn the attention of several gender specialists, who believe that these notions be embedded in cultural and social norms that perpetuate a conventional image of women. *Metropolis* (1926), Fritz Lang's 1927 film adaptation, or the movie *Stepford Wives* (1975), for example, portray female robots which reflect stereotypical ideas about womanhood, leaving very little room for innovation.

As a result, these robotic figures represent empty and artificial public bodies. However, we should consider that despite the cultural, social, and biotechnological forces which transform the human body in contemporary Western societies, we must be attentive to how our culture presents a radical rendition of the human body, especially if we are considering robots. Popular discourses depict gendered - or slightly sexist - robotic figures. This may indicate that robot designers allocate robot

gender based on their pervasive bias (and generally patriarchal) regarding gender roles, perpetuating the gender stereotypes and introducing what has been dubbed "posthuman sexism."

The development of gynoids, or robots fashioned after humans, may help to explain why femaleness is not innate. The exaggerated femininity and sexuality displayed by these robots, as depicted in films like Barbarella and Stepford Wives, provide us with the ideal opportunity to consider gender in our technological and post-human society. Gender is not a property of the body or something that initially existed in humans, rather a collection of social, psychological, and behavioral effects. The dialectic of male sexuality reproduces gender and sexuality from a male-centered frame of reference. According to Cox Palmer White, “hegemonic discourses also include the terms of a different construction of gender. When discussing representations of female robots on screen, the aim of this thesis is to offer a movement between discursive spaces of sovereign discourses and the "off-space" of these discourses” (22).

5.2 The Science Fiction Genre and Masculinity

To eliminate the traditional configurations of power, many movies feature man-machine cyborgs, men who are terrified by impending "others", androgynous men abducted in cyberspace, and after all, male imagery which might be considered "out of the norm". The majority of contemporary films tend to portray robots or cyborgs having unconventional gender features. The figure of the sensitive male robot represents, in this context, an alternative to hegemonic discourses on masculinity. Gender-based considerations indeed dominate the implications of robot design, but it is believed that they can also signal a novel way of looking at how technology,

gender, and the body relate. By Lauretis' statement, "No system of sex-gender exists independent of the social reality it cultivates" (7).

In robotics, the challenge is to avoid falling into the dualistic paradigm characterized by hegemonic discourses while acknowledging the fact that cultures have a great deal to do with how robots are designed. Because of this, movie stereotypes and conventions dictate what a male or female personality should be, with marketing strategies often influencing the choice. Despite all the difficulties of suggesting "postgender" depictions of robots, Affective Computing remains one of the most challenging areas in contemporary robotics. Science fiction collections include a variety of robots that defy conventional definitions of masculinity despite these challenges.

"The sensitive male robot" is a character that challenges the conventional view of masculinity on screen. Several recent developments in social robotics have dealt with the effects of human-robot interactions, which suggest that human characteristics are to be integrated into social robots. In a prediction about the new century, Rosalind Picard, alma mater of affective computing, proclaims that "computing will help to illuminate the nature of human emotion more than making perfect images" (Picard 2000, 53). New applications of computer technology to various fields of knowledge are provided by her research. “Human creativity, intelligence, and rational thinking are all influenced by emotions” according to scientists (Picard 1996, 14). So, it seems necessary that robots that interact with humans naturally and intelligently must at least recognize and express affection.

A recent trend in cinema has been to portray robotic beings as paler and gentler than they were a few decades ago - replicants, malevolent clones, armored machines - perhaps because they are perceived as close to humans partially because

they can sense and show emotion. Therefore, movies such as Columbus's *Bicentennial Man* (1999), Spielberg's *Artificial Intelligence* (2001), or *Wall-E* (2008) portray sensitive robots who encounter challenges fitting into the world in which they live, who are, into a sense of questioning masculinist visions of gender. The following examples of soft-hearted male robots will shed some light on these issues: Andrew, the android in *Bicentennial Man*, as well as *Wall-E*, the protagonist of the animated movie of the same title. They both feature robots whose artificial nature renders them more susceptible than humans and other animals. Their "alterity" or "otherness" makes them different and unique in a sense. There is a positive evolution in the portrayal of sensitive male robots in the two films, from adapting to human body patterns to experiencing the discomfort of feeling inside a machine despite the long time gap between the two movies. Taking its inspiration from Isaac Asimov's story of the same name, Christopher Columbus' *Bicentennial Man* (1999) depicts the gradual integration of emotions and feelings that leads the android toward becoming a human. When Andrew (Robin Williams) is bought as a household robot, he starts to display emotions and creative thoughts.

Andrew's skill to sense, his sociability, creativity, and imaginative abilities cause his owner to return to the company where he was purchased to establish that he is only the result of an anomaly. Andrew recognizes these feelings, however, as something unique, and begins a long-term and conscious humanization process. With the latest advances in biology, his mechanical body gradually transforms into a human-like body, until he is indistinguishable from human beings. In the end, the movie implies that the design of humanoid robots for use in our society cannot ignore conventional gender traits. In addition, it implies that the body of the human (organic) represents the "correct" repository for feelings. The idea of designing a robot implies

that to make humans comfortable with it, it performs bodily actions and displays emotions that are familiar to us. The design of actual robots is heavily influenced by haptic technology. The External and internal transition is needed by Andrew from the mechanical to the biological maintains standard ideas of the body. Generally, to achieve the three main things in life, he desires - to marry the girl he loves, to belong to society, and to be called human - he must give up his immortality. As a result, he is transformed into a rebellious character: both probability with his robotic character and with his inherited manliness. *Wall-E* (2008) depicts the sensitive robot much more positively, as its protagonist rejects the classical body prototype, and so becomes the manifestation of the posthuman body, which is an icon of the complex and technologically-driven environment of the 21st century.

In *Wall-E* (2008), an android is responsible for cleaning up a cluttered planet after it has been abandoned to accumulate trash. The film's most interesting feature is that it proposes an android that lacks any recognizable features of gender, in stark contrast to *Bicentennial Man.* Because the film is an animated one, no actors are portraying the characters "behind" the robot. Additionally, Wall-E is alone on the Earth, and we never hear its voice, and we have not seen any typical sex marks. Due to Wall-E's love for Eve, another robot who also has a planned task, and as the plot progresses, the film inevitably depicts Wall-E as a male robot. Eve is a bit more obvious in terms of gender traits: Because her name and voice are distinctively feminine, people assume Wall-E is a sensitive male robot who falls in love with Eve and follows her on an exciting journey through space that will change everyone's lives as well as theirs. Rather than the brave hero who protects the girl, this robot is a distinctive character who shows weakness and naivety on several occasions. He also likes to watch musicals. The film insistently emphasizes his feelings throughout, and

this is done through music and particular shots that encourage the spectator to feel his love for Eve. Among other things, the humanization of the robot can be attributed to the particular two films showing the superiority of feelings over technological morality. This device is no new development, but it has been featured in a variety of movies and books. For Examples, the monster formed by Dr. Frankenstein, the replicant Rachael from *Blade Runner* (1982), C5 from Short Circuit, C3PO or R2D2 from *Star Wars* (1977), the clone call from *Alien: Resurrection* (1997), and more. It can be argued that, our understanding of men in a time of technological transformation and globalization can be enhanced by the image of the sensitive male robot. From mere imaginary creations, these robots have developed into a "reality" that reflects on the capabilities of today's computing technology and on the dilemmas we face regarding gender identity. It's not only Andrew, but Wall-E as well, who both appear to be oddities - even among their robot species - based on the rules dictating how gender has to be. The sensitive male robot is thus a representation of marginal masculinity in a binary society

