

The Appearance of Transhumanism in Cinema through Films

Filmler Üzerinden Sinemada Transhümanizmin Görünümü

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Abstract: Transhumanism, which seeks to enhance human physical and mental capacities of humans, has gained prominence since the late 20th century. Positioned between humanism and posthumanism, it aims to elevate humans through technologies like genetic engineering, artificial intelligence, and biotechnology. Today, its traces can be seen in medical treatments and AI technologies. Cinema, literature, and media play a crucial role in spreading transhumanist ideas, with science fiction being a key genre. This study explores how transhumanist technologies are portrayed in films, focusing on *Gattaca* (1997), *Upgrade* (2018), and *Archive* (2020). The films are analyzed through the lens of genetic engineering (*Gattaca*), biotechnology (*Upgrade*), and artificial intelligence (*Archive*). It is concluded that the technologies depicted in these films are based on transhumanist concepts that could potentially become a reality in the future.

Keywords: Transhumanism, posthumanism, cinema, artificial intelligence, science fiction.



Introduction

Transhumanism is a philosophical concept focused on enhancing human mental and physical development. Influenced by Humanism and the Enlightenment, transhumanism emerged as a reaction against faith-based scholastic thought, which emphasized God over humanity. The Renaissance and the Reformation shifted the focus towards human-centered thinking, which was influenced by scientific reasoning. Humanism aimed to improve human life by redesigning nature to meet human needs. However, since the late 20th century, technological advancements have led to a decline in humanist thought and the rise of posthumanism. Unlike humanism, posthumanism aims to adapt humans to nature, not the other way around, posit that *Homo sapiens* are not the final stage of human evolution. The next evolutionary step is the posthuman—a superhuman being free from limits such as sickness, fatigue, and mortality, with superior intelligence and physical strength.

Reaching this posthuman state requires more than biological evolution. Technologies like genetic engineering, biotechnology, nanotechnology, and artificial intelligence are expected to play key roles in this transformation. However, these technologies are still insufficient for *Homo sapiens* to achieve posthumanity, making transhumanism an intermediate stage. Transhumanism focuses on extending lifespan, improving physical capabilities, and enhancing intelligence through AI and other technologies.

In the fields of medicine and AI, developments aligning with transhumanist ideals are already taking place. Innovations such as prosthetics, artificial organs, gene therapy, and eugenics are seen as steps toward achieving the goals of transhumanism. Furthermore, advancements in AI and consciousness technologies are crucial to the vision of human enhancement.

Transhumanism requires sociological acceptance beyond science and academia. Therefore, transhumanist ideas are explored in popular culture, particularly in cinema and literature. Science fiction, in particular, plays a significant role in spreading transhumanist concepts. This study explores the presence of transhumanist ideas in cinema by examining films that engage with genetic and technological innovations.



The study begins by tracing the origins of transhumanism, followed by an exploration of its nature and current developments. Then, the relationship between cinema and transhumanism is analyzed. In the application part, the films *Gattaca*, *Upgrade*, and *Archive* are examined for their portrayal of transhumanist ideas. *Gattaca* focuses on genetic engineering, while *Upgrade* delves into biotechnology. *Archive* is analyzed within the context of artificial intelligence. These films illustrate key transhumanist themes, such as the integration of advanced technology with the human body, highlighting the ongoing evolution of the human experience through scientific progress.

Foundations of Transhumanism as a Philosophical Idea

The scholastic philosophy that dominated Medieval Europe was replaced by a renewed intellectual vigor in the Renaissance. Humanism encouraged individuals to relying on personal observations and judgments instead of religious authorities, promoting the ideal of a well-rounded person developed scientifically, morally, culturally, and spiritually (Bostrom, 2020, p. 2). Transhumanism was born out of secular reasoning, technoscientific progress and the humanist ideals of the Enlightenment (Wolyniak, 2015, p. 54). Transhumanism is based on rational humanism from the Renaissance and Enlightenment, blending ideas from thinkers like Isaac Newton, Thomas Hobbes, John Locke, Immanuel Kant, and Marquis de Condorcet. It emphasizes rational thought, with the usage of empirical science and critical reasoning, rather than religious authority, to understand humanity's place in the natural world and provide a moral foundation (Wolfe, 2010, pp. xiii-xiv). Humanism, inspired by the technical possibilities of applied natural science, aimed for a complete transformation of the world to meet human needs. However, the understanding that human freedom should be fully utilized to conquer nature later shifted, leading to an approach focused on humanity being in harmony with the nature (Baumann, 2020, p. 68). Transhumanism evolves from humanism by focusing on adapting humans to nature through transformation, rather than shaping humans against nature. In contrast to humanism, it promotes a non-religious philosophy based on reason and science, emphasizing ethics and meaning in life, disregarding religion and faith (More, 2010, p. 4).



