

Chapter 3

TRANSHUMANISM IN *X-MEN: DAYS OF FUTURE PAST* (2014)

AND *TERMINATOR SALVATION* (2009)

3.1 Disability and Resilience

The X-Men series released over the last ten years have been outstanding box office successes; it's a flawless production, fast-paced scriptwriting, and a great cast. The story raises moral and philosophical questions for mere mortals: the impact of genetics on our daily lives, personal identity, integration of minorities, duty to help, frontier science, medical research, and disability development opportunities. Unsurprisingly, the integration of minority mutants into human society was one of the central themes of the X-Men saga, as it evokes the plight of Jews in European societies. And the fact is that most of the writers of the X-Men comics are of Jewish descent, so was the director and producer of the first film, Bryan Singer. X-Men is a metaphor for the debate over whether America should promote racial, ethnic, and religious equality and diversity or become a more homogeneous and less multicultural society. Science fiction has depicted the problem of social integration in terms of the equality of different beings or minorities. It's still paradoxical but also a symptom that even the most powerful mutant, Professor Charles Xavier is incapacitated. This can be a metaphor that the lines between disability, ability and resilience may blur in the future. In the words of Alla Ivanchikova "It is within the framework of our foundational fantasies that we acquire the capacity to desire certain things, and by contrast, to reject others. Technoimmortality proponents—often referred to as transhumanists—propose that we desire infinite life" (Ivanchikova, 64–89)

Fantasy films as such revolve around some questions which the film attempted to answer; moral and philosophical questions for mere mortals: the impact of genetics on our daily lives, personal identity, the integration of minorities, the duty to help, the frontiers of medical research, disability and the physics of development, etc. The X-Men film saga has its origins in the comic books launched by Stan Lee and Jack Kirby for the North American publisher Marvel in the 1960s. The story

revolves around mutants, a group of humans born with a series of genetic changes that have enhanced certain human abilities so much that many of them even have superpowers. Paradoxically, or perhaps not, this trait leads part of humanity to view them with fear and disgust.

X-Men tells the story of the mutants and focuses on the confrontation between old friends, the reconciling Professor Xavier, and the vengeful and ruthless Magneto. Both embody good and evil and mostly argue over the status of mutants in society. Professor Xavier is committed to integration and peaceful coexistence and trains young mutants at school to act for the common good. Magneto meanwhile chooses confrontation, fearing that normal humans will end up destroying mutants, seeing them as strange and a threat to their safety. With that in mind it's important to remember that Magneto also known as Erik Magnus Lensher¹ is a Jewish mutant who lost his family to the Nazi death camps and escaped that fate owing to his superpowers. This tragedy makes us think that history could repeat itself with mutants and to avoid this they must first attack humans. But there are also anti-mutant fanatics among the people. In the first movie, a senator champions the drive to destroy them; while in X-Men 2 a military scientist plots to destroy them. In the face of such threats Magneto founded the "Brotherhood of Mutants" to assert the supremacy of "Homo Superior" -the mutants- over "Homo Sapiens". As Magneto says, mutants are the future; they are "gods among insects". But to achieve his goal, he must face Professor Charles Xavier, his X-Men and humans. so we see a clear transhumanist story here narrated in a powerful VFX. Mackellar in speaking about the film *Avatar* (2009) says

"The 2009 American science-fiction film *Avatar*, directed by the Canadian James Cameron, set in the mid twenty-second century on a distant moon, recounts the story of a disabled man who can remotely control, through his mind, the synthetic body of a native avatar, which he uses to interact with the real natives. Slowly, however, this man begins to prefer living through his avatar, which seems a lot more interesting and attractive to him than his 'real' world. Creating new identities online therefore allows people to find out how they might act/react in different situations and settings, or they may want to

escape and discover new prospects if they are trapped in a real harsh reality. However, they may then find that they prefer their new virtual lives." (MacKellar, 152)

The existence of superpowers in X-Men mutants has not been clearly explained. In one instance, they refer to the X gene, which evolves every million years and causes genetic mutations that lead to the emergence of extraordinary abilities and techniques in mutants. Incidentally the subject of Darwinism is not only relevant to understanding the mutations that lead to superpowers; it is also important to understand Magneto's perspective on the relationship between mutants and the rest of humanity. The first is homo superior, the second Homo sapiens. And on the planet Magneto believes, there is no place for either race. There is only room for one, the most advanced, the one with the strongest physical qualities. The powers developed in mutants are very different. For example, Professor Xavier can read other people's minds, Magneto can control metals, Wolverine has fearsome claws with his flexible bone structure that he can use at will, and physical regeneration that makes him (almost) immune. Through any physical assault, Storm can change the weather at will, Jean Grey has telekinetic powers, Nightcrawler can teleport, and more. They acquire abilities that are overlooked in ordinary human society that others do not have. Some have radically changed their appearance making them easily recognizable to others and therefore "unusual" like The Monster and Diablo². Other mutants do not suffer from "morphological abnormalities", but their abilities prevent them from interacting normally with other humans; such is the case of Paige³, whose physical contact with others leads to their death. This mutational difference hinders normal integration into society and leads in some cases to rejection, alienation and stigmatization. For example, Mystique, Magneto's lap dog, who kidnapped Senator Kelly, the political leader of the anti-mutant movement, blamed "people like you who made me hate going to school as a kid". This idea of exclusion is said to be one of the reasons why some mutants would side with Magneto and demand the domination and physical annihilation of Homo sapiens as a class. So far what I found is that to be able to survive in the near future world of machines like The Line⁴ it is important for humans to remain one of the fittest. It will be a time when money and all riches won't be enough to sustain a person but the primal human physic should be able to adapt to the changes around him. It's something of Darwinism that resurged

in this saga.

3.2 H+ in *X-Men: Days of Future Past* (2014)

X-Men: Days of Future Past (2014) is part of a series of science fiction films that question the role of technological progress and its impact on people and our understanding of morality, such as the novel *Frankenstein* (1818), the 1936 film *Modern Times*, *Star Trek* (1960s), *Blade Runner 2049* (2017) or *Gattaca* (1997). The subject of genetics has drawn attention in previous films. *The Island Doctor Moreau* (1896) includes the genetic modification of animals into demi-humans, the cloning of chimeras and hybrids in *Oh Lucky Man!* (1973) and the modification of human physiology in *Gattaca*. Perhaps the innovation of *X-Men: Days of Future Past* (2014) is that mutations become transhuman abilities, not just upgrades over the average human. In this sense, it raises many questions: How do we see the future of humanity? Are we using technology to become more human? How should we see and interact with beings with abilities and capacities beyond those of humans? Do these human developments oblige us to modify our current conception of ethics, which assumes the relative equality of all human factors?

The first H+ interventions of X-Men are in cells aimed at modifying the genome of the genetic make-up of existing organisms in order to make them resistant to certain diseases or to improve their physiological capacities. This type of intervention has already been used in seed production and pet food. However, human use is still in its infancy. In sport, this may mean interventions to achieve better athletic performance. These interventions aim to modulate genes associated with physiological performance like erythropoietin⁵, growth hormone, hypoxia-inducible factors and peroxisome⁶ proliferator-activated receptors. Therefore, no genetic differences are passed from one person to their offspring. In the short term, this means an improvement in the germ line of cells: the sperm, fertilized egg or newly fertilized embryo. Therefore, its metabolic abilities improve and thus improve the new creature's health capacity or physical performance like in the case of Scott Summers aka Cyclops. Since many basic structures of the human body are formed very early in life, these changes must be made before a person is born, as many skills are set before birth. The "impairment, the biological 'deficiency,' enables these bodies to be enhanced by the latest developments in technology, thus transforming

them into “humans 2.0,”” (Harrasser, 172). Therefore, the results of this type of genetic intervention are hereditary and can be passed down from generation to generation.

3.3 Mutants and Genetic panic

The X-Men films raise many questions of moral and philosophical importance. One is the possibility and justification of genetic engineering to increase our human potential. After identifying a number of distinctions regarding potential improvements, some objections raised by bio conservators to such development techniques are analysed and challenged: The logic of equality; the damage logic; the logic of autonomy; and the participation of humanity. Unless there is temporary damage to health, there is no reason for moral panic. In what follows, I discuss the transhumanist concept in X-Men and how it can affect the physical and mental development of human abilities which result in the creation of a new class of people. Secondly I analysed scenarios in which human evolution might occur: the transgenesis⁷. My analysis in this chapter is that with all these opportunities to improve our human capacities, there should be no reason for moral panic.

One of the most interesting issues raised by the *X-Men: Days of Future Past* (2014) is a society half of whom support people who choose to alter their physical or cognitive abilities and are offering treatment to make them normal humans again. It is absolutely true that the mutants did not make these changes on purpose or through genetic engineering; they did not create instead they were created upon. Our human body is a complex structure and any sort of makeup that is attempted to cover up our genetic disabilities would result in alienating ourselves with other normal human beings. In this sense, the Savage World⁷ is a more realistic vision of what a society could be in which long-term developments can be chosen. Another interesting aspect related to evolution is found in the origin of *The Planet of the Apes*⁸. Mutation is the key to our evolution which allows us to evolve from single-celled organisms to become the dominant species on the planet. This process is slow, usually lasting thousands of years, but too few millions of years of evolution lead to the breakthrough. However experiments with the gene X, are the plots of the saga like the one in which military scientist William Stryker killed mutants to enhance or combine their powers. Wolverine himself was also one of the mutants on whom

these experiments were performed. The explanation for the extraordinary abilities that mutants acquire; and their unique appearance is the idea that evolution takes sudden leaps as individuals acquire large mutations that give them new abilities. It works anyway because gradual and progressive mutations cause rapid changes because they are affected by the environment where mutancy is already present.

However Mutants and the X-Men provide a good excuse to wonder how far transhumanistic engineering can go, whether the ability to augment our abilities is desirable and where we should set societal limits. Such genetic improvements and situations where treated individuals have more power compared to other normal individuals and the development of genetic engineering represent a revolution that can go further than the industrial revolution of the 19th century. The decoding of the human genome, which stores the basic building blocks of what we call human, opened up the possibility to a variety of gene therapies and the technologies to deliver them in the area to be treated. In *X-Men: Days of Future Past (2014)* humans are a repair material. It is not unrealistic to believe that within a few decades, such treatments combined with cybernetic implants will prolong human life, improve their mental and emotional state, strength, and vision. In other words the ability to manipulate people with specific traits and abilities that could result in so-called "transhumans" still seems a long way off. Formalism film theorists such as Sergei Eisenstein in *Film Form (1949)* emphasize the artistic application of cinematic elements. Unlike Realism, techniques such as retouching, camera angles, and lighting are creatively used to evoke emotion and convey meaning. We see such techniques being used in the Millerian desert in *Mad Max: Fury Road (2015)* in the visage of Furiosa and her band of travellers. These emotions added to a genetic engineering opens up not only the possibility of people being born with fewer diseases, but also the so-called "biological liberation" that is the release of some of the bonds that are naturally imposed on humans. Transhumanism in X-Men allows people to better choose their destiny and no longer be subject to the influence of the natural genetic lottery but to their own destiny. As Savulescu⁸ points out, such a world allows people to thrive beyond the limits set by nature.