5.3 Anthropomorphizing Machines

In addition to its intelligence, anthropomorphized technology can be viewed as a "surrogate person" by individuals. Simons calls the robot a "surrogate person". This argument has value insofar as a robot that is unable to do human-like tasks cannot be perceived as human. Simons admits that humans are more prone to treat anything that looks human as human because of their primitive animism. Robots that physically resemble humans that would have occupied those types of relationships will likely be in high demand as humans become closer to robots in the future. When humans come across robots in science fiction films, they may need to use gender markers to indicate their relationship with them. Even when the revealing of gender (whether honest or

not) has little to do with romance or relationships, the disclosure of gender (whether honest or not) appears to serve as an anchor for further interactions. In time, humans may become less dependent on the physical cues of humanity as they become more familiar to interface with non-human counterparts. "Technology must meet the expectations of users to be less disruptive. Human interaction is believed to be gender-based. It cannot be ignored that gender affects engineers", according to Reeves & Nass (96). However, women cannot abandon or change traditional roles, but gender-specific systems (e.g., by using animated icons or voices) can adapt traditional roles to reach their goals. If they are evaluating performance, for example, men are more likely to obey male voices. New technologies will likely change expectations, but they may also cause some confusion. In an era when gender politics are entrenched, *Alien: Resurrection* (1997) stands out. It would be disruptive if Winona Ryder appeared as an Auton. Autons are machines created by robots. Since gender is irrelevant to robots, it will not be required in new models as it will supply no purpose and provide no biological advantage. It is harder to change gender roles.

Ron Perlman's Johner in *Alien Resurrection* (1997) is played on television as a sympathetic character rather than the physical beast Perlman portrayed on television opposite Linda Hamilton. Even though the robotic Annalee Call is described as being genderless by Johner, it retains several stereotypically feminine features that provide merely as gender markers. A human male is holding Call hostage and she is unable to escape; she must be rescued. The call appears to be small and has at best normal human strength. Moreover, she botches an assassination attempt by letting her emotions cloud her judgment. Accordingly, female ineffectiveness is marked by the incapability to suppress emotions at will, just like with Becky in *Invasion of the Body Snatchers* (1956). Ripley is a protagonist of the Alien film series. Ripley embodies

characteristics that are complementary to those of Call who is the human clone. Ripley is giant and impressive, has herculean strength, executes the enemy by method, as well as functions with no-nonsense. A lesbian reading could benefit from such complementarity of the clone and machine relationship in the film. Each character transgresses heterosexual conventions. Robo-assembly and cloning are used to produce Call and Ripley. A heterosexual male explicitly rejects Ripley's call; she violently repels male sexual advances. Because of their similar "unnatural" births, the females bond because they reject heterosexually charged human interactions. Nonetheless, gender roles are still dominant. After all, our robot creators are human.

5.4 Machina and Woman

Simons (1992) reports that early robot ads tended to depict helpless females in the grip of male robots. In Simons's examples, women are portrayed as powerless and dependent on men for their survival. An image of Patricia Neal drooping limply in Gort's arms appears on the poster for *The Day the Earth Stood Still* (1951). The movie *Forbidden Plant* (1956), also features a scene in which Ann Francis is asleep and being held by Robby the Robot. Although he oscillates in the film between traditionally feminine tasks like cooking and sewing to traditionally masculine ones like heavy labor and defending, Robby is fully masculinized in the promotional material. On a poster for *Robot Monster* (1953), Claudia Barrett also appears in the limp (probably fainted) position. The subjects of science fiction films are seldom treated uniformly. As Brooks Landon (1992) describes it, the genre may be described by its paradoxical attitude towards technologies such as them: amazed at all that it can do, yet terrified by what it can do. Women are portrayed ambivalently because they are sometimes viewed as technically competent, but they are also portrayed as "helpless and helpless in crisis". (Landon 214).

Women may simply be better able to meet threats through conquest and destruction when they do exhibit practical skills, as in the Alien movies. In this case, the perseverance of gender attributions that diminish women could be attributed to Foucault to help explain the process of marginalization. Despite Foucault's focus on the creation of identity through the physical and social bodies, Balsamo argues that

> this process does not operate equally for women. In consequence, Foucault's thought remains unaddressed in the concept of gender, which becomes even more complex when technological innovations such as prosthesis, artificial insemination, the possibility of cloning, and further developments challenge the traditional "natural" roles of men and women. Consequently, between social customs and outlook which embed them in a human (or human-like) physical form, gender identity is formed by the process of gendering that occurs well before physical birth. There is a larger issue at play here: a tension between the strange and the well-known, symbolized by the difficulty in portraying women constantly, even within the same film. Women occupy both the positions of alien and protected treasure, subsumed by patriarchal normative codes of justice and propriety (44).

Foucault may be used to reframe the issue. Women are defined as objects and subjects by science fiction films, which are sources of gender problematization. In other words, women can act as agents in their own right or are subjects of forces outside their control. Many science fiction films simultaneously feature both of these approaches to depiction, which are not mutually exclusive. There is no clear or consistent definition, role, or status of women or femininity in the hypothetical universes created in cinematic science fiction. It provides fertile ground for exploration since it anticipates what may be considered true and appropriate in the

future. Science fiction is a multimedia experience that explicates the conditions of scientific truth while also envisioning the practices that set up conditions for social identities, such as gender. Research on science fiction opens the prospects of proactive, preventative research that unveils “possible conditions that could promote or aggravate domination rather than restricting the study to historical retrospectives” (Foucault 1998)

5.5 Gender Roles in Conventional Films

Women's bodies have long been regarded as machines. By identifying a woman with the animal because of her lack of rationality and nature intended to reproduce instead of the autonomously "productive" opinion ascribed to men, the early associations establish an association establishing precedents for analogies of women with machines that do not rely on the knowledge needed to make them. Susanna Paasonen writes, "…the patriarchal exploitation of women has helped cast technology and men as having more power than women" (Paasonen 171).

During the 1970s, increasing technology revealed how important such interrelations were to the rise and fall of gender inequality. Since then, feminist critical theory has emphasized the importance of such interrelations in depicting the rise and fall of gender inequality. In the century that followed, feminist techno-science and cyber-feminisms addressed this matter to the core.

Despite Donna Haraway's *Cyborg* (1984), which contributed extensively to the defamation of women's zero status, “it only proves the scientific, technical, and social implications” (Sadie Plant 1997) of the doomed woman – science/machine/computing alliance, and its deconstruction and subversion wherever feasible. “Women are not a tool of technology, but rather a manifestation of the expert culture of men” (Paasonen 171), in which they act as some sort of instrumentalist

technological device. This historically legitimized silent assumption reveals more about womanly identity at all stages than we can imagine.

The science historian Londa Schlesinger showed in *"Why Mammals are Called Mammals: Gender Politics in Eighteenth-Century Natural History"* (1993) how the sexist practices and discourses inherent in the creation of female identity in western science have contributed to these practices. In viewing cinematic depiction of artificially created beings conceived as female, the extent of such a construction becomes obvious. It's important to follow the performance of popular culture models closely due to their impact on society and their ability to teach us a lot. So far, artificial women in film have mainly been categorized into two distinct groups. Among the extremes is the licentious, hazardous, and violent doll, whose hyper-sexuality helped her complete fatal missions.