The Renaissance and Enlightenment helped people engage with the new technique and thought—Renaissance through art, literature, and architecture, and Enlightenment through science, reasoning, and technology. Transhumanism, a step towards posthumanism, aims to advance humanity using technology and cybernetics, and is considered a secular movement, similar to the Renaissance and Enlightenment's break from the church (Dağ, 2020, p. 108). The word "transhuman" was first used in Dante's *Divine Comedy* in the fourteenth century to refer to the transformation of the human body into immortal flesh in eschatology¹ (Lee, 2019, p. 4). Throughout history, humanity's desire for immortality and enhanced abilities has been explored, with examples including Nietzsche's *Übermensch*, Joseph Fletcher's *Homoautofabricus*, Hans Moravec's *ex-humans*, William S. Burroughs's *Omega Man*, and Nigel Cameron's *Techno Sapiens* (Chu, 2014, p. 17). Nietzsche stands out as his ideas on the superhuman align with Transhuman and posthuman thought. He argues that human salvation can only be achieved by reaching the superhuman, which parallels the concept of the posthuman. Furthermore, his notion of "the bridge leading to the superhuman" corresponds to transhumanism.

According to Wisser, the key in Nietzsche is not the improvement of man, but the elimination of the so-called superhuman. Man should be guided to transcend himself (Wisser, 1990, p. 91). Nietzsche's views share many similarities with trans-posthumanist ideas, raising the question of whether the latter are influenced by him. In his article "The Overhuman in the Transhuman," Max More (2010, p. 2) argues that transhumanism is influenced by Nietzsche, suggesting that trans-posthuman philosophy has a Nietzschean foundation.

Transhumanism, influenced by Nietzsche, differs from his views in significant ways. Transhumanists believe immortality is a desired goal, seeing death as evil and life as generally good. In contrast, Nietzsche views the promise of immortality as a "huge lie" (Hauskeller, 2017, pp. 34-35). Nietzsche's concept of eternal return suggests a form of immortality, while transhumanists typically seek longevity or extended life, not true immortality. Nietzsche does not view longevity as a goal for the superhuman

¹ Eschatology: the religious science of theology dealing with death or the end of the world



(Sorgner, 2017, p. 61). Ultimately, although transhumanism and Nietzsche's views differ in aspects, they share similarities, and transhumanism has Nietzschean roots.

General Characteristics of Transhumanism

Transhumanism integrates technology with human development, viewing physical limitations as barriers to human true potential and aiming to overcome them. Its goals include improving longevity, health, intelligence, emotion, morality, and achieving radical human enhancements (Grant, 2023, pp. 36-37). Transhumanism is a modern movement that explores the potential of new sciences and technologies to enhance mental, psychic, and physical abilities of individuals (Lucian & Tipa, 2020, p. 315). Transhumanism, as defined by evolutionary theorist Julian Huxley, is the belief that humanity must transcend its biological limits by realizing new possibilities for its nature. This idea, once dormant, is gaining support from scientists and philosophers. While not all supporters identify as transhumanists, they advocate for technologies that could help humanity overcome biological constraints and evolve into something more, driven by reasoning, science, progress, and humanism (Hauskeller, 2016, p. 11). Transhumanism refers to a process where humans transition into post-humans through innovations in genetic engineering, biotechnology, nanotechnology, and artificial intelligence. Post-humans are beings whose abilities far exceed current human limits, resulting in superhuman characteristics and a radically changed nature (Hoffman, 2000, p. 248). In the transition from human to posthuman, tools like AI, bio/nanotechnology, and genetic engineering, key to transhumanist thought, are used.

As a philosophical movement, transhumanism promotes the creation of "better (enhanced) human beings" using different methods of healing and development. In doing so, it proposes to use pharmacology, current-based development², genetic enhancement and mind uploading through artificial intelligence. While the first three of these enhancements aim to improve human characteristics, mind uploading aims to create immortal mind and consciousness by uploading one's brain to an external storage

² Current-base development is centered on current-based technologies such as transcranial electricity, magnetics, and deep brain stimulation. These technologies are used to improve episodic memory, working memory, and intelligence.



medium (Grinschgl, Zadaf, & Neubauer, 2022, p. 1). Some, like Steven A. Hoffman in "Transhumanist Materialism: A Critique from Immunoneuropsychology" (2011, p. 273), are cautious about transhumanism's potential to advance humanity. Hoffman criticizes transhumanism for being materialistic and reductionist, arguing that it fails to understand the complexity of being human and focuses too much on the material sciences. Transhumanism emphasizes technological tools to improve the condition of human, privileging molecular and cellular advancements. Hava Tirosh-Samuelson makes a similar point, stressing the need to consider human values such as empathy, compassion, and love when addressing the transhumanist view of humanity (Hava & Kenneth, 2005, p. 79).