This optimistic approach cannot hide the fact that they face serious difficulties: creating standards of access that respect equal opportunities. On the

other hand, measures are also needed to prevent the intolerable inequality between powerful posthuman beings and "natural" or ordinary people in this future society. Other authors also point out that Transhumanism can go down a kind of slippery slope that can lead to changes in the most vulnerable aspects of human nature of aggressiveness, selfishness, etc. that are morally unacceptable (McNamee and Edwards, 7) . However other authors are afraid of these changes and view them not only with suspicion but also with horror. For the "bioconservatives", the enhancement of human potential is not only a threat, but also morally unstable because they would go against nature's plans or replace God with man.

It is necessary and appropriate to consider some of the societal implications of recent and future advances in material culture. Solving the mysteries of the genome will lead to important and diverse developments with far-reaching societal implications. Our genetic map leads to an increasing proliferation of various treatments and technologies aimed at curing genetic diseases. The methods of transmission are irreversible and complex, so complications usually cannot be resolved later.

Therefore, the moral question is not whether enhancements are legal, but whether it is morally permissible to enhance people's physical abilities by some means such as genetic engineering or to what extent or to what extent such improvement would be acceptable for the smooth functioning of a society. I thus discussed genetic interventions to their typology and on the other hand according to their scope or range. It is possible that the good outcomes amongst these will be carried out in the future just as it worked out in the films.

3.4 Transhumanist interventions in *X-Men: Days of Future Past*

There are two types of genetic intervention, somatic and germline. The first is to enhance natural human abilities within a specific human structure, such as increasing one's own IQ from 100 to 104. These interventions can only be termed "development". The second would be a genetic intervention that extends his abilities beyond the typical range of the human species, for example by increasing his IQ from 100 to 200. Mutants in Xavier's School in X-Men would be the best example of this type of growth. Their mutations go beyond what doctors can do today and it is

very doubtful that it will prevail in the short or medium term. These interventions can be described as "transhuman". However, we must be aware of the social changes that these genetic interventions can cause. Unsurprisingly, a heated debate is currently raging between those who support the use of these reproductive technologies and those who oppose it: the bio-protectors. This combination clearly reminds us of the storylines of *X-Men: Days of Future Past* (2014).

Citizens who fear mutants and citizens who defend the legal right to live and coexist as equals in the same society in *X-Men: Days of Future Past* (2014). But before delving into this subject, other areas that affect the possibility of human development should be mentioned: Transgenesis and cybernetic transplantation. Transgenesis is another area where genetics can play an important role; Improving physical performance through the production of hybrids and artificial chimeras (Miguel, 2010). Although this sounds like a science fiction hypothesis it now makes sense to consider some of its possibilities. In the animal world there have been natural hybrids for a very long time, such as the mule, the son of a donkey and a mare, or a mixture of a horse and a donkey, Liger a mixture of tiger and lion or a mixture of zebra and donkey. With the rapid development of science, it is possible to create artificial hybrids. It is currently believed that there are hybrids with human elements. They would be "new" creatures from the start, their ontological status unclear.

Chimeras²¹ are organisms that contain cells from two or more different organisms with different genetic information. For decades attempts have been made to create artificial chimeras of the animal world. The prospect of creating chimeras with human elements seems unlikely to some researchers. Transgenics are organisms to which genes have been added; organisms belonging to one species but modified by the introduction of biological elements of another species. The main problem here is to determine which species the modified animal belongs to. As Savulescu points out, it is not currently clear what species chimeras belong to and therefore what rules or laws apply to them, what potentially morally significant abilities they have, or in what sense they will ultimately be applied. (Savulescu, 307).

Besides the fact that these are controversial questions and that some scientists rule out the possibility of their appearance in the short or medium term, the

interesting question is whether beings with such physical abilities like the X-Men could arise in the future. For example, cybernetic implant is an abbreviation of the English words "cyber" and "organism". In this sense, cyborgs are organisms composed of biological elements and mechanical, electronic or robotic devices that serve to enhance the capabilities of the biological part, mainly through the use of technology. This term was coined by Manfred E. Clynes and Nathan S. Klein concluded that a closer relationship between man and machine was needed as scientific knowledge developed in the 1960s. One area where cyberization has increased is in sports, raising inevitable ethical and legal questions. In this sense, the paradox that emerges is that mechanical implants are born with a clear therapeutic and rehabilitative objective of the physical abilities of athletes usually disabled like Professor X, but they can have the effect of improving physical performance. Recent advances in technology have allowed implanted cyborg athletes to achieve better grades and athletic results than "normal" athletes, which would not be limited to competitions for the disabled, although in some cases until now it means that they must participate in the same competitions as able-bodied athletes. Such is the case of the South African Paralympian, arguably its most famous cyborg athlete, Oscar Pistorius,¹⁰ whose claims have challenged some of the deepest foundations of elite sport. The problem is no longer his handicap, but that he is too capable.

3.5 Time factor in X-Men Days of Future Past

X-Men: Days of Future Past (2014) reimagines the heroes who formed the original He member of the X-Men. To kick-start the X-Men fever, director Bryan Singer has created a new bloodline that brings together all the known mutants and newcomers. For some mutants it is death, for others it is rapture. In this story, a bleak future looms over Sentinel, a new mutant destroyed by the government's defense program, with Wolverine (Hugh Jackman) traveling to his 1973 to complete the Sentinel project and a young Charles (James McAvoy) to change and persuade him and Eric (Michael Fassbender) join hands again.

Days of Future Past is at its best, a fast-paced, absurd adventure that faithfully recreates the spookiness of the original comics, with its tongue-in-cheek humour and the idea that we humans are wild Neanderthals. It's full of fruity allegories about evolution, and interpretations of villains. Mutants (Jackman, McAvoy, Fassbender,

Lawrence) and the wild and capricious Quicksilver (Evan Silvers) get caught up in bizarre situations in Singer's skilful hands, turning this story into a metaphorical masterpiece.

Bolivar Trask (Peter Dinklage) is depressed by the fear of new species and fed up with Pacific mutation experiments. Despite persecution, they still reflect prejudices based on dogmatic understanding of science. The politics of films like *Days of Future Past* are based on simple rational discourse. Singer understands that a comic is not an essay but a pamphlet, and that the message is conveyed most effectively through playful actions.

Each of the main characters harbours an underlying dilemma which is revealed through the presence of the other comics, even if it is hardly fleshed out: whether it is Eric's desperate loneliness, the rejection of Charles' authority, Logan's transcendence, or Raven's lack of personality; for each of the characters, as well as the horde of new faces that we only get a show of force. As Derek Johnson says

"The soft, managed reboot of *Days of Future Past*, therefore, turned on its own time-travel narrative in order to introduce changes to the world in its past, culminating in a coda in which Jean Grey and Cyclops now live in the future, having experienced a completely different set of (now untold) events that did not lead to their demise. Future X-Men films are now free to go back to that new, unwritten past, with 2016's *Age of Apocalypse* recasting younger versions of Jean Grey and Cyclops; but that new interpretation is framed as part and parcel of a multiverse persistently shared with the original films."

(Johnson, 138)

Days of Future Past reveals how cinema has absorbed television formats and how series impose and consolidate themselves as narrative schemes, while television rejects cinematic language, a profitable exchange for studios but which can be harmful for an audience that must get used to never being satisfied and never expecting more. Cognitive film theorists David Bordwell in his *Making Meaning: Inference and Rhetoric in the Interpretation of Cinema* (1989) and Torben Grodal's *Moving Pictures: A New Theory of Film Genres, Feelings, and Cognition* (1997)

studies how viewers process and understand movies. This theory draws on cognitive psychology to explore how audiences feel about stories, characters, and emotions in movies. But the X-Men audience can't fully enjoy the film without seeing the previous parts. As this huge and explosive new chapter unfolds, we finally get a taste of what is yet to come. Many of Days of Future Past's scenes are interesting, worth a closer look, and clearly don't stray from blockbuster constants.

There are gaps in the story, gaps in the execution, and a blatant disregard for logic, but it's presented elegantly and pops. The charm of these characters is their overwhelming lightness, their eternity, their transcendence, in which neither time nor can death overcome them.

3.6 Difference between the screen and comics

In this movie, the era of mutants means the end of history for the common man. As many readers will notice, there are many differences between his classic 1980s X-Men story Days of Future Past and Bryan Singer's film. *X-Men: Days of Future Past* (2014). First, in the comic plot, the present takes place in the current comic. This means that the protagonist of the title, who survived in the distant future of 2013, can travel to the past and live in his own body again. Future past days give us a much longer time frame. This movie is set in 2023, not 30 years from now. So just a few years in the future, and about 60 years before his X-Men, after we last saw Patrick Stewart/Ian McKellen's Generation X-Men in action.

First Class is nominally a sequel to the movie. The present day of Days of Future Past is not what happened after the *X-Men: The Last Stand*. Instead, it's set in 1973, when the X-Men have disbanded and Professor Xavier is in despair. In most of his X-Men Fatalities first-rate, Beast, Xavier, Magneto, Mystique, and just a few characters get little to no screen time.

The official reason for Wolverine returning rather than Kitty is that Kitty wasn't the main character in the film, and Wolverine's return clarifies the relationship between Logan and Charles Xavier. This is a valid point. In particular, it featured a troubled and helpless Xavier in the past, which in this case was clearly not addressed in the comics, as the past is actually the present comics. Due to Xavier's changing personality, it was necessary to send someone to solve the problem.

Another difference between comics and movies is the purpose behind them, which goes back to the beginning. The present or past of this cartoon, depending on how you look at him, is set in 1980, but the movie is set in 1973. This departure from the comic stems from Singer's inability to define cinema. In the comics, the future role is set in 2013, the same year that filming began. There are two main differences between the comics and the movie: the mutants' time traveling to escape the guard building and the nature of the infection. In the comics, Rachel is the one who uses her own supernatural powers to send the spirit of an adult Kitty Pryde back to her recent past. Instead, due to the character's popularity, the film sees Wolverine travel to the past thanks to new powers developed by Kitty Pryde (Ellen Page). Hugh Jackman's charisma stems largely from the story's success, but it was clear he would replace Page as the main character in the movie, as opposed to the comic, where Kitty is the protagonist of the story. Singer justified his decision to send Wolverine back in time by saying that it would not contradict Wolverine to revert to his younger self because he ages so slowly thanks to his regenerative abilities. "But the mutations of the Inhumans (or the X-men) are not really the same as a tragic flaw. It's not error that leads them to a final and definitive unraveling, but a constant, ongoing state of affairs. The inhumanity of the Inhumans isn't their downfall, but their daily life, their mundane, ordinary practice." (Bogost, 135)

Other major differences include the inclusion of the character Bolivar Trask and the actor playing him in the film. In the comics, the Sentinel, a terrifying mutant-hunting robot, appears to run amok out of control, but its creator, Trask, does not appear in the story. Instead, Singer decided it was important to show audiences a character who, as several interviews show, sees himself as a benefactor of humanity rather than a slaughterer. The choice of Peter Dinklage, who had no physical connection with the cartoon character, would have been due to the skill of the actor.