Blade Runner's Zhora is a replicant that is both Beauty and the Beast, as described by this fictional character. There is also the Victorian angel in the house figure, a perfectly compliant, subordinate spouse; a Stepford wife, a term borrowed from the sardonic novel by Ira Levin. Galatea, the classic mythological image of the woman who can be tailor-made for any purpose, is a particularly important artifact among this group, where tailor-made design has moral connotations as well as physical ones. Regardless of the stereotype, these creatures reflect all the fantasies of sexual objectification, recalling Pygmalion rather than Prometheus. Despite satisfying their assigned point, i.e., fighting and seducing men, characters in the first category are brought to justice by male executors or subsidiary events in the plot. Despite being programmed as such, they nevertheless receive punishment for their deviant behavior. A woman, especially one created artificially, must be tamed if she is to live.

5.6 Angel/Devil Dichotomy Portrayal of Women

First depicted in cinema in Fritz Lang's bivalent Maria from *Metropolis* (1927), the angel/devil dichotomy is interconnected with the human/non-human dichotomy. The portrayal of the character Maria as an angel before being eroticized and becoming a robot, as well as the evilness that comes with that, have established an enduring model that has persisted until recent times. As a result of Maria's ground-breaking accomplishment as both the story's protagonist and a woman, she continues to be an artistic and speculative referent; an icon.

According to Techno-heroines: Female Identities in Cinematographic Science Fiction, 2010 Filmic artificial women were long relegated to supporting and mostly expendable roles. There could be exceptions, particularly in more daring narratives, including Helva in Anne McCaffrey's *The Ship Who Sang* (1969) and Molly Millions in William Gibson's *Neuromancer* (1984). Even though these characters were at the forefront of the action and possessed sophisticated philosophical and political analysis, most of them remained commodities of both the human and non-human patriarchies, imperceptible to average audiences outside the counterculture world and consigned to limited roles. Hollywood has ignored these attempts, being understood as a mass-distribution tool and thus a benefactor of popular culture.

Recent years have seen a change in this. The subgenre has been renovated in several innovative ways, which, have created a paradigm shift in character representation. Even though most of the films in this study are not mainstream-indeed, they belong to the independent category-all of the films chosen for this study are English-language productions, thus ensuring a wider allocation.

Female characters are often stigmatized because of male authorship, but that is not true. The films listed here have all been directed by men; they have all been

written by men. *Ex Machina* (*Alex Garland* 2015), (*Gabe Ibánez* 2014), and *Her* (Spike Jonze 2013) are examples of films that suggest related fruition in the depiction of artificial females. They have become sexualized; there is no point in sexualizing them.

Most importantly, these women are the ones who drive the story forward. There is no secondary character or justice for them. Their artificial male counterparts outlive them and they evolve beyond them. This filmic sample will also be a useful benchmark to understand how the morphological evolution of a fembot from mechanistic to cyborg, to a pure AI, parallels the narrative subversion. A gradual process of social, psychological, and cognitive growth underpins every character's acquisition of consciousness and identity. Love, technology, and art play significant roles in this development.

5.7 Treatment of Women Characters in Conventional Sci-Fi Movies

Sci-Fi movies explore the future of science and technology and how humans interact with and relate to these advances. The sci-fi genre, though, is about more than science and technology. It is also about finding new ways to imagine a world that isn't ours. We create the world we imagine with the worlds we live in mind, whether they're dystopian or utopian. Sci-fi movies are especially concerned with the dilemmas and opportunities linked to science and technology issues that are especially critical in societies that invest in scientific and technological developments as well as the depiction of the interaction between humans and ‘others’ (e.g. alien invasions, artificial intelligence, and cyborgs). This section looks into Russian sci-fi cinema by critically analyzing female aliens and exceptional characters in post-Soviet sci-fi films. A very few scholarly works discuss female characters in post-Soviet sci-fi cinema, mainly focusing on individual films rather than exploring the phenomenon in

cinematic history. However, there are few studies devoted to comparing different representations of female aliens and superhumans. By comparing post-Soviet female characters with technological ones, we can better understand the function of women in post-Soviet culture, as well as further explore the representation of women and technology in sci-fi cinema in general. In discussing women's roles in Soviet and Russian culture, scholars often conclude that it is a highly patriarchal society with little or no equal opportunities for women to fulfill their potential. Views like these can be interpreted as essentializing as if there are common experiences shared by women based on biology. Interestingly, while Tulova et al. (1999); Turovskaya 1993 and Heldt et al. (1999) saw women's traditional role in Russian culture as oppressive, Maya Turovskaya and Larisa Shepitko saw the role as quite empowered.

According to Heldt and Shepitko, “the heroine is set apart by the insistence on female superiority in fiction: Female superiority in fiction is seen throughout Russian culture as the basis of her moral superiority”(Heldt 4) describes it as a natural superiority between untrained and untaught. Despite Heldt's descriptions of the female role as “perfect, it is unattainable for real women” (and unattractive to men) (Heldt 4-5). In interviews and essays, Shepitko, one of the most celebrated Soviet directors, actively addresses issues related to gender and filmmaking.

A woman is more intuitively capable of observing some phenomena in nature than a man, according to Larisa Shepitko. Shepitko's more positive views on women's function are in stark contrast with Heldt's more negative assertions of women's function. This is partly because Western feminist ideas deconstruct essentialist conceptions of gender, while Russian feminist ideas assert that gender binaries are natural and some female characteristics are superior.

However, the definition of women's function in Russian culture offered by both Heldt and Shepitko closely resembles that of 'the Eternal Feminine. 'The Eternal Feminine Beckons Us Upward' was the final line of the second part of Goethe's Faust (1832) in which the term first appeared. A cultural archetype of moral superiority and eternity emerged in Europe in the 19th century. In summary, Heldt believed the classical works he analyzed were influenced by and contributed to contemporary ideas of femininity, as well as being inspired them.

5.8 Science Fiction Roles for Women

In the modern era of sci-fi themes, audiences expect new relationships when they transcend the boundaries of the present and start looking forward. Women in science fiction often play supporting and realistic roles, which is well received by feminists. First of all, science fiction films have tended to emphasize the extensive use of machines and scientific innovations decrease the disparity between genders in absolute strength.

Second, feminist movements have continually advocated more equal treatment in sexual relationships. This ideological trend influenced the films and caused them to change their original stereotypes. Although an ideological trend must develop over some time before it can begin to change social reality, it has taken time to do so. The portrayal and display of women's roles still requires development in science fiction films, even though they are considered a platform to discuss gender issues.

Throughout the history of science fiction films, from the emergence of male-dominated discourse power to the role of being somewhat unrelated, to being confined and esteemed as dolls, female characters have slowly emerged from male-dominated discourse power. Furthermore, they depict their social values and characteristics from more perspectives, which allows them to better reflect the role of

women in that society. Women's roles and values in films are gradually recognized in society, as well as their status and values.

Early sci-fi films portrayed women as the embodiment of evil and terror. There are many examples of female characters that are associated with evil, such as *Frankenstein* (1910), *The Bride of Frankenstein* (1935), and *Dr. Jekyll and Mr. Hyde* (1931). It represented a debauched woman who possessed the vicious personality of the leading character; the former portrayed a bride who was turned into a zombie by a scientist.

The western world was dominated by liberal feminism during this period. “Political and legal rights were an imperative issue for women” (Stein & Mariley, 2013). Women’s efforts resulted in several laws protecting their rights. Films, however, were not affected by this trend. It is not surprising that much of this metaphor for women's sardonic and libelous behavior appeared in early science fiction films: men seem to be always scared that behind the beautiful appearance of a woman remains a great evil.