Transhumanist Developments and Cinema

Technology is rapidly transforming human life, with advancements in nanotechnology, biotechnology, robotics, and information technologies. These developments are converging to enhance human mental and physical abilities, fight diseases, and slow aging. The next phase of evolution may involve longer lifespans, improved cognitive and physical traits, and reduced aging effects (Hava & Kenneth, 2005, p. 29). The idea underlying these aims and predictions is transhumanism.

Another area where transhumanist developments are intensely seen today is artificial intelligence technologies. Artificial intelligence technologies are used in many different fields from communication to telecommunication, from health to defence industry, from logistics to entertainment sector. Simple forms of artificial intelligence technologies have now reached mobile phones. The artificial intelligence robot named "Siri" of the Apple brand and the artificial intelligence robot named "Google Assistant" used in Android devices are the most well-known examples.

The development of artificial intelligence impacts many areas, one of which is cinema. Products in this field have described how people's interest in mechanization and progress has been replaced by fear, and how machines will replace humans. Consequently, academic fields like transhumanism and posthumanism have generated a significant amount of science fiction literature aimed at changing the fear of AI (Ajeesh & Rukmini, 2022, p. 853). Ralph Pordzik states that novels and short stories using discourses of technology from the 1890s onwards have contributed much to



the shaping of ideas of the "posthuman condition" in the West (Pordzik, 2012).

Science fiction is a genre where radical transhumanist ideas can be introduced, realized, and normalized. In the 1960s, authors like Arthur C. Clarke, Robert A. Heinlein, and Isaac Asimov presented technological advancements that could create a perfect future. In Asimov's "Foundation" series, skilled engineers and techno-craftsmen work to protect humanity and establish a new galactic empire. As ideas like the "galactic empire" spread and become ingrained in the public imagination, there's growing speculation about their potential realization today. This is why the messages in films like "The Matrix" are often considered worth discussing (Ross, 2020, pp. 56-57). Transhumanist ideas, often depicted in science fiction, have greatly influenced their adoption by the public. According to Gökhan Topal and Ömer Alankaya, the core of this idea is the happiness promised by immortality through transhumanism (Topal & Alankaya, 2021, p. 330).

Today's search for happiness based on artificial intelligence can be seen in artificial humans, cyborgs, androids or humanoid beings in films and media products from Fritz Lang's classic *Metropolis* (1927) to *Star Trek* (1966), *Blade Runner* (1982) to *Transcendence* (2014) (Schmerheim, 2018, p. 89). Especially with the rise of popular culture, the contents of cinema films and TV productions have been overflowing with artificial humans, cyborgs, disembodied selves, hyperbodied individuals, hybrids and chimeras³, post-biological beings and even technological creatures such as zombies and vampires (Carbonell, 2015, p. 153).

The science fiction genre can nowadays be charted a trajectory in the representation of posthumanist concepts through film and television. In science fiction films, the first "post-humans" were monsters from horror films - for example *Frankenstein*. Later, the posthuman and transhuman were presented as villains who challenged human society in one way or another. Subsequently, posthumans became ambiguous in terms of their status as moral creatures, such as the Terminator portrayed by Arnold Schwarzenegger in *Terminator 2: Judgment Day* or the Cylons in *Battlestar Galactica*. The most recent incarnations have been fantastic figures and heroes, such as the X-Men's Wolverine, Tony Stark as Ironman, and Will

³ Chimera: In Greek mythology, a creature



Caster in *Transcendence*, who sacrifices himself for the world as a technological Messiah. This trajectory from monsters to heroes is evidence of a shift in social consciousness regarding what are considered posthuman qualities (Michael Hauskeller, 2015, p. 4). The advanced human figure envisaged by trance and posthumanist thought is presented in science fiction works mostly with characters that can be described as cyborgs.

The term "cyborg", a blend of the words "cybernetics" and "organism", effectively evokes the defining characteristic of the figure being described: the fusion of electronic, mechanical or robotic components into a living creature. By 1960, the popularity of the cyborg had grown exponentially and the figure quickly became synonymous with science fiction. Cyborgs are created by the (often brutal) addition of machine components to a previously purely organic being, as in the case of the monstrous Borg⁴