3.7 The monastery as a visual vocabulary

The monastery in *X-Men: Days of Future Past (2014)* is an old monolithic monastery built on a mountainside. Singer points out that the cloister temple that hangs when Wolverine travels back in time was inspired by the chapel model he saw in the photo. Stained glass has a fantastic, almost magical quality. There was something magical about it. Here the mutants encounter their greatest enemy from

the future. The monastery is an ancient monastery that has been around for thousands of years and is surrounded by all the sci-fi elements such as the new X-robot jets and sentinels, thus blending classic and sci-fi aesthetics. According to Jason Lee, "governments perpetually develop an enemy, instilling fear and complicity in the populace, allowing them to be subjugated and the dominating regime to remain in power. There is a complex relationship between the government and the press in enabling such a power relationship." (Lee, 64)

Taking inspiration from various Asian architectural forms such as China, Japan, India and Indonesia, John Myhre designed this set as if the entire structure was carved out of a single rock by ancient monks. The monastery consists of three parts: A ridged Great Wall built for protection. The courtyard consists of a series of tower-like structures used for prayers and gatherings and the columned portico which served as the last line of defense against attack and as the entrance to the monastery's sanctuary. Cultural memories and references are in short supply to shape the future. So the approach was to create a visual vocabulary to communicate ideas. The past is warm, dark, and mostly cloudy, but the future is cold, dark, and cloudy. Since the film is set in both the past and the future, Cerebro and Xavier's mansion was constantly moving, with the film's shooting schedule changing what scenes appeared at what point in time.

Described by Myhre as a reinforced warship, the X-Jet was one of his most difficult kits to design and build. X-Jet looked true to her original X-Jet in comics and early movies, but it was all new and different. We see sleek, futuristic ships of varying shapes, scales and layers, with no visible seams. The filmmakers redesigned an older version of Xavier's wheelchair to match what already exists in the X-Men universe. And for the next version, the designer worked with Myhre to create something unique. Looking ahead to future technology, we came to the conclusion that the chair does not need wheels and can be moved using magnetic force.

3.8 Sentinels

Sentinel is a mutated robot whose construction program began in the early 1970s. They can attack the mutated gene and then isolate and attack the mutant. The Future Sentinel is an evolution of what was developed in the 1970s. Future Sentinels

are especially dangerous because they have biochemical technology that adapts to mutant abilities and allows them to take on mutant form and destroy them. Thousands of people go hunting. The Sentinel's importance in making a transhumanist film lies in its impact on the X-Men universe and the broader themes of prejudice and fear of mutants. Poon says "the Sentinels have found his mutant utopia and are attacking en masse! Beams of energy crash through glittering domes and tall spires as the Sentinels hunt down the mutant residents. Magneto is furious!" (Poon, 26-30)

Sentinel depicts the conflict between mutants and humans. Representing the pinnacle of anti-mutant technology, the Sentinels are specifically designed for combating and eliminating mutants. This advanced technology amplifies the tensions that exist between mutants and humans, making conflicts more serious and deadly. Trask's creation of the Sentinels is based on his belief that mutants pose a threat to humanity, and this fear further exacerbates the rift between his two groups.

In this bleak dystopian future, the Sentinel has evolved into a highly efficient killing machine. They have the ability to adapt and counter various mutant powers, making them virtually unstoppable. As a result, mutants are brutally hunted down, imprisoned or killed. The dystopian future serves as a cautionary tale, showing the potential consequences of unbridled hatred and discrimination and the devastating effects they can have on both mutants and humans.

"The Future of Robot and Human Intelligence formulated the vision of immortality in computers as the normative goal of human progress. The ideas of technological posthumanism and transhumanism have now found their way into literature, art, film, television, and journalism." (Krüger, 19-26)

To prevent a dystopian future from becoming a reality, the X-Men decide to use time travel as a last resort. They send Wolverine's mind to the 1970s, where he must convince a younger version of Professor X and Magneto to work together to change the course of history. The Sentinel's presence in the future serves as the catalyst for this time travel mission, adding urgency to the X-Men's quest to change the past.

Sentinels also act as saving arcs. The film deals with the character of Sentinel founder Bolivar Trask. Trask's actions in founding the Sentinels are driven by his fear and hatred of mutants, but the film also portrays him as a complex character with deeper motives. Trask is portrayed as an ambitious scientist who truly believes in protecting humanity from potential mutant threats. His character explores whether salvation is possible for someone who has caused so much suffering and destruction.

X-Men: Days of Future Past (2014) features significant character development for several of his main X-Men characters. Meanwhile, Charles Xavier, known as Professor Magneto, struggles with his beliefs and loyalty to the mutant cause. Depicted as a key figure in the founding of Sentinel, Mystique faces a moral dilemma that could change the course of history. The film allows these characters to learn from their past actions and grow as individuals.

One of the unique aspects of *X-Men: Days of Future Past (2014)* is the ability to connect his two eras of X-Men movies. By utilizing time travel, the film is able to seamlessly blend, interact, and influence the events and characters of both timelines. The concept not only offers a new look at the X-Men universe, it also closes certain storylines while opening up new possibilities for future films. *X-Men: Days of Future Past (2014)* serves as a formidable foe, a catalyst for time travel, and an iconic representation of prejudice and fear. They help advance the plot, create dystopian settings, and provide opportunities for character growth and salvation. The film's intricate storytelling, combined with the amalgamation of multiple of his X-Men eras, makes for a pivotal and memorable instalment in the X-Men film series.

In 2000 when the X-Men hit the big screen, X-Men technology allowed filmmakers to pretend the X-Men didn't exist. 14 years later, getting real, reliable results is no longer a problem. For example, the Sentinel, an 18-foot-tall mutant-slaying robot coveted by the mighty X-Men, is no match for outdated special effects technology. Many robot movies have been made in the last decade, but what Singer was trying to achieve has so far failed. In *Days of Future Past*, Singer presents two versions of the Sentinel: the one from the past and the updated version from the future.

3.9 Constraints and their possible solution in *X-Men: Days of Future Past*

In recent years there have been many arguments against reproductive technologies, as well as strong counter-arguments from proponents of biotechnology-based development. In transhumanism there is no doubt that these technologies can provide many advantages and benefits in the treatment and prevention of disease, as well as the ability to increase productivity and meet personal lifestyle plans. Faced with these undeniable positive effects, transhumanists claim that these technologies are made available to humans and that everyone has the ability to obey them (Bostrom, 9). In this sense it is clearly distinguished from some current eugenics movements, which have historically employed coercive selection techniques to promote a particular idea of what constitutes an ideal human group. Transhumanists clearly distance themselves from any assimilation to the eugenics of the past: the evolution of X-Men like Jean Gray proposes the improvement of a species, hopefully for the improvement of certain individuals, if possible. Development should be reversible. But, as mentioned above, serious objections to humanism have been raised: The problem of inequality, the problem of loss, the problem of autonomy and the problem of dehumanization. For the problem of inequality the first criticism asserts that it is an exaggeration that physical growth is not equal between normal and evolved humans. The technology isn't advanced enough, at least not yet, for people like the X-Men, who are way above average human intelligence or ability. Even if that picture is height, muscle mass, eyesight, extending human lifespan, etc.

In the current historical context there are other social areas where there are few inequalities which can be considered unfair. This is the case when other skills are available through genetic inheritance, parental skills or privileged access to education due to country of birth. The question is whether it would not be fairer in terms of equality of opportunity if social success did not depend only on the factors mentioned above, but could be improved. In other words as seen in *X-Men: Days of Future Past (2014)*, transhumanism can adapt to the random and inappropriate circumstances into which individuals are born, making its potential outcomes more dependent on their free will choices. Cultural materialism analyzes films in the context of their cultural and historical environment. It takes into account the economic, social and political factors that influence filmmaking and audience

reception. Raymond Williams' *Marxism and Literature* (1977) and Tony Bennett's *Culture: A Reformer's Science* (1998) contains an in-depth analytics of cultural materialism theory which the X-Men films too so vividly portray. So from this perspective a person's social or economic success would be more in line with a performance-oriented conception. But what if these future improvements in physical performance are not within normal limits and cannot be translated into human improvement? the living conditions in the society will actually be very different from what we have experienced so far, and the physical changes will be very similar to those of the X-Men mutants. There will indeed be a dystopia.

Moral norms and social norms in general indicate a range of psychological, economic and social conditions that change significantly over every decade. Here we have to consider two scenarios, possibly consecutive. Firstly, where access to these developments has not yet been generalized to all members of society, it is necessary to allow access to these events to those who wish to access them, while ensuring that these institutions do not abuse it to be able. These rights simultaneously apply Rawls' principle of differentiation¹¹, with some of the advantages they enjoy affecting other subjects as well. In this way it should be possible to give the most disadvantaged members of society access to these developing technologies in the short term or to receive compensation that may cast doubt on the justification of binding measures aimed at extending influence to all citizens. In this sense, the creation of economic and social measures that guarantee equal conditions of access to developing technologies, as happens in education or health services in welfare states, is not excluded. Such physical or cognitive improvements contribute to individual well-being and autonomy and general well-being like every member of the X-Men enjoys. Roy Scranton says

"The hardest thing about seeing our future isn't the black swan — that high-profile, hard-to-predict event that retroactively changes everything — or the complexity of the climate system, or even the fact that humans are wired for repetition, adaptation, and rationalization. The hardest thing about seeing our future is that we cannot see our present, and if you don't know where you are, you don't know where you're going." (Scranton, 43)

Another consideration is how the individual will use these resources. And just like in today's society, some people make more effective decisions and life plans than others. Health safety issues with regard to health impacts was pointed out that technological advances have not yet prevented adverse health effects. It can be assumed that some implants with their improved technology could endanger human safety and health, especially considering the long-term consequences of changes in the human body. In some cases, chronic and permanent injuries are also observed. As we have already seen, gene therapy also poses health risks. A precautionary principle should apply for the time being, that is to say a cautious approach to the development or remodification of human beings, so that we can be sure of all the goodness and luxury that we predict and specify as the consequences do happen.

3.10 Impact on personal autonomy

For all the things that have been seen so far, we don't know if these changes are consistent with the predictions of previous experiments. The problem is that we don't have enough information and we can't predict the outcome. So taking any kind of drastic action against transhumanism or genetic engineering, in particular especially mutants, is controversial given the potential harm. Therefore and above all the objection is the loss of autonomy which Habermas¹² reveals as one of the most unacceptable consequences of genetic engineering processes, namely an increase or a weakening of autonomy. This question arises in *X-Men* when some mutants wonder if they want it to stay that way. The mutation turned them into super powerful beings, but limited or damaged them in other ways, mostly preventing them from carrying out their other life plans normally. This problem forms the backbone of the episode *X-Men: The Last Stand*, in which the company Worthington Laboratories announces that it has developed a drug in its laboratory on the island of Alcatraz to suppress the mutated genes. Some mutants like Rogue are interested in medicine, while many are intimidated by annunciation, making it difficult to pursue other life projects while developing skills. Jonas and Habermas note how the possibility of parental genetic selection can undermine children's sense of autonomy and self-constructed identity (Kampowski). Genetic interventions, even when ordered or directed by parents themselves and not just doctors or other government agencies, paradoxically threaten individual autonomy under the guise of some growth. The

consequence of a child's understanding that his identity is the product of the judgments of others, even if it is his parents, can be more than remarkable for his own moral understanding of self.