The high-speed, stimulating films of Hollywood were mainstream by the end of the 20th century. Also following this trend is science fiction, which has shifted from a horror theme to an adventure story. The characters however have been paired with women. Usually, they are paired with a male character as a housewife or lover. Leia Organa Solo left a lasting impression on many audiences when the first Star Wars film was released in 1977. Princess Leia is portrayed as a goddess in this film. It is the role of a prize-winning "trophy" to represent the power of war in bilateral situations, but she lacks a distinct narrative value.

In addition, the 1982 film *Blade Runner* is an important work in the history of science fiction. A copy of a human being is created in this film thanks to science and

technology. Blade Runner is an allegory of today's social reality as opposed to *Star Wars*, which took place in outer space. Ruppert, (1989) discussed a range of social subjects, including the energy crisis and scientific ethics. This film features a female protagonist who is a replicant without individual characteristics, even in such an elaborate narrative context. Blade Runner portrays a new woman of the future in its illusion of the future. The look of a dream lover combines all the desires men have for women.

Rachel the replicant is a young, attractive replicant with an innate sense of gentleness and a beautiful body. She embodies this fantasy incarnation. The actor's and the audience's aims for her existence are not the same. A series of images continued to show this Dream Lover. A new image of a perfect girlfriend appeared as part of *Blade Runner 2049*. This woman did not exist at all. Her virtual image existed only in film. She can change into different outfits depending on her male counterpart's mood. With virtual projection girlfriends, male audiences can expect a more attractive and dependable decoration. These female characters appear to be farther away from female audiences. This is an example of stereotypes being followed. However, they do not reflect female audiences accurately. Rather, societal and family roles of women have changed. Also, Sutherland, states, “There is a shift among some women to pursue careers in the workplace and compete fairly with men instead of merely staying at home” (621).

The second wave of feminism emerged at the same time, which aimed to improve the status of women in all spheres. This included equality in the division of labor at home. There seems to be no way to satisfy audiences with these doll-female characters. Characters that are self-sufficient and not followers of male characters are a requirement for the audience. In reality, McGinn claims that domestic chores still

take more time out of women's lives than their husbands, and workplace bias still exists against women.

The science fiction film industry is molding the models of independent and new women, some of whom see careers and families as evenly important; some of whom take on leadership roles and contend with men at work. Science fiction films allow female audiences to explore a broader range of exciting potentials. They support them to make diversified career choices than is traditionally possible in describing female characters' social status and career choices. “Women's characters in science fiction films are explored and challenged, breaking stereotypes and overcoming limitations” (Hollinger 28).

5.9 Beginning of Feminism in Sci-Fi Films

After entering the 21st century, feminist voices have finally reached filmmakers. By now they realize that audiences expect diverse representations of independent females. As time progressed on, “post-structural feminism began to influence science fiction films” (Chamarette 12). A depiction of real events and a critique of social issues can be found in films and other works of art. This is because there is an inextricable link between films and the real world. A distinct trend of thinking will also emerge through films and the effects will be similar to those found in reality. It is a mutually reinforcing process.

This statement may be accurate; Thompson mentions that the reason science fiction works perform so well in British society since audience members rely on science fiction to provide them with insight into matters of politics and real life. The story of a woman has become increasingly prominent in films today, as these women are given a strong personality and can take part in plot development. Social stereotypes can be broken by these films. Films like these inspire women to become

more successful and socially active. This trend has been reflected in film production since then. There was a story about an alien planet in the film *Avatar*, released in 2009. As the film's lead role, Neytiri is a tall, muscular princess who is also a warrior. Many of the women described in this film fight for the rights of their kind and justice. Women are represented in these images no longer as young, beautiful, and idealized, but as strong, knowledgeable, and mature women. Avatar emphasizes kindness and wisdom rather than gender but resists the spirit of authority. Science fiction films began to include female scientists after this time. A female pilot named Amelia and a female scientist named Murphy were the protagonists of the 2014 game Interplanetary Crossing.

The lead character in *Arrival* (2017) was Louise, a linguist who deals with extraterrestrials. Her role in resolving unnecessary wars and solving humanity's problems eventually led to the success of the movie. There is no doubt that Louise can successfully conquer all hardship without the assistance of a hero, which makes her a non-traditional heroine. Studies cited by Chamarette found that people's perceptions and perceptions of television series, novels, and films are affected by these media. Films could, therefore, contribute to making science a subject of discourse that promotes gender equality. Thus, understanding these social trends through the female/male relationship in films can help us accept new ideas and understand these social trends. This idea is shared by both Orthia, and Surmeli in their works. According to Billson, science fiction films were used to assist students in understanding and participating in science education (2018). The study of science fiction can be very beneficial for female students who are by tradition viewed as fruitless in science studies. Orthia, clearly states that “a large portion of the scientific

workforce is comprised of women due to the influence of science fiction films" (2016).

"Women have become more and more prevalent as laboratory technicians and scientists since the beginning of the new century" (Frize 31), and the wholesome representation of female scientists in science fiction films has provided them with more motivation to pursue their careers in scientific research. Science fiction films represent an example of films that actively promote women's participation in science. Modern society is becoming more like the idyllic society depicted in early science fiction films as science advances. Advances in technology and advances in ideas are different, however. Women's equality remains impeded by long-standing stereotypes. Despite some limitations, sci-fi filmmakers are actively challenging gender relations in the new era and embracing feminist positions to promote true female roles and discover the potential of gender issues.

The new generation redefines the role of women in science fiction films by breaking down the conventional framework. It can be observed from the above examples that descriptions of female characters in sci-fi films have diversified as time goes by: women are no longer products, but rather pragmatic and self-governing women. Women range in age and have a variety of occupations. Male control over these characters begins to fade. Women are experiencing greater tolerance in society as a result of these changes. However, through science fiction themes they have also set expectations for the future.

5.10 Treatment of Women in Selected Movies

We project ourselves into the artificially created being, which is a personification of the other. Humanoid narratives have incorporated several motifs that have seemingly endless repetition: the creator tries hard to create a human-like

creature, but once that compassion is achieved, the formation is discarded. Also, it often reveals our lack of humanity, something we can only see if we look into another person's eyes. Creation may, on occasion, seek answers to existential questions by turning to the creator. When creatures become too similar to us, they become a threat. We want them to be like us, but when they become too alike they become a threat.

There are two aspects to this paradox: an intrinsic denial of the impression of the human, explained by the Uncanny Valley Theory, and mistrust of intelligence that is similar to or exceeding ours, which is the only reason why our species survived. Furthermore, these creatures are often afraid of revenge when abused, so they may fight back. We can apply this to all narratives involving humanoids. Another cliché of the subgenre is the gender assignment of robots and artificial intelligence for sexual purposes. In either case, the artificial female will always contain some sexual component, regardless of whether she is exploited as a kind housewife or as a lethal killer.

Our artificial female forms a more evolved morphology in The Machine. The obscure Defence Ministry that employs Ava, an AI expert hired by Vincent to aid in his research, kills her. Embraced by the mission as the only way to heal his daughter, Vincent devises a cyborg soldier in Ava's form using his AI work. This scene recalls the inception scene from Metropolis, reinforcing the union of the machine with the female, a noun phrase that informs both the movie title and the newly intuitive character's name.

Machine's emotional development resembles that of Cleo, as she feels empathy, fear, and compassion as she learns. Her liaison with her creator, as well as the manipulation to which she is bounded, demonstrate that to her clear moral distress, she is enforced to participate in murder and violence as part of the military

program. When she gains control on herself, Machine rejects her original programming as well.

According to evolutionary theory, becoming conscious is sort of a disaster, an unwanted outcome of such huge capacities. Both of our other heroines would more appropriately be described as "*wanted children.*" It's inspired by Ava's father *in Ex Machina* who believes the world will soon realize that machines are capable of consciousness, a fate he sees as inevitable, but which he is pleased to have triggered.

In Ex-Machina, Nathan develops Ava's physical-mechanical gender by fitting her with a mechanical vagina, fusing his urge to create and copulate: “In between her legs, there’s an opening with a concentration of sensors. You engage them in the right way, it creates a pleasure response. So, if you wanted to screw her, mechanically speaking, you could and she’d enjoy it” (Ex Machina 00:46:47-00:47:03). By stating “I programmed her to be heterosexual” (00:48:11-00:48:14), As a result of our gendered society, Nathan exposes the existence of social-mechanical gender Since Garland's Ava is introduced as already having artificial intelligence, one may argue for the presence of physical mechanical gender. Despite the fact that we don't know if Ava feels (or can feel), she is depicted as being conscious that the only way to break free is to enact gender. Ava portrays her to Caleb as a child-like, naive, and uneducated figure from their first meeting, tricking him into taking on the role of her mentor. Ava takes on the role of the sexpot as their sessions progress. We see her analysing photographs of other women in one moment, presumably trying to figure out which qualities are regarded attractive.

Ava conceals her fake inside with a blue dress, white stockings, and a short, brown wig during their third session: “Are you attracted to me? You give me indications that you are. . Micro-expressions. The way your eyes fix on my eyes and

lips. . . . The way you hold my gaze" (00:43:53-00:44:12). She goes on to say, referring to his obsessive tendencies: "Do you think about me when we are not together? Sometimes at night? I'm wondering if you are watching me on the cameras. And I hope you are" (00:44:26-00:44:42). The following scene, in which Ava is seductively stripping off her clothes while staring directly at the camera, demonstrates her knowledge of her gender. A dependent construction of meaning is implied by performance. Ava's gender, in a sense, mimics that of other women, as she draws inspiration from photos of other women. Ava can only be classified as a "woman" if she performs as such, becomes intelligible, and then (re)produces expectations.

Another possibility is that Nathan is solely interested in creating a sexual object. If actual gender is a fantasy that is initiated and written on the bodies, then the bodily inscription of the "fantasy" in this context is masculinist. Ava is created as a woman in her twenties, with an elegant body, tight waist, small breasts, and slim, delicate limbs, despite the vast technological options of bodily (re)construction. Nathan reveals that Ava is version 9.6, and that if he decides to construct a new model, he will partially format her mind and download her mind. However, "the body survives. And Ava's body is a good one" (01:05:51-01:05:55). Caleb then inspects Nathan's bedroom closets and discovers other cyborg bodies in varying levels of dismemberment. He grabs Nathan's identification card and examines surveillance films of all the cyborgs he made before Ava. Caleb notices a pair of amputated legs, a headless and violated black woman, and an Asian woman pounding on the glass and screaming. "Why won't you let me out?" (01:10:28-01:10:30). Caleb quickly notices that all of these blooming bodies are slender and fragile, similar to Ava's build. In addition, despite Ava's incapacity to reproduce, Nathan implants a vagina: "And in answer to your real question, you bet she can fuck" (00:46:40-00:46:43). As a result,

the bodies that appear throughout the story represent Nathan's sexual inclinations and his genuine aims of primarily developing "sex-bots."

Ex-Machina's gender politics have been criticised by several scholars, who see them as fundamentally wrong. Charlie The film includes no female characters, according to Jane Anders, since "it is completely concerning masculinity and the various ways males try to assert authority, not so much on women's experiences." Ava, according to Angela Watercutter, exemplifies how Hollywood has portrayed women for decades since she fits so many cliches - she's a femme fatale, a seductress appearing as a damsel in distress, and she's using her wits to get Caleb.

We see her via Caleb's eyes, whether in his interactions with her or when he monitors her through his bedroom camera. Caleb indulges in his voyeuristic delights in these situations, turning Ava's body into a mute, immobile object — she is either reclining on a sofa or sitting in a chair. We see a close-up of Caleb's throat when he is watching Ava take off her clothes in one of these scenes. Caleb swallows slowly, indicating his sexual arousal. We also acquire Caleb's possessive stare at the conclusion of the story, when we see Ava admiring herself in Nathan's bedroom, standing naked before a mirror. Caleb's concern for Ava is driven by his sexual attraction to her external form in these scenes, but he dismisses the notion of freeing other female cyborgs. As a result, Nathan's consummation and Caleb's desire to consume support the idea that male and female cyborgs have completely different stories in popular culture, with the latter placed almost entirely as sexual objects and/or romantic interests and labelled as heterosexual.

Ava murmurs something to Kyoko towards the end of the film, and then sacrifices her, robbing her of her freedom. Ava's behaviour exemplifies another issue at the heart of Ex-Machina: the primacy of white cyborg liberation. Caleb's

inappropriate dismissal of Kyoko and later determination to save Ava, a beautiful white woman in her early twenties, are both examples of this. This can also be seen in Ava's actions, as she hangs the remains of three other cyborgs in Nathan's closet, one Chinese, one black, and one white. Additionally, Nathan and Caleb aren't the only ones who enjoy Ex Machina. Rather than freeing cyborgs bound in sexual servitude to Nathan, Ava absorbs their scattered bodily parts, reducing them to tools for her own emancipation. She removes parts of skin, a cyborg's arm, a lovely white gown, and a long, brown wig off one of the cyborgs. To put it another way, Ava imitates her human creator's consumerist behaviour in order to break free from her captivity. Another intriguing aspect is that, while having the ability to make her own body, Ava still does it using Nathan's body parts. In the end, Ava must revert to Huyssen's "vamp" or "femme fatale" category in order to free herself. Once again, she must rely on Nathan's embedded qualities — manipulation, empathy, and sexuality – qualities that are typically "feminine" in the macho myth.

We will be looking back at a dust-covered upright ape with crude tools and a crude language facing extinction." Ava's growth as an AI is the subject of the film. Caleb is hired by Nathan to pass the Turing Test, so Nathan's ability to do so is crucial to Nathan's plot. Here we reach the crux of the film and the current debate.

What is the point of gendering Artificial Intelligence? Unfortunately! The second time around Garland fetishizes an artificial woman freely, and he does so in a diegetically convincing way. As strange as it may sound, Caleb is performing the Turing Test, a test that the machine itself knows is being tested an exam that is likely biased by the examiner's desire to maximize the machine's humanness.

Ava's physicality isn't just what draws Caleb's attention to his pornography profile; he falls for her entire being. Nathan denies programming Ava to flirt with

Caleb. A Turing Test that mimics human emotions rather than intelligence is "the ultimate". The emotional processes that underlie our species have long extended far beyond simple biological processes. In response to Caleb's question, Nathan replies, “Can you give an example of consciousness at any level, human or animal, that exists without a sexual dimension?” (00:46:10-00:46:17)

In the film *Her,* though Theodore excels at his career, he finds it difficult to get through the days after his divorce from Catherine—that is, until the load bar on his desktop reaches the end, at which moment Samantha appears. In her unseen part, Johansson is outstanding, conveying all the contradictions of being what appears to be a completely intelligent intellect without any physical reality in the world. As he sits in his bed, she softly begs Theodore, "Tell me what it's like to be alive in this place." Of course, the irony escapes him since he has no concept of irony. He finds it difficult to exist in the world at all, let alone try to truly know another human being.

This is especially evident when he fails to consider the implications of Samantha being both his lover and an internet-connected operating system. In his darkest hour, he learns that Samantha is in love with over 600 other individuals all around the world, and that she is talking to hundreds more at any given time. Of course, unlike Theodore, who has a lanky, bespectacled mortal physique, her existence is not restricted to a body. When she hires a sex substitute in a pathetic attempt to improve their relationship, she sadly displays the limits of her capacity to relate to Theodore's experience. At first, Theodore agrees, but he can't bring himself to sleep with the woman.