For this reason, a person undergoing genetic intervention cannot be considered a natural fact, but interpreted as if the programmer was acting without will or consent. The transhumanists' concept of genetic intervention binds the person concerned to a precise life project and, in a sense, entails the freedom to choose his life, or at least prevents him from starting it over, modifying it or revising it in depth.

But it would be wrong to think that a person has no choice in life because some of their genes were chosen by their parents. It's not that today's parents try to control their children's lives through decisions in which they have no part: what education they receive, what extracurricular activities they engage in like playing a particular instrument, playing sports, joining a cult, etc. keep in mind that genetic enhancements actually give them more choice and autonomy, that is, when they expand their abilities rather than restrict their autonomy. Better health, more intelligence or more talents are abilities whose influence does not limit, but opens up more possibilities. And of course, children like today are not denied the opportunity to adapt and ultimately deviate from their parents' life plans. This is what happened with the X-Men Warren Worthington III better known as the Archangel. Warren as a boy was born with wings but the boy chose to fly off when an antidote to cure him of his mutancy was about to be injected into him. There is no point in blaming mother nature or parents when a person is born with an incurable disease like Severe Combined Immunodeficiency Syndrome as mentioned above since until now there was no technological means to prevent it. But if it is possible to remove or add such genes the parents would again be innocent in giving birth to their child with the same mutant syndrome which they already have in them. Here another question arises if the child of a mutant wanted to be born with traits of mutancy. The transhumanist viewpoint starts all over again with the child. This is the principle that Julian Savulescu calls "reproductive altruism" (Savulescu, 43).

3.11 Benefits and problems of dehumanization

Dehumanization is the condition of manipulation in which we cannot

recognize our original essence. Authors such as Michael Sandel, Leon Kass, Francis Fukuyama or George Annas are some of those who dubbed the modern world as "bio conservationism" and, as the term suggests, express their concern and rejection of the development of technologies that undermine our human dignity. Genetic engineering in transhumanism is not represented at the moment as humanity's deepest hope, but as humanity's darkest fear. This attitude towards technological development is particularly evident in the *X-Men: Days of Future Past (2014)*, in which many main characters resist and fight against mutants, seeing them as anomalies of human nature and a threat to their very existence as a planetary race.

There are many issues behind the resistance to "human nature". Not everything that nature offers as a "gift" is worth preserving: disease, famine, natural disaster, etc. This is what Alfred Lord Tennyson means when he says "Nature, red in tooth and claw" in *In Memoriam*. Nature is not the measure of goodness or justice. And if so, why would we accept all of these aspects of the dark side of nature and tolerate their influence unconditionally. In the past, man rebelled against this violent destiny and therefore rebelled against the common human progress.

If the Stone Age had taken the same position that bio protectants claim today, we would probably still be where we were a millennium years ago. Some literary works and films warn that technology could make us impersonal, slaves of the state or powerful institutes in the future. Transhumanists reject these possibilities. It is desirable and possible to monitor technological advances without sacrificing the benefits they offer in terms of respect for human rights just like Professor Charles Xavier in *X-Men* monitor mutants and humans in cerebro. Political-legal strategies that people have devised to address and reduce inequality, stigma, or violence have been quite successful so far, so there's no reason to believe it won't happen in the future.

With this argument, conservationists are left with a question that is not easily answered: what is human nature made of? Sometimes they draw attention to the fact that human beings are recognized as moral beings, sometimes through emotional capacities. But today, perhaps the most common assumption is that "humanity" still has higher cognitive functions: rationality, autonomy, consciousness, self-awareness. And if we agree with this point of view, it seems that technicians do not lose their

humanity at all: they think, feel, have confidence in themselves and can make life plans for the future. The choice leads to a loss of dignity in the beings thus born (Fukuyama 148); a dignity which is already rare in today's world.

In addition to debating the meaning of "disability", it should be noted that similar arguments were developed decades ago when children were conceived through In Vitro Fertilization(IVF). Fortunately, these predictions turned out to be wrong, and the reason is that dignity does not depend on how one was born. On the other hand, many authors have pointed out that dignity has nothing to do with who we are as human beings, or how we are born. In *Blade Runner 2049 (2017)* and *The Island*, androids and clones are different from humans, yet they share the same qualities that make humans valuable like moral autonomy, intelligence, emotions, and the ability to suffer. The criticism of Michael Sandel, expresses the fear that genetically modified humans play the role of God and oppose nature. Apart from religious interpretations, people literally usurp the role of the supreme. Since this is a secular statement and it focuses on it, the main concern is that people don't see their own limitations.

3.12 Dystopian World with advanced humans

Transhumanist stories are about the future and the people who inhabit it are based on our awareness of our limits and what we can possibly become. The images whether utopian or dystopian represent the conflict between our desires and our doubts. The following two very specific moments find evidence of their weakness which also becomes their strength. One is the fateful moment when the warrior Achilles sees the arrow of Paris pierce his heel. Another is when Superman discovers during adventure 61 that kryptonite, a fragment of his home planet, weakens his powers and makes him as weak as a human (Siegel and Schuster). Several centuries pass between the former episode and the later yet both have the same essence. Posthuman history, or the vision of a world where we are better and more advanced, always arises from the justification of our weaknesses until the rejection of the logic of our humiliation. As Nick Bostrom says the study of the "ramifications, promises, and potential dangers of technologies that will enable us to overcome fundamental human limitations, and the related study of the ethical matters involved in developing and using such technologies" (Bostrom, 1). We know that we are ephemeral heroes

and anti-heroes, embodying imaginary projects or the eternal fight for eternity.

A reality in which we push our limits and overcome our old weaknesses has been imagined since the dawn of time, but it has always been an integral part of history. These stories of visions of the future and the people living there are illustrations of our consciousness, which cannot be understood without recognizing what we never will be. Imagining a future whether fictional or dystopian reflects our desire to understand the present, to want or aspire otherwise, to live in a disappearing world and the fear of being swallowed up by machines or abusing technological advances. The novel *1984* (Orwell, 1949/2010) is one of the most influential examples. Most of these X-Men stories and *Z-Men: Days of future past* (2014) in particular speak of what we want to be, of what we really are and are part of a paradox: the main characters are our salvation and at the same time our doubts and the supreme expression of chiaroscuro¹³. For this reason the idea of a strong future involves a good vision of the continuum of pain, rejection and sacrifice as the driver of change. Cited by many authors and titles, it (Transhumanism) can be broken down into three axes that help us understand its validity in the history of popular culture: mythology, development, and technology.

It's safe to say that much of modern Western fiction comes from three major legacies: Biblical texts, Greek mythology, and Arthurian legends. The former manifests in stories of redemption, the acceptance of the punishment inherent in existence, and the crucifixion of characters grappling with a guilty conscience and unacknowledged sins; which Logan or Wolverine is the best example as the choice to become more mutant and have more powers and suffer more too was his choice alone. The second is the expression of worlds filled with hyperbolic characters illustrating the collective quest for eternity just like Scot Summers journeys into the Savage Lands after losing his lady love Jean Grey. The third is the story of an ordinary man who is in fact called to reign, to perform great deeds that usually elude him like Nightcrawler who regards himself as a simple man even though he has the ability to teleport. They all share many aspects, two of which are very clear: the struggle against time (meaning our temporary and limited state) and our desire to recognize a higher entity that symbolizes the purpose of our journey. They also share a common search for moral and emotional support, a compass to help us find our

destiny and ourselves.

The legacy of mythology is felt both in classical literature and in the rise of audio-visual fiction in the 20th century (Arnaudeau, 2013; Mayer, 2018; Reynolds, 1992; Anseta Gómez, 2007). In Greek mythology, the role models of the gods and the long list of characters seeking their approval took on so many faces that they became full stories in popular culture. And the clearest and most recent expression are the superheroes, born in the form of cartoons as a resistance to the great social and political crisis of the last century, and their cinematographic and television translations have become a synthesis of what we understand or make of it.

3.13 Cyborgs: Modern Archangels

In *Terminator Salvation* (2009) saga fighter plane pilots are codenamed 'Archangels'. Superheroes and superheroes are the quintessential projection of an expanded humanity, even if they are not the direct result of the evolution of our gods or aliens. Comics, films and series explore the divine in the human and especially the human in the divine. It's no coincidence that popular culture's depiction of Superman is dedicated to the torpedo of creation and is increasingly reflected in the shaping of his story. After all, we live in a time when we are more aware than ever of what we take for granted, and superheroes ultimately embody a collective vision for a better world that is far from realized. Philip Hefner's "The Animal that Aspires to be an Angel: The Challenge of Transhumanism." sheds much light on the wannabe angel side of humans. The certainty of living the dystopia and the motto that they are trying to save us changed the audio-visual formula forever. (Hefner, 158-167)

Although there have been many technological changes throughout history, the 20th century is the development of science and technology. The exponential of modern and professional science was when it started to emerge as a strategic and military issue. In the interests of governments the cyborg is a fairly young character that came of age after WW-II; an interpretation in science .The military-industrial complex and its atomic bomb or space travel was a scientifically new and historically specific entity. The cyborg Skynet is a troll command system in *Terminator Salvation* (2009) with integrated communication intelligence. It is filled with new entities and materials derived from their Production. Exceeding "natural limits" is a

common thing in this metaverse.