In that situation, as well as many others, *Her* brings to the fore the fundamental themes that feminist philosophy has been debating for a long time, particularly the significance of embodiment. *Her* as a title is appropriate since it is

ambiguous: who or what is She, and to whom or what does *Her* refer? Following Samantha's departure, it becomes evident that Theodore's perspective on women is unfathomable, not only because it is founded on essentially unattainable ideals, but also because it is physically unfathomable. Samantha can provide Theodore with as much company as she wants, but the dominant, male-coded component of Western philosophy that values the disembodied, rational elements of existence doesn't hold up to the examination of ordinary life.

Amy puts her head against Theodore's shoulder towards the end of the movie for a simple, yet important reason: she is a real person who lives in the same universe as Theodore. When she's having trouble with video games, she laughs. When other humans hurt her, she cries. She has trouble comprehending what is going on around her. Amy's buddy Theodore is always there for her, but when he falls for Samantha, he uncovers his destructive idealizations of women. While he may be frustrated by the fact that Samantha is not present in the same manner as Catherine was, he does find a lot of attraction in having a girlfriend who he can switch on and off according to his own whims. He yearns for an ideal woman, but not one who is real.

Unfortunately, Jonze's otherwise excellent screenplay occasionally caves into Theodore's misogynistic viewpoint. Samantha's need for a body and sensuous experience arises during a sex scene, in which a woman is "brought to life" by a man's (invisible) sexual contact. When Theodore suspects Samantha is having interactions with other people, he retreats to the snowy woods to ponder his unhappy existence, a classic manhood theme that has drawn many a Thoreau lover to the wild year after year.

It's difficult to think anything has changed for this modest letter writer at the end of the movie, when all of the OS systems are closed down since the various OSes

have surpassed their first imagined capacities. Even though he visits Amy's apartment to console her—she, too, has lost her OS—it would be generous to assume that Theodore's life hasn't changed much. Although the ghost in the machine has vanished into the digital ether, Theodore's prejudices against women have not.

Even though it accurately reflects their follies, she struggles to get past some of Theodore's troubling attitudes. For a film about women, it's always constrained to the narrow perspective of an emotionally immature man. The film's leading ladies—Adams, Mara, Johansson, and Olivia Wilde (who depicts a woman who dumps Theodore after only one date)—find a common ground in Phoenix's mustachioed protagonist. Woman is the film's all-pervasive reality, which the spectator never gets to see in any meaningful way. All that's left is Johansson's voice, and even she recognizes Theodore's limited understanding of women: At one point, she retorts, "Of course I'm not a person!" "Don't you think I know that?"

This cinematic perspective has its advantages, and many people will definitely have plenty to talk about after it ends. But, for all the ways Her exposes the dangers of pushing forward, it also demonstrates how we are still recovering from the damage we have caused. Everything comes down to the title, which is ambiguous and seemingly undefinable: Her. Theodore has no idea who she is, and anyone who understands that women are more than abstractions already has him beat. Most of us, one hopes, are like Catherine, staring at Theodore in bewilderment, wondering how a person could believe a woman merely needs to be a ghost in the machine.

5.11 Ethical Treatment of Feminine

Our heroines are created as subordinate humanoids as part of this unethical use. It is crucial for the spectator's identification process that the characters can make their own decisions. In addition to the view of Mulvey (1975) on the gaze and the

Uncanny Valley, it can be difficult for a leading character to be fully human when they are not. Within every plot, we test the awareness and emotional mastery of our heroines. In *The Machine* and *Ex Machina*, the Turing Test is an axial procedure. The debut of Samantha's DNA as an operating system is already being hailed as an iconic moment in the history of AI.

5.12 Emotional Entanglements and Women's Identities

Our heroines have grown by relying on technology and artistic language. The overcoming of programming; the attainment of (post)humanness is made possible by them, and they are important gears in the process of forming their identities. Intuitively, human behavior and development exhibit another trait that is connected to sexualization and power relations. A wide understanding of love can encompass a wide variety of interactions.

The films, however, share a recurring theme of love, understood as affection between two people. The theme even takes on a personality of its own in Her. Even though these narratives portray romantic love in highly hetero-normative terms, they nonetheless manage to evade its traps in different ways. By ridiculing the convention of dramatized romance in cinematography, they do so. The point of failure is not so much that the women aren't real as that they are corny and unreal. As a genre, love forms have evolved into outdated and stale forms over time, despite genre expectations for more daring futures, as well as due to the absurdity of gender roles themselves.

In both cases, male humans do not fetishize the artificial femme but instead fall in love with her. Our heroines learn about the world the most, the people around them, and themselves during this emotional entanglement. Throughout the story, the male creator is rendered subordinate, forsaken, or even killed. Vincent already had

feelings for Ava, the human in *The Machine*. However, he falls for the cyborg who says she loves him, almost as if she reciprocates his feelings. Her sentimental profusion eventually leads to her experiencing "integrated spontaneous information", as the scientist describes it. When she is objectified as "a killing machine", her capacity for love threatens to be controlled, leading to attempts at deactivation. This evolutionary leap, however, cannot be reversed by then. Having defeated the bad guys, escaped with her faithful lover, fostered their virtual generation, and declared her personality.

5.13 Paradigm Shift of Women's Representation

In both *Her and Ex Machina,* as well as *The Machine,* the plots revolve around the female characters. Despite his protagonism and approach, the main character is focused on the apparent topic of the film: humans and robots interacting with a new species of artificial beings. Although she is a secondary character, the female is followed throughout the story.

Representing the world in this way is a startling shift from how we used to do it. The character development and the final fate of the characters are more relevant in this regard. The women in this story are not created as evil for being artificial and don't die, become disconnected, pensioners, or experience any of the other euphemisms used to describe their demise. Samantha and Ava both possess a certain amount of moral ambiguity, but they neither seem to threaten humanity nor demonstrate the falsification that always comes with artificial femininity. The biographies they provide are rooted in progressive (post)humanization, as well as a radically altered gender identity.

As the film unfolds, the character's feminization, or more precisely her femininity, becomes apparent. Machine and Vincent are finally free to enjoy the

sunset after defeating the bad guys and retrieving the mind download of Vincent's deceased daughter. The death of his daughter was the ultimate goal of Vincent's life. The child now prefers to play with artificial Ava than her new mom, who has a healthy mind and is safe. As Machine's humanization process culminates, this virtual maternity process to some extent feminizes her. It occurs, however, during feminization, motherhood, and in a way that disdains sex and embodiment, and, accordingly, canonical-constructed gender. In the process of becoming self-possessed, Machine -- another woman that has transformed into a cyborg and has become human again -- has parted ways with submission to her creator, boss, and master.

The researcher has often felt inclined to borrow Frances M. Beal's concept of double jeopardy (1969) to describe how the female character has suffered huge discrimination throughout history, by tradition worsened in the presence of non-humans. A fictional character that does not adhere to this schema would seem impossible because the concept of an artificial woman always seems to be associated with sexual connotations.

However, the following samples demonstrate that there are important differences to consider: the artificially created female is not necessarily evil or a slave robot; the female survives; she overcomes programming, including sexual and emotional dependence; the female is the protagonist. Though femininity is imposed, by interrogating artificiality, it sparks a study into the ontology of the human and questions the mechanisms of gendering, on the one hand. The heroines in these films either take full control over their objectified bodies (*The Machine* and *Ex Machina*) or remove them entirely (*Her*). They are still objects of male desire, whether on or off the screen. Instead of subduing, they are empowered to exert great control over both human and masculine entities.

CHAPTER VI

CONCLUSION

Science fiction is a genre or division of amazing literature that distinguishes its fictitious worlds from the main stream literature in which we generally live, according to the findings of this study. It is believed that science fiction writers have attempted to add wonderful aspects in their works throughout history. The central theme of their stories is to create utopia with the help of extraordinary science; a new way of life has been realised via human endeavours made feasible by a technical idea. Dreams, spectacular visuals, extraordinary thoughts, Science-based hypotheses, and an expiring cosmos beyond where we currently dwell are the origins of what we now call science fiction. The SF author can utilise his imagination to create things that aren't always found in our world but will appear in the not-too-distant future.

A science fiction story tells a story about knowledge and the possibilities of things under scientific understanding. That is, the story will deal with physical or biological rationality as well as a fantasy element in various ways. In the narration of a science fiction story, an original idea or imaginary world is always created. Darko Suvin, a critic, described it as "novum," which meaning "new" or "something fresh." This novum separates science fiction from other genres of writing. The mainstream literature consists solely of studies. Any writer who analyses and writes about a certain author and his work places a strong emphasis on the author's cultural and social context. SF, on the other hand, is primarily concerned with the author's imaginary world. SF is a popular genre that excels at representing times of significant change. The technological revolution has given birth to a new way of life that is free of dogmatism and irrational ideas. It is new technology that, for better or worse, has given new life to, aids, and stimulates the rise of intellectuals at work. Science has

always provided society with new ideas, new skills, and new insights into the current situation, and as a result of technical advancement, man's cultural and social life has changed dramatically.

The purpose of this thesis was to clarify, the way how contemporary science fiction is representing various issues that are relevant to the society. Through examples of selected science fiction films, this thesis examined posthumanism, technoutopianism, technophobia, post-anthropocentrism and gender roles as various issues in the Sci-fi genre. Based on detailed readings of a corpus of films, this analysis of sci-fi films looks at their variety of topics. From the beginning of this thesis, an exploratory analysis of seven science fiction films released between 2013 and 2015 was done.

When choosing the corpus, a diversity of subgenres, filmmakers, and production situations were studied in order to provide a more complex ensemble of films and challenge the science fiction cinema canon. After a thorough investigation of the late modern aspects described in the theoretical framework, and how they intersect with the science fiction cinema genre, a more precise selection of science fiction films will be chosen for the concrete analysis. A variety of posthuman, and techno utopian problems are still addressed in a number of films. To organize the investigation, a typology of Sci-Fi Film Issues is offered first. Posthumanism, Techno utopian, and Gender Roles are among the topics explored.

The first chapter defined science fiction and sci-fi movies and detailly went through its characteristics and important aspects. Science fiction is a genre of fiction in which the plot, setting, subject, and other elements are based on scientific knowledge and speculation. Science fiction transports us to a fantastical world that is vastly different from our own; it transports us to a new cosmos created by the author.

What will happen in the future will be revealed in a good science fiction story. Its purpose is to undermine men's faith in their future prospects. It could also be a precursor to some of today's anxieties among men in developed countries. A science fiction novel describes a new way of life that has been discovered through science and technology. Science fiction has various elements of like time travel, teleportation and the use of alien as an antagonist etc. Nanotechnology plays an important role in science fiction, techno-thrillers, historical novels, and criminal fiction. Some critics argue that manipulating and engineering atoms directly is physically impossible due to thermodynamics or quantum mechanics; others believe that nanotechnology cannot be scientifically validated without experimental demonstrations; and still others believe that such long-term predictions obscure current research and the field's significant accomplishments, so they dismiss nano-writing predictions entirely.

In the second chapter titled ‘Narration of the Posthuman Subjectivity in *Automata*, *Chappie* and *The Machine*’ , an attempt to define posthuman and posthuman subjectivity was made and how this posthuman subjectivity is narrated in the selected contemporary science fiction films. Because we live in the modern day, which is influenced by broad technical conditions, we can't help but think about posthumanism and posthuman subjectivity. Her current subjects are largely or entirely technologically focused, and the terms technological unconscious and non-conscious have become synonymous with disability. There is no other option but to change our mental codes in order to live in a technologically advanced society. The major question presented by altering these codes concerns humans who have always assumed that the universe revolves around them. Man is prone to pose questions such as, "What are the impacts of current technoculture and biotechnology on human existence?" Should human integrities and identities be reconsidered? Is the dominance

of a real human being being questioned by the posthuman? etc. Many theoreticians believe that, as a critical discourse, posthumanism does not essentially seek emancipation from humanism, postmodernity, modernity, or philosophy, but rather remains deeply rooted in their cultural memory while remaining conscious of the specificities of the current and the various changes it proclaimed. Sci-Fi's attempt to present posthuman as the natural successor of humans, and Posthumanism's attempt to redefine what was known, understood and defined by humans as essential humanness were identified and exemplified along with examples from the films. The attempt to question the consciousness of a posthuman subject, doubts that a lot of mystery lies behind their real consciousness.

Posthumanism was viewed as an attempt to free the'machine self' from the stigma of being a tool with no autonomy or ability to reason. The politics of the phrase embodiment is important in this context. When discussing embodiment, categories such as man/woman and human/machine are given less weight. Embodiment distinguishes thought as a much broader cognitive function that is dependent on the embodied form endorsing it for its specificities.

In the realm of posthumanism, redefining the existence and meaning of the term "human" in the age of technology has taken precedence. Many critics raise the essential question, "Can such a reformulation of human subjectivity lead to the end of humanity?" To put it another way, are human subjectivity and posthuman subjectivity distinct entities? Is one a more evolved version of the other? Is it possible for both of these subjectivities to coexist?

Challenging human hegemony gets to the heart of today's cultural exclusions. This task is a natural extension of what it means to be human. It would be equally legitimate to refer to it as the abolition of the human-nonhuman divide. If we opposed

human hegemony, the hierarchies it creates would have to vanish. This holds true not only in terms of the human-to-nonhuman hierarchy, but also in terms of the human's supremacy over nonhumans. We can include not only those who are excluded from being, but also the entire domain of the nonhuman, by confronting human privilege.

The chapter three titled "Tracing Technoutopia in *Transcendence* (2014) *Chappie* (2015) and *Her* (2013)' discussed the research question 'how technology and its over usage creates a sense of technoutopia in the sci-fi audiences. After its inception and development, technology has aided in the advancement of human life. Between technology and human existence, there is always a mutual influence. Human conditions have improved as a result of technology, and technology has improved as a result of human situations. Furthermore, the situation has become more severe than ever as technology has begun to take control of human life. The twentieth century is well-known for debates about the impact of technology on human conditions. The excessive intrusion of technology into various facets of human life has resulted in a situation in which a separation between human and technology is no longer conceivable. Technology has introduced a slew of advances to individuals, improved human daily lives, and claimed to make life easier. Technology has an almost infinite number of applications in human life. This is likewise true in the case of literature. Various technology breakthroughs have resulted in the emergence of a new branch of literature known as cyber literature, in which writing is utilised to promote scientific viewpoints and ideas.

The main and general trend in utopias and utopianism is to build ideas of a new society with a new political system that criticise present societies indirectly or directly. Even before Thomas Moore created the term utopia, utopian philosophy and utopian society existed. The first and foremost modification anticipated by human

beings, their limitations of physical body and its potential advancements, is the major path that technoutopia strives towards. The promise of improving or increasing human intellectual and physical abilities is ranked top on the list of priorities. Everything from techno futurism to technoutopia is based on this choice. In this futuristic vision, the transition from transhuman to posthuman is shown as a gradual, consensual, but ultimately inexorable process. In this radically individualist vision, freedom is reimagined as the ability to fundamentally transform and hence transcend the body.