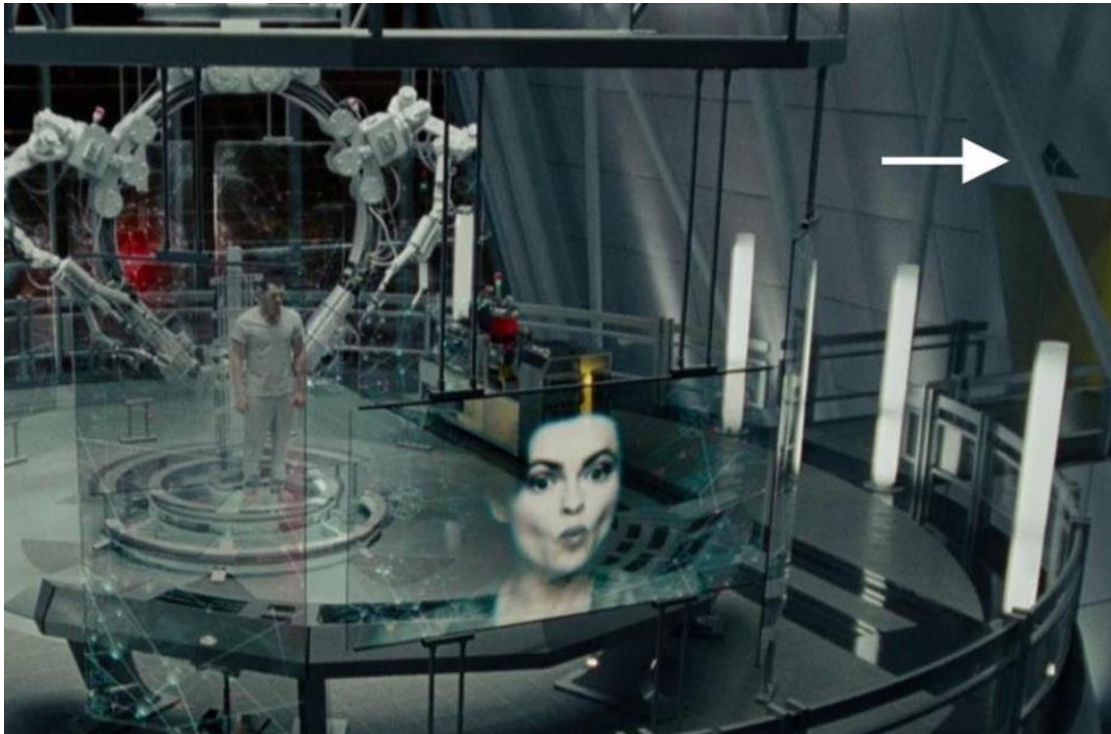


Fig. 1. Skynet from *Terminator Salvation* (2009)

The case of transuranic elements also found its place in this film. The existence of many chemical elements that theoretically should exist in a periodic table is hypothetically placed after uranium in some transhumanist films. They were created one by one and continue to "evolve". This Transuranic element can often be of artificial origin, i.e. of course, they do not exist on Earth. These processes are similar construction of transgenic units, often with patents as living organisms. In the words of Hopkins in a dystopian world,

"Transhumanism can be religious, in the sense that people can incorporate transhumanist methods and ideals into their religious aims. Where religion and Transhumanism can easily antagonize, however, is over the method of transcendence pursued, and the overall attitude toward given nature that motivates the pursuit. Practically speaking, the real battleground between religion and Transhumanism will be in the debate over which specific technological moves are consistent with a religious view of the ultimate good, a debate depending greatly on doctrinal specifics." (Hopkins, 14)

They are therefore works of art. The development of the cyborg and more broadly of techno sciences after the 1950s deepened in the hands of the central countries; an ambiguity explored by Haraway. Deployment of weapons of mass destruction by the capitalists has created a vast web of global threats. At the same time they caused many political and social changes; irreducible changes in a linear and progressive process of impregnation.

Early cyborg geeks were heavily influenced by strength training and general body modification. That's why they weren't appealing to feminists. It should be added that science fiction does this despite important feminine and feminist contributions. This technique had resistance and it came in danger to the views of the feminist. So 'Technophobia' has a manifesto of feminist science fiction these days; the most powerful cyborgs in Terminator series -villains and anti-heroes- came in feminine looks. But the cyborgs are still sexually exploited; cyborg women are often represented as sex machines. Here we can see the films taken in my study from a Feminist perspective as written by Laura Mulvey in her *Visual Pleasure and Narrative Cinema* (1975) and Bell Hooks' *Reel to Real: Race, Sex, and Class at the Movies* (1996) which examines how gender influences cinematography and representation. Laura Mulvey coined the concept of the "male look," referring to how films often position audiences to see through a straight male perspective.

Despina Kakoudaki claims that when a smart machine receives competent manipulation of human skin and language a person can reduce the possibility of violence, gender, caste, sociality, and existential dilemmas (Kakoudaki). So with the descriptions of date the cyborg of our century is strong. This is the identity of the cyborg era: ability to end life on earth and make differences to impact humans and terraforming our planet more than in previous decades called anthropocene.

3.14 Evolution and its dangers

One of the most recurring motifs in history is to talk about the future of man through evolution in response to the destruction of the imaginary ceiling of life or as a result of some social or genetic manipulation. The latter category has one of its main exponents in comic books especially the X-Men (Lee and Kirby, 1963) and the inevitable film and television adaptations. The X-Men was born in the 1960s as an

echo of social struggles and a metaphor for ambient sectarianism in the United States. The first comic dates from 1963 and is a very important subject. These characters are mutants who arouse suspicion about their species. These mutants were afraid because of their supernatural powers. This fear is seen as altered in *Terminator Salvation* (2009) as here it is the humans who fear and not the mutants. It is one of the reasons why I chose these two films among others. It's a canon theme that permeates the entire history of the genre: the fear of difference. They have always imagined what would happen if our species took an evolutionary leap, and they warn us of the consequences in our cultural ramifications. According to Lars Schmeink,

“the examined cultural artifacts of biopunk science fiction are united. All of them posit a utopian potential for a different future by revealing a critical posthumanist notion of subjectivity as key. This potential might not include us, or include only a radically altered version of us, but it is existent. In extrapolating the dystopian present of liquid modernity and disclosing the diminishing dimension of science-fictionality in terms of the possibilities of technoscience, especially genetic engineering, biopunk dystopias function thus as education and warning.” (Schmeink, 246)

They have always imagined what would happen if our species took an evolutionary leap, and they warn us of the consequences. The inventions of the near future are once again used to talk about the present. Despite being born in a specific and extremely aggressive historical era, the X-Men are an accurate representation of the political conflict of all time. Much of it is being reflected in *Terminator Salvation* (2009) in the form of skynet¹ which is an inverted version of ‘Xavier’s School for the Gifted’. The ‘gifted’ here are manufactured instead of being sought.

Another important front in the evolving portrait of modern fiction comes from Aldous Huxley's *Brave New World*: the idea of a utopian society based on the domination of genius. The evolution of species by genetic selection is the pretext for the plot that spawned an entire era of fiction. One of the best alternate version of the book, although not an official adaptation, is by Andrew Nicol's *Gattacabi*. Created in 1997 at the height of the ongoing debate over the use of genetic engineering, it asks the question of what would happen if future births were based on artificial

selection criteria that would allow the creation of societies guided by exceptional individuals. The main characters are two brothers, one of whom was born with help and full of prospects, while the other is born naturally and suffers from a heart problem that limits his chances of life until the age of thirty. It is in short, a perfect synthesis of the debates on development. On one hand we want to believe that the next generation H+ person like John Connor will correct and improve the present, but at the same time we doubt the extent to which the natural order of things can be manipulated. In the words of Keith, A., Bauer

"Transhumanism is a social, technological, political, and philosophical movement that advocates the transformation of human nature by means of pharmacology, genetic manipulation, cybernetic modification, nanotechnology, and a host of other technologies. The aim of this movement is to increase physical and sensory abilities, augment intelligence and memory, and extend lifespan." (Bauer, 8)

The overwhelming horror of some deep jungle rural monsters are some of the driving forces of the genre's(transhumanism) history, as the monster almost always wins or is only defeated by some special warrior who has some kind of augmented abilities. To see its meaning one may turn towards the novel *The Island of Doctor Moreau* by HG Wells, in which the desire to repeat human evolution leads to the creation of a genetically manipulated human that leads to a small-scale dystopia.

The challenge of nature and its consequences is another way of projecting our future. In this sense a reference to the myth of Frankenstein and its multiple meanings is unavoidable. When we try to breathe life into what isn't there to create a being reflects the monster we carry within. That's the modern expression of the concept which this thesis too attempts to answer, with Vincenzo Natali warning of influential video games like the movie *Splice(2009)* in which scientists create a hybrid life form that learns to manipulate its emotions and instincts. *Hitman (2007)* is about a genetic experiment that suppresses children's emotions in order to turn them into ruthless serial killers. As for cloning, another popular evolutionary theme, mention should be made of the television series *Orphan Black (2013)*, which tells the story of a young woman who discovers that she has been the subject of an

experiment that has produced countless copies of itself.

3.15 Virtual Infinity

There is an ancient belief that achieving immortality is progression. According to these fictional stories, humans can extend their journey in the world through technological advancements that can correct aspects that make them weak and limited in the long run. Authors like Frank Herbert *The Eyes of Heisenberg* (1966), Isaac Asimov *Foundation* (1993) or Michael Crichton *Terminal Man* (1972) have explored the future from the perspective of the conflict between man and machine. Fiction is dominated by stories about the loss of humanity that accompanies the existence of the machine, or about the machine finally coming to its senses and taking its place in the world. Iconic films like *Terminator Salvation* (2009) or *Blade Runner 2049* (2017) are clear representatives (Sala, 2017). But there's a third meaning in *Terminator Salvation* (2009) meant to show how advances in technology can make humans superhuman, even as it repeatedly warns of the dangers of continually challenging nature's patterns. In these stories, man lives, survives or evolves because of the machine, but realizes that his role in society is shrinking and must also decide who he really is. One of the best films other than *Terminator Salvation* (2009) is Paul Verhoeven's *RoboCop* (2014). Cop Alex Murphy has been rebuilt and revived for robotics, but his memories and emotions in the human scene struggle with the directives of his software. In short it is a very current dichotomy because modern society is constantly divided between what they are and who we are.

Similarly, Leigh Whannell's *Upgrade* (2018) depicts a man bouncing back through technology using the "upgrades" to combat biblical undertones. The debate here revolves around whether it's right to use technology to satisfy our most basic instincts. At the other radical extreme, Shinya Tsukamoto's Japanese film *Tetsuo* (1989) shows a protagonist who dreams of a world of metal and cables that allows us to collectively peer into technological madness. In the story, the machine turned into a man.

"The Terminator is the mirror which showcases what a dystopian universe would look like. It is very much simply a science fiction to many viewers yet these modern tall tales "emphasize and advocate

the benefits of technology for improving life. "Transhumanism" is the effort to transform the human being into something beyond its present body and mind ("trans" means "beyond"). It is driven by innovations in the health care sector, increasing machine intelligence and the military. The economy will be influenced by the resulting trend to merge humans with computers and machines. Transhumanist parties will play a role in the key policy decisions of the coming years." (Benedikter. & Siepmann., 47)

Contemporary fantasy cinema has turned parables about primitive gear machines into classic treatises on the disruption of virtuality in our lives. Another such film of our time is The Wachowski's *The Matrix* (1999), in which society is enslaved by computer programs until a couple of heroes rise to take control.

3.16 The Apocalyptic Consciousness

Few modern films like *Terminator Salvation* (2009) combine many different languages to consider the role of a superman in our imaginary future: Neo from *The Matrix* must learn to distinguish reality from appearance, learn to impose himself as a character. The scene where he learns martial arts is invaluable and ultimately accepts them in the struggle between the virtual world and the physical world. John Connor in *Terminator Salvation* (2009) had to grow up in a world of war. Another film of imagining the future of man is the *Black Mirror* (2013), which deals with how technological applications can transform our lifestyles, our relationships, and even affect our deaths. All these hints at a virtual eternity where physics is limitless, and video games these days allow us to imitate ourselves as avatars make our most repressed dreams come true. In the words of Scott Pugh, "humankind is distinctly and distinctively placed in the world of things, both organic and inorganic, but today's readers may well be pondering a move beyond the current species, a transhuman existence." (Pugh, 122-135)

No matter how advanced machines are, no matter how advanced virtual worlds are, no matter how powerful Superman is, and no matter how much we grow as individuals, these stories share the same theme and come to the same conclusion.