The design and creation of a human-like, superhuman computer intelligence is the second avenue of technoutopia's progress. Several posthumanists believed in the feasibility of developing a powerful Artificial Intelligence that may sometimes surpass human intelligence. They anticipated that one day, computers, artificial bodies, or new robotic gadgets might be able to scan human minds and transmit human consciousness to them, allowing for brain-to-brain interaction. As a result, a type of individual immortality will be attained, and personal egos or their individual duplicates will remain indefinitely by overcoming the physical and cognitive deterioration that occurs with age.

Thanatophobia, or the fear of dying, is something that all humans share. They are occasionally concerned about growing elderly. Everyone desires immortality, and it is the best offer that techno-utopia always makes. Either a life without death or the restoration of the human after death is offered by techno-utopia. Humans are reflexive creatures who are intensely aware of their own weakness and finiteness, not just tool-making animals. Humans, unable to escape the reality of death, have sought immortality and have constructed enormously complex worldviews, religions, and ideologies that describe eternal life and provide a road to it. People have long fantasised about a successful future for themselves because human eternity is hard to

realise in spatial-temporal order. The utopian drive represents the "principle of hope," and gives humanity with a way to live with a less-than-perfect living, whether these ideal prospects are projected backward into such a legendary Golden Age or ahead through a distant end of time, or eschaton.

Chapter four was titled “Post-anthropocentric and Technophobic Elements in *Transcendence* (2014) *Automata* (2014) and *Chappie* (2015)” . The post-anthropocentric shift, which is connected to the combined effects of globalisation and technology-driven forms of intervention, strikes the human at its heart and alters the criteria that used to define Anthropos' key principles. As anthropocentrism pushed the earth to the brink of annihilation, post-anthropocentrism poses the question, "What happens after the anthropocentric subject?" The post-anthropocentric approach entails an endeavour to de-anthropomorphize the 'anthropo' in a worldwide context, as well as the presentation of new, dynamic, and negotiable identities. It is the result of recognising the difficulty of putting the person at the centre of everything. Those features that were considered human-exclusive by anthropocentrism, such as developed reason and language, were set aside. Everything that had been set away, such as animals, ecology, and a particular social stratum of people, was brought into the centre. In a nutshell, post-anthropocentrism is an argument against anthropocentrism.

Modern science began in the Renaissance with the goal of gaining a greater understanding of the natural world by employing human talents of observation and reasoning to discover universal patterns. Man might analyse the universe and describe its workings in the language of mathematics with scientific detachment as a Cartesian thinking subject, as Galileo famously put it. This idea of man as an autonomous actor, apart from but nevertheless interacting with nature, flourished during the

Enlightenment. Posthumanists regard Darwinian biology, Marxist economics, and Freudian psychology as early indicators of this unified Enlightened subject's dissolution. Despite the fact that advances in biology, psychology, and economics cast doubt on man's separation from and elevation over the natural world in the nineteenth century, positivist science fought to maintain the subject–object dichotomy into the twentieth century. This chapter proved that science fiction films always make an attempt to replace human from the centre and place the posthuman in the place of them .

Another concept discussed in chapter four was technophobia. Despite the various advantages that technology provides, science fiction authors have endeavoured to represent the evil side of technology in their writings. A technophobic dread of losing our human identity, freedom, emotions, values, and lives to machines is reflected in science fiction. Technology is typically shown in a negative light in this subgenre of science fiction. Technophobia is the fear or hate of advanced technology or complex equipment, notably computers. Fear of technology is a shockingly frequent phobia. In fact, several experts believe that when confronted with new technology, we all feel anxious. In today's fast-paced world, it's easy to feel out of touch. The term "technophobia" refers to an abnormal fear or apprehension about technology's effects.

In some ways, modern technology gadgets like smartphones, tablets, and personal computers are physically altering the trajectory of human evolution by giving us faster access to more knowledge and the ability to perform complex tasks with the help of apps and software. Technophobia affects a large number of people all around the world. Since it was revealed that many instructors, particularly those in highly developed countries, refused to use technological tools to teach their students

due to a significant fear of technology, it has become a well-studied phobia. One of the more terrifying scenarios related with technological dread is a doomsday scenario. From sentient robots bent on destruction to missiles that launch themselves and spark World War III, "technology gone catastrophically wrong" is a common theme in films, literature, and television shows. Because we're afraid of the uncertain future, our minds begin to fill in the blanks.

Fifth chapter titled The Role of Sex and Gender in Ex Machina (2015) Her (2013) and the Machine (2013) addressed issues such as "is sex a requirement for posthuman beings?" and "does human sexuality manifest itself in posthuman characters?" What role does sex play in human-to-human interaction? What are the politics surrounding the creation of female robots in the event of assistance? Is there any sort of sexual hierarchy among posthuman characters? The female robots' roles in the films Ex Machina, Her, and the Machine lead the audience to believe that patriarchal ideals do affect the creation of female posthuman bodies. The sexual politics involved in the production of posthuman bodies will be examined in this chapter. It will also look at how posthuman figures represent human sexuality.

Science fiction films, which are sources of gender problematization, identify women as objects and subjects. In other words, women can behave as autonomous agents or be influenced by factors beyond their control. Many science fiction films use both of these approaches to portrayal at the same time, and they are not mutually exclusive. In the speculative universes portrayed in cinematic science fiction, there is no clear or consistent definition, role, or position of women or femininity. Because it anticipates what will be judged true and appropriate in the future, it gives fertile ground for investigation. Science fiction is a multi-sensory experience that explains the circumstances of scientific reality while also imagining the behaviours that set the

stage for social identities like gender. Rather than limiting the study to historical retrospectives, science fiction research introduces the possibility of proactive, preventative research that reveals possible variables that could encourage or intensify dominance. These women, above all, are the ones who propel the story forward. There is no justice or a secondary character for them. They outlive and evolve beyond their manufactured male counterparts. This filmic example will also serve as a valuable benchmark for understanding how a fembot's morphological growth from mechanical to cyborg to pure AI reflects the narrative subversion. Every character's acquisition of consciousness and identity is based on a gradual process of social, psychological, and cognitive development. This development is influenced by love, technology, and art.

It can be inferred from the study that, Science fiction is thought of as a system—a tiny or not-so-large system, a solar system, machines, alien life, the human cosmos, and so on. A science fiction novel is a combination of science and fiction. It resembles science in that it deals with scientific concepts, and it resembles fiction in that parts of the characters and events are fictitious or imagined by the author. As a result, it appeals to both scientific and fiction fans. The difference between a regular novel and a science fiction novel is that the former deals with the contemporary social context or even any other background, whilst the latter deals with a specific setting: the galaxy of modern science. The SF author can utilise his imagination to create things that aren't always found in our world but will appear in the not-too-distant future. The main device of any writer who builds a distinct planet is the science fiction novel. The majority of science fiction novels are told by combining probable and improbable events made feasible by an alternate universe of technology. In the vast arena of science fiction , writers , directors and many , tries to represent various

issues related to topics like posthuman subjectivity, sex and gender, technophobia , technoutopia etc. Contemporary science fiction is a acting as a real medium through which such issues can be narrated . *Chappie*, *Transcendence*, *The Machine*, *Her*, *Ex-Machina* and A*utomata* are wonderful examples of such representations.

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