In *Terminator Salvation* (2009) people surely suffer and terminate because awareness of impermanence gives real meaning. This is also reflected at the end of *Blade Runner 2049* (2017) when Roy Batty, aware of his impending death, considers what he sees and experiences to be the essence of immortality. Mankind moves forward and evolves; they will defy time but will not beat it. Much of modern fiction or dystopian films, stems from this realization and tries to arm our future with our present struggles and seemingly impossibilities.

3.17 The coming age of Cyborgs like in *Terminator Salvation* (2009)

The creative minds behind *Terminator Salvation* (2009) are actually a large group of experts in computer technology, military operations, artificial intelligence (AI), and the course of world events. *Terminator Salvation* (2009) and other films with themes similar to *The Matrix* film can be seen as a wake-up call; a proverbial blow to our downfall. Yet most people in the world remain passive, jaded, ignorant and intellectually lazy even when shaken with dystopian awareness films as such. With a possible risk of complete destruction the film *Terminator Salvation* (2009) warns that the Skynet -robot- military system is taking over and waging a devastating war against humanity. There is actually no such thing as a military space communications system called Skynet except the closest alike that are operated by Britain and NATO.

We have entered the era of the autopilot: the world's autopilot aircrafts ready to replace humans. Talking about this we remember the devastating attacks of the killing machines in the film *Terminator Salvation* (2009). Cyborgs in our daily life could be ready in 10 to 15 years or maybe a quarter of that timeline depending on how many hours the Deepmind¹⁴ scientists work. If we think that's unlikely, we can already see what the Japanese have already achieved with Saya¹⁵ long ago

So to be perfectly honest this is debated yet admitted. AI devices artificially designed to wear could be the scientific 'devil in the flesh' ¹⁶. Although the molecular electronics from human DNA is an obvious necessity to bring to life to a robot, we can see what is happening in the research facility in Hebrew University of Jerusalem, Israel: a DNA that can conduct electricity and is a promising step towards molecular electronics. (Porath, 1).



Fig. 2. Saya teaching in the Classroom

Our technological civilization has reached a supernatural ability. Our scientists or their reasons can rebuild a thing from scratch or lead to an event of a cataclysm that could lead to the end of the current civilization. Today's machines, plans, energy, raw materials are the same as Skynet, all positioned to replicate nearly every aspect of late 20th or early 21st century technological civilization: television, telephone, work car, microwave, airplane, locomotive, railroad, etc. Today just like the all-powerful Skynet our robots can make electronics, motors, windows and tires from scratch. As Milan says

"It is argued that the "generic" evolutionary pathway of advanced technological civilizations are more likely to be optimization-driven than expansion-driven, in contrast to the prevailing opinions and attitudes in both future studies on one side and astrobiology/SETI studies on the other. Two toy-models of postbiological evolution of advanced technological civilizations are considered and several arguments supporting the optimization-driven, spatially compact model are briefly discussed. In addition, it is pointed out that there is a subtle contradiction in most of the tech-optimist and transhumanist accounts of future human/alien civilizations'

motivations in its postbiological stages. This may have important ramifications for both practical SETI projects and the future (of humanity) studies." (Milan, 246)

But by saying so it does not mean that we must go back to the age of the cavemen. A technological civilization can build a new reserve from time to time, centuries or millennia, without waiting for development. Huge economic resources have been spent on all this.

"I think we should be very careful about artificial intelligence. If I were to guess like what our biggest existential threat is, it's probably that. So we need to be very careful with the artificial intelligence. Increasingly scientists think there should be some regulatory oversight maybe at the national and international level, just to make sure that we don't do something very foolish. With artificial intelligence we are summoning the demon. In all those stories where there's the guy with the pentagram and the holy water, it's like yeah he's sure he can control the demon. Didn't work out." (Montenegro)

It does sound like Dr. Faustus summoning a demon. Elon Musk is a world-class industrialist, financier, engineering excellence and more. If he says something like that publicly at MIT, we sure can sense several upcoming, undeniable truths just like in *Terminator Salvation (2009)* saga. There are more examples like Google's new program, CaP (Code as Policies), a human-like learning computer that programs itself. Of course, since computers can program themselves, they don't need human programmers, they program themselves, they can do or think whatever they want. So we find ourselves in a whole new world, the world of the machine.

The many scientific discoveries and inventions have made it difficult to believe if Earth is the only planet under the domination of machines. People began to suspect life beyond this solar system in the far beyond that may be a possible threat to human life. Here I say that our own Artificial Intelligence is a great threat. It does not like biological life. In it a soul is missing: it has a lack of compassion or empathy. It is an extremely intricate, incredibly subtle and intricate human construct that not only extends into the 3D physical realm, but also operates in the world we

live in.

In *Terminator Salvation* (2009) we see transhumanism frankly as war machines. One of the human protagonists John Connor fights against cyborgs that claim to control a society of their own: a society made up of humans, cyborgs, part human part-cyborgs, and water robots. The machine co-opts humans by offering them a break from bullets. Before the age of *Terminator Salvation* (2009) the people, by building a fighting machine, hoped to take a break from war, leaving it to the machines. It was a blissful hope as people would be able to provide themselves with generous pensions, medical care, nice homes, vacations, comfortable lifestyles, money, requirements and benefits, professional status, security etc. The cyborgs today know exactly which keys to press. If the bullets and the lob are not enough, the machine will completely destroy the people who receive support. In the assassination of Gandhi the machine -gun- neither knows nor respects the soul or love. When we see that people (at least some of them) have a heart and a soul; that is the purpose of their destruction. Because of this, we see a plague of ruthless cruelty and ruthless destruction on this planet. We see the machine in action but fail to see the other way, the other action around: their objective is to destroy humanity and the planet.

Skynet the computer 'ghost' in *Terminator Salvation* (2007) uses anyone willing to work with it to further its nihilistic ends and yet there are many who lift their cups to that. Machines today have their hooks and tentacles all over the planet. The entire planet and all of humanity are under fierce and relentless slow attack. The only way to move forward and out of this hellish landscape is to increase our awareness of how and why this is happening. Otherwise we are done with our journey on this earth, the game is over as the final decision belongs to the machine. In this scenario, humanity has no future on this planet and the planet will inevitably fall into the machine. At the rate and scale of events in the world today, it should all be over by some swift decades or perhaps sooner. We are at a very advanced stage in this context of life and death for all; nearing the epitome of the civilization of our age.

3.18 The Cyborg Immortality

The idea that humans are immortal and that artificial intelligence is catching

up with the Creator may sound like something out of a sci-fi movie, but scientists fear the possibility decades from now. Many technologies, biotechnologies and nanotechnologies, help to understand how the biological process of diseases occurs. Interestingly, aging is studied as a curable disease and this is the most important aspect. Example may be noted here about Wolverine from X-Men who is also known as Logan. The technology is used in biological organisms, indeed there are already experiments with mice in the field of longevity.

In the next few years, a 90-year-old man could be as fit and young as 30. This isn't completely immortal; but the life expectancy that is currently increasing, but as we age in numbers, we wouldn't be growing older just like Wolverine from X-Men who has healing factors. This is what Transhumanism expects us to expect. We live in a world where evolution is constant and immortality is a dream. In the near future this will no longer be a dream but will become a reality. As Napier says, "Ghost in the Shell contains elements of both dream and nightmare. Created by a director clearly familiar with both Christian and Platonic concepts (in fact Oshii considered attending seminary at one point), the film is definitely not for children. Much more intellectually challenging than most American science fiction films" (Napier, 72-79) Years from now our species is on a roller coaster to be overtaken by machines. The "singularity" then arrives. This is the point of view of Raymond Kurzweil, a futurist, engineer, expert in artificial intelligence, musician and entrepreneur interviewed by *Time*. He seeks to make known the moment - what he calls the singularity - when the evolution of machines transcends man. Kurzweil believes it is possible to date such an event. The "singularitarians"¹⁷, as Kurzweil the American Computer Scientist calls them, claim that humans will finally be "functionally immortal" in 2045. Not just because we can put our minds into computers, but because the rise of regenerative medicine will "reverse the damage" of age.

Kurzweil envisions a world where technology is so advanced that the human genome "will just be code to be tested and tweaked" and we can raise the dead. Infinitely prolonged life becomes reality as the resurrection of organic matter. But in this matter the results and its impact to the society can be seen from Jonathan Swift's *Gullivar's Travels* where the immortal Struldbrugs live a hopeless over prolonged and meaningless lives. Perhaps death is no longer dreaded once and for all; human

intelligence will conquer the universe and Kurzweil even hopes to bring his father back to life in his book *The Singularity is Near* (2005). He says

“The Singularity will represent the culmination of the merger of our biological thinking and existence with our technology, resulting in a world that is still human but that transcends our biological roots. There will be no distinction, post-Singularity, between human and machine or between physical and virtual reality. If you wonder what will remain unequivocally human in such a world, it's simply this quality: ours is the species that inherently seeks to extend its physical and mental reach beyond current limitations.” (Kurzweil, 25)

The speed of our scientific progress will be such that "within a few centuries, human intelligence will process and saturate all the matter in the universe". And when that happens a new meaning of life is unlocked: the long overdue answer to John Donne who wanted death to die so badly.

3.19 Thematic development of transhumanist characters

Transhumanist characters often focus on a typical traumatic origin of a villain who was mutilated and turned against his will into a half-human, half-machine, all-police creature with a subtle Frankenstein twist. The relationship between Dr. Dennett Norton (Gary Oldman) and Murphy (Joel Kinnaman) -in *RoboCop*- to their wife and son go further than what we call a normal family today. After Murphy became a Robocop the marriage seems artificial and serves as a point of contact for the cyber-agent towards his more human side. At the other end of the equation is Raymond Sellars (Michael Keaton), the CEO of Omnicorp, which owns half the world through the use of military robots in armies. Sellars is close to completing its master plan to launch its product in the one market that has turned it down, because Omnicorp is legally prohibited from launching its machines on US soil. Here we see cyborgs instead of robots and such beings saving someone's life -as soldiers. This is Sellars' plan, and it is executed cleanly and effectively against Agent Murphy, who has been fatally wounded in a terrorist attack.

In this plot construction, a startling sequence of images emerges from Murphy's reformation. Dr. Norton shows him what's left of his organic body, and as

he dissects the mechanical parts, the hero watches in horror as all his biological originality shrinks down to his head, heart, and lungs. This confrontation with reality, the perception of a new bodily self, undoubtedly leads the hero to the process of accepting reality, while in his psyche this very difficult struggle for his human identity takes place and makes him 'recognize'.

Being cyborgs refers to the recognition of a condensed image of imagination and material reality in which a bio political technology is realized that defines our bodies and identities and limits any possibility of historical transformation. There are arguments about whether the increasing presence of robots, drones and drones on the modern battlefield is justified. Likewise, he wants us to think about important issues like Transhumanism, whether technology and robotics are useful to humanity to improve the quality of life. In the same vein of the story, Murphy's themes of free will, emotions, and the soul are strongly emphasized. As Eugene Thacker says;

"we seek continuing enhancements to our intellectual abilities, our physical capacities, and our emotional development . We see humanity as a transitory stage in the evolutionary development of intelligence. We advocate using science to accelerate our move from human to a transhuman" (Thacker, 72–97)

3.20 Cyberpunk and Cyberspace: The body no longer behind a screen

Cyberpunk is a narrative and aesthetic genre that has recently gained popularity due to the rapid convergence of socio-political and technological moments in the history of storytelling. New developments such as social networks, open-source software and additive manufacturing technologies are reviving all existing notions of identity, its materiality and its essence. The state of social unrest created by a market whose interests destroy the lives and bodies of a growing group has helped to justify and glorify those who rebel against this systematic oppression. In the words of Raulerson,

"In a time of protracted economic crisis, failing political systems, and impending environmental collapse, one strand in our collective cultural myth of Progress – the technological – remains vibrantly intact, surging into the future at ramming speed Amid the seemingly

exponential proliferation of machine intelligence and network connectivity, and the increasingly portentous implications of emerging nanotechnology, futurists and fabulists look to an imminent historical threshold whereupon the nature of human existence will be radically and irrevocably transformed. The Singularity, it is supposed, can be no more than a few years off; indeed, some believe it has already begun. Technological Singularity – a trope conceived in science fiction and subsequently adopted throughout techno-cultural discourse and beyond – is the primary site of interpenetration between technoscientific and science-fictional figurations of the future, a territory where longstanding binary oppositions between science and fiction, and between present and future, are rapidly dissolving. In this ground-breaking volume, the first to mount a sustained and wide-ranging critical treatment of Singularity as a subject for theory and cultural studies, Raulerson draws SF texts into a complex dialogue with contemporary digital culture, transhumanist movements, political and economic theory, consumer gadgetry, gaming, and related vectors of high-tech postmodernity. In theorizing Singularity as a metaphorical construct lending shape to a range of millennial anxieties and aspirations, Raulerson also makes the case for a recent and little-understood subgeneric formation – post-cyberpunk SF – as a cohesive body of work, engaged in a shared literary project that is simultaneously shaping, and shaped by, purportedly nonfictional technoscientific discourses" (Raulerson, 1)

In this scenario, the boundaries of the body are constantly and unprecedentedly reconfigured. The body is not only a place of technological intervention, but the multiple orientations it undergoes make it an identity battlefield. In *The Terminator*, Marcus Wright suffers from an identity crisis as he thought himself a human and it was until he got stuck in a magnet mine that he realized he was a cyborg. The micro-political place of action is expressed through our physical and technological practices, and it is this aspect that inserts us into cyberpunk, its dystopia, but it also offers the possibility of reaction, action and self-determination.

As Karen Cadora points out, cyberpunk as a narrative genre has been characterized as one of the mass cultural products that has sparked scholarly interest in its trans- and posthumanist proposals that transform identity into something very mobile (Cadora, 357). However, this interest has gained a foothold in criticism of cyberpunk narratives that emphasize the abuse of identity and body and the glorification of Cartesianism¹⁸.

3.21 Gender in dystopia

Donna Haraway's imagination of exploration and resistance to identity brings together the experiences of our bodies and those of other trans women growing up on the fringes of this history that is current in material reality but transcends not only this futuristic genre but also technologies of class and racial oppression.

Mad Max: Fury Road (2015) is known for its strong emphasis on female characters and their agency in a male-dominated and brutal wasteland. The film's central plot revolves around Imperator Furiosa, portrayed by Charlize Theron, who plays a pivotal role in helping a group of women escape from the oppressive rule of Immortan Joe.

The society depicted in the film is characterized by a patriarchal hierarchy, with Immortan Joe as the ruler of power, who controls resources and controls the women he considers his "wives". Wives are depicted as objects of lust and status, highlighting the commoditization of women in this world. The film depicts women's reproductive autonomy and self-determination over their bodies. The wives' quest for freedom revolves around their desire to escape forced reproductive slavery, illustrating the importance of reproductive rights and self-determination. So we see here just as Margarey mentions "Technological sophistication has enabled its inhabitants to break completely the nexus between sex and reproduction and that between gender and mothering." (Magarey, 136)

Mad Max: Fury Road (2015) breaks with traditional gender stereotypes often seen in action movies. The film presents women as strong and capable individuals, not just prostitutes in distress or companions. Furiosa and the female characters in the film are portrayed as strong, independent, and instrumental in shaping the events of the story. Furiosa is a great example of this, as she takes charge of her fate and

defies the oppressive system, leading a revolt against Immortan Joe. Furthermore, the wives were not only passive victims but also actively involved in their escape and liberation process. The film avoids needlessly sexualizing female characters. Their costumes and looks are very realistic, reflecting the harsh environment and survival-oriented story. The focus is on their personality, skills, and actions rather than looks.

However, the film also addresses issues of sexual exploitation and objectification. At the heart of the plot are the "wives" of Immortan Joe, a group of young women imprisoned as livestock subjects. They are depicted as individuals seeking freedom and self-determination over their own bodies and lives. They are not objectified for their beauty but recognized for their resilience and desire for self-determination.

In *Terminator Salvation* (2009) where the post-apocalyptic world is ravaged by a war between humans and machines, gender roles and relationships play a role in shaping the narrative. The film features a predominantly male cast, reflecting the militaristic nature of the resistance against the machines. Male characters often take on leadership roles, such as John Connor, portrayed by Christian Bale, who leads the human resistance. This portrayal aligns with traditional gender expectations of male heroism and leadership in action films. Female characters like Blair Williams, played by Moon Bloodgood, who is a skilled fighter and pilot. However, their roles are mostly in supporting capacities, reinforcing a more traditional gender dynamic.

The creation of virtual communities are areas where technological agency can manifest as a subversion of the neoliberal capitalist norm, as an institution supported by biology and a vast body of scientific knowledge with which to shape our language, building and developing discourses. Monique Wittig's masterpiece, *The White Man*, is an example of biological and moral perfection. The counterpart woman is perfect but she's mean and unreasonable, and she's revered for her invaluable value as a mother. All technologies, from clothing to cyberspace, are marked in their habitability by the binary gender. Women are taken up and seen as someone who should have children and we reach a pathological state when we might no longer see them as such, including trans women. It is true that the experience of a trans woman is not the same as that of a feminist woman, but no woman has the same experience as another. Experienced oppressions often work differently Like

Furiosa; in *Mad Max: Fury Road* who do regulatory mechanisms and form a resistance in the micropolitics of the body. The biological body, upon which modern science and technology is based, is their first and most advanced site of control over their other tags like 'cyborgs' or 'women'.

In *Ghost in the Shell* (2017) the main character, Major Motoko Kusanagi, portrayed by Scarlett Johansson struggles with questions about her identity and gender. Her mind is that of a woman, but her body is an artificial construct, leading to a sense of disconnection and existential crisis. The character of Major Kusanagi is reduced to a sexualized object rather than exploring her complex character. This sexualisation reflects the representation of women in media and science fiction.

X-Men Days of Future Past (2014) has always been a metaphor for real-world issues of discrimination. The mutants in the X-Men universe represent marginalized groups, racial minorities, and people with disabilities. The ongoing mutant-human conflict in the movies parallels struggles faced by these real-life marginalized groups, emphasizing the need for acceptance and equality. The X-Men films have strong female characters like Mystique, who plays a crucial role in shaping the events of the movie and challenging gender norms and expectations. While *Ghost in the Shell* (2017) faced criticisms related to whitewashing and sexualisation, *X-Men Days of Future Past* (2014) is often praised for its diverse cast and empowering representation of female characters. As with any film, the way gender and sex are depicted can be influenced by the filmmakers' choices and societal context, and it is essential to engage in thoughtful discussions about these themes and their impact on audiences.

3.22 Living in a dystopian world: Terror and Identity

Dystopian films are about the near future, and the wave of nostalgia that goes with it. We live in a postmodern; anti-modern world. The Enlightenment is not dead, it has just changed its sign: instead of thinking that progress is unstoppable and that the future can only bring prosperity and betterment as some tech-savvy capitalist minds do, many seem to think that decline is inevitable and that all the past should have been better, even if we consider that our nostalgia tends to be ravaged by inequalities, nuclear tragedies, violence of all kinds and armed conflicts. For the

transhumanist feminist Donna Haraway, author of the visionary *Cyborg Manifesto* (1985), hope and despair are comfortable attitudes that evoke collective indifference, because if everything is lost, there is no point in changing anything if we die anyway. Haraway tries to ask what lies behind these paralyzing poles. Haraway is particularly prone to despair: on a destroyed planet, that's not an incomprehensible feeling, but it's not very productive either. It's true that time is running out: we can't pretend not to see it but we need our systems of production and the way we treat the environment to reshape -if possible- other species with which we share our existence, and we have to learn to live on a planet with a thousand differences. In a world where revolution is literally beyond our imagination, such connections are as vital to our survival on a broken planet as the pursuit of global reform. It is not possible that a few environmentalists will defeat the 'planet destroying' humans and take care of the earth; it'll be only possible if all the people come together in a collective effort and take charge to prevent the earth from the approaching doomsday.

Haraway invites us to see science fiction not only metaphorically as a way to reinvent the future; instead she traces our relationships with other species in our past and present just as Max had done in *Fury Road* connecting between Immortan Joe and Furiosa. It will help us think about how to rediscover the connections, not from scratch, because we cannot return to zero; but to a nature that has not been polluted by man. To this end, according to Haraway, fiction, philosophical thought which feminism interpreted as questioning gender relations, also means class and ethnicity. For this the discourse of despair has gained a lot of ground in leftist thought in recent years. As Haraway wrote, this is both understandable to the current state of the world and a counterpoint to the traditional man that some have chosen to exploit. However, it is worth it for the leftists to come out and discuss the ground, the discourse on the future, especially if we believe that the future is only possible with concrete political transformation. Barker points out that "a machine only makes sense, indeed is itself expressive, through its relations with social and political machines. Today we are in the grip of a face whose identity has been entirely abstracted from and by the technical speeds and the biopolitics in which it participates. What matters in this new regime are issues of signal, distortion and clarity and what measures, techniques and technologies are to be devised and deployed to produce this common operating picture." (Barker, 116)

Any subscriber to Netflix, HBO, or any other series and movie platform will have noticed the "Sci-Fi" tag displayed prominently in the content menu. Most of them deal with dystopias, darker and larger tall tale chronicles, the main characters' encounters and clashes with aliens, androids, clones, or logarithms where a lot of feminine or womanly elements are involved. So gender is not only weaving social nightmares, but also beginning to push the boundaries of human identity. Long-time fans of SF know that wasn't always the case. Initially, science fiction literature was limited to a specific type of novelty - the novelty born of the industrial revolution - and its possible consequences like utopia has contributed to the over-opening of modern horizons by conceptualizing scenarios linked to innovation, making them predictable and above all controllable.

It is no coincidence that it was born at a time when civil society, emerging from the slowness of the old regime due to industrialization and the exponential growth of scientific and technical knowledge, embarked on strength to the promised land of the future. "The paths of change also change," Fernando Pessoa would later say of the astonishing transformation, whose two discourses were at *The Origin of the Illumination: Journalism, The Great Writer Of The Burning Present*; and *Science Fiction, the Story of the Emerging Future*. The roman scientific pioneer Jules Verne envisioned the future of aerostatic navigation, submarines, and space travel with optimism, without straying too far from the shores of the present. His British counterpart H.G. Wells took over and explored the outer layers of tomorrow, sending his time traveller back to the year 802,701. At this early stage, identity and its complexity was attributed to gender.

Reasonable people, driven by a thirst for knowledge and technical know-how, were the epitome of Victorians: masculine, practical, confident and enterprising. The adventurers did not differ from the dramatis personae of the realist aesthetic. The artistic creed of the triumphant bourgeoisie revolves around the uniqueness of the characters, seen as a continuous and indivisible whole, psychologically coherent and endowed with an original personality in the sense of modern individualism: characters who succeed the novels of Dickens or Austen; it was in their desire to appropriate the world with a technique that transcended any sentimental, creative or political consideration; otherwise, it was cut from the same mould. These stories

weren't meant to challenge seemingly solid identities of gender. The confrontation with the recesses and contradictions of the bourgeois self was the specialty of small expressions, relegated to the margins of the literary system, horror and, above all, the fantastic.

The main representative for me, Edgar Allan Poe (1840) brings out split personalities and ghostly doubles. *Dr. Jekyll and Mr. Hyde* (Stevenson, 1886), first showed the terribly disordered personalities of comfortable waistcoats and coats, false collars, belts and the disciplined body. It was horrifying to see how repressed instincts took over the rational and self-controlled subject. Unsurprisingly, a century later psychoanalytic criticism has found in these accounts a window into the invincible visions of the unconscious. (Jackson, 1986). It is clear that the harassed person (Mr. Hyde) is not a real subject, but a fictitious transcription: a figure of realism. Fiction and horror responded to this character, revealing the animal it contained: the heritage of the ape identified by Darwin and the source of the nightmare of regression to animality. These characters –forerunners of Transhumanist characters- have been seen to succumb to other agents such as *Dracula* (Stoker, 1897): a half-human, half-vampire capable of destroying his victims, transforming them into his own image and likeness, and revealing their precious individuality by mere sucking their blood.

These works identify the infinite cosmos whereas my study is about the infinite depths of the soul. The Victorian hero's mission was not to subvert Victorian morality but to harness the potential of science and technology. But in those Victorian years the writers invented another versatile character who played a big game of identity: the Alien. In *The First Men in the Moon* (Wells, 1901), a civilized extra-terrestrial insect called the 'selenites' embodies the alterity of a future which is radically different from the present. In *The War of the Worlds* (Wells, 1898), the invader from Mars imitates the European colonizer's (some of them) character and resolves to exterminate the "inferior races". By attributing certain characteristics of 19th century Western society to entities from other worlds such as the imperialist spirit, cult of technology, overpopulation etc., and these stories initiate a distorted approach and question human identity.

3.23 The Transhumans' Regulation in Dystopian Films

In the struggle of the individual against the unitary state, a new genre - or subgenre, depending on how you look at it - was born, dystopia. Dystopian pessimism extends to other worldly machinations. In dystopian films there is a harbinger of an ultra-technical totalitarianism; and also as the ultimate and inhuman result of evolution governed by instrumental reason. Narratives of invasion reverse the axiological axis of terror: when the threat comes from the irrational depths of the individual, pathos becomes the last bastion of the personality. Aliens, members of mass communities, and unnamed beehives or anthills resemble "those unnatural, mechanically inclined man-machines" Chaplin confronted in *The Dictator* (1940), and in particular his caricature of coldness and impersonal scientist determined to carry out his mission. experiments regardless of the human cost to be carried out.

With the space invaders, horror delights the will and theme of the directors and returns fantastically. Like Dracula, aliens can take on any face, including that of their victims; and they are asexual creatures. According to some interpretations, this last characteristic is a symptom of loss of sexual identity by some critics of the dominant society (Jancovich, 1996). This fear particularly affects men, whose masculinity is challenged by repetitive work, the monotony of lifestyles and the emancipation of women. On this reading, both the asexual and androgynous extra-terrestrials and the robots -mechanical eunuchs- express the masculine fear of decline which results from the status of machines, of non-gendered beings, imposed on men. So "the kinetic condition in architecture had already established itself in the 1960s and developed in the following decades via the concept of metamorphosis, perhaps best represented by the explosive collision between architecture and high technology/the digital world." (Spiller, et al. 156)

In frightened liberal democracies, the mantra against the fear of robots is control. The dizzying process of differentiation and increasing complexity compels elites to master the infinite variables of society, and politics; and the social sciences succumb to the mania for self-regulation and design manifested in functionalist theories and in cybernetics: the science of man and machine. The other side of this obsession is a rejection of conformism and a fear of being directed from outside, a fear that took on sociological content in the concept of hetero-oriented people

introduced by Riesman, Glazer and Denney (1950). The individual here is controlled by the media, advertising, mass media, public relations, advertising, etc. Such fears inspire Philip K. Dick's paranoid tale of characters unsure whether they are themselves or the playthings of a malevolent intelligence. The thriller *The Manchurian Candidate* (Frankenheimer, 1962), and the novel *Over the Cuckoo's Nest* (Keseey, 1962) attacks psychiatry, which claims to treat mental illness by stimulating the brain, destroying it by lobotomy and by destroying it by electric shock.

We have seen that the extra-terrestrial has served as an alibi for science fiction to talk about ethnic relations and the automatism of social life. H.G. Wells in the 1970s dropped that alibi and began to openly speculate about the increasingly porous boundaries between humanity and its machines. Gender studies tell us there is no reason to fear this closeness and takes responsibility for reconciling us with our artifacts. The tiny droid R2D2 from Star Wars (Lucas, 1977) doubles as a pet and a servant; it is funny but what really fascinates us is its profession whose human aspect suggests even more disturbing similarities.

Robots in the dystopian era are designed to be conscious. Isaac Asimov (1950) puts it as a first person singular that is indicated by the subjectivity that emerges from its title. His short story series is known for introducing a robotic morality that prevented automatons from harming their human masters.

3.24 Conclusion

To conclude this chapter I have tried to show how the *X-Men: Days of Future Past* (2014) and *Terminator Salvation* (2009) raise interesting questions about moral and legal thinking. I worked on the effects on what human abilities, enhancements in some cases and the acquisition of superhuman abilities in others might have in a typical dystopian society. In *Terminator Salvation* (2009), the concept of livelihood within a transhumanist dystopian world is marked by relentless struggle for survival. Human societies have collapsed, and what's left of humanity survives in small pockets of resistance. These survivors often live in hiding, scavenging for resources, and attempting to evade Skynet's detection. The natural environment is severely degraded due to the nuclear fallout and the relentless warfare between humans and

machines. Christian Fuchs says about the transitory life as-

"When life and human existence are defined via death, nothingness is made absolute and idealised. Death is not an everyday experience of human beings but a tragedy, absurdity, and futility, which breaks into everyday life to shatter it." (Fuchs, 319)

Traditional notions of livelihood, characterized by stable economies, infrastructure, and access to basic necessities, have all but disintegrated. Instead, livelihood is centred on resistance efforts, makeshift shelters, and adapting to the ever-present danger posed by robotic adversaries. The few remaining humans are forced to rely on their resourcefulness, combat skills, and the limited technology available to them.

In *Terminator Salvation* (2009), the notion of livelihood is intrinsically tied to the struggle against an advanced technological adversary that seeks to erase humanity. The transhumanist elements in the movie, represented by both human resistance fighters with limited enhancements and Skynet's highly advanced machines, highlight the potential for technology to shape both the survival strategies of humans and the existential threats they face.

While it's still science fiction to believe that such consequences can occur in human physiology, the X-Men are a timely excuse to oppose and alter identities that radically make up our personal and social makeup. After analysing the main arguments against the development of technology and its use for development purposes, put forward mainly by "bio conservationists", I have tried to contextualize and relativize the "moral panic" they invoke. In my view, none of these objections is decisive in preventing the development of a transhumanist research, nor in guaranteeing that it cannot be used without risk to the health of those who wish to carry it out.

In the transhumanist dystopian world of *Ghost in the Shell* (2017), the augmentation-driven economy has emerged, leading to a divide between the augmented elite with access to high-skilled jobs and the non-augmented population relegated to lower-skilled positions. The dependence on technology has spurred a cyber-security industry to combat cybercrime, while the societal divide between the

privileged augmented and the marginalized non-augmented exacerbates existing inequalities. This world blurs the lines between human and machine, shaping livelihoods around the fusion of technology with human existence and emphasizing the ethical and social implications of unchecked technological progress.

Notes

1. Erik Magnus Lehnsherr is a powerful mutant from X-Men who is willing to go to any extreme to protect his species. He is better known as Magneto, the master of magnetism.

2. Diablo is a role-playing dungeon crawler video game series developed by Blizzard North and continued by Blizzard Entertainment. It is an action game.

3. Paige Guthrie aka Husk is a fictional X-Men character appearing in Marvel Comics who is able to change her skin material into almost anything say into diamonds.

4. The Line (ذا لاين) is a 170-kilometre-long linear smart city under construction in Saudi Arabia in Neom, Tabuk Province. It is designed to have no cars, streets or carbon emissions. The city anticipates a population of 9 million.

5. Erythropoietin is a hormone secreted by kidneys which increase the rate of red blood cells production in response to falling levels of oxygen in tissues.

6. Peroxisome structures are vesicles which are involved in energy metabolism and biosynthesis.

7. Transgenesis is the uncontrolled transfer of foreign DNA into the germline of an animal species.

8. The Savage Land is a hidden prehistoric land appearing in X-Men comic books by Marvel. It is a tropical preserve hidden deep in Antarctica.

9. *Planet of the Apes* is a 1968 American science fiction film directed by Franklin J. Schaffner and loosely based on the 1963 French novel *La Planète des Singes* by Pierre Boulle.

10. Oscar Leonard Carl Pistorius is a South African convicted murderer and former professional sprinter. Both of his feet were amputated when he was 11 months.

11. Rawls Difference Principle favoured maximizing the improvement of the "least-advantaged" group in society.

12. Habermas known for his theory of communicative action rests on the idea that social order ultimately depends on the capacity of actors to recognize the intersubjective validity of the different claims on which social cooperation depends.

13. Chiaroscuro is a term used in paintings to describe tonal contrasts used in modelling of the ideas or themes depicted.

14. DeepMind is a division of Alphabet, Inc. responsible for developing general-purpose artificial intelligence (AGI) technology. That technology is also known as Google DeepMind.

15. The robot teacher, called Saya, can express six basic emotions: surprise, fear, disgust, anger, happiness, sadness as its rubber skin is pulled from the back with motors and wiring around the eyes and the mouth.

16. 'devil in the flesh' is a term used in *The Exorcism of Emily Rose (2005)* to denote a person being possessed by an evil spirit. Here in my study the spirit is seen as a ghost: the possession of humanity by AI.

17. The singularity (singularitarians) is a theory about the future point in time where technological growth becomes uncontrollable and irreversible, resulting in unforeseeable changes to human civilization (the epoch of change).

18. Cartesianism is a theory that thinks scientific knowledge can be derived a priori from 'innate ideas' through deductive reasoning. Thus Cartesianism emphasizes on sensory experience as the source of all knowledge of the world.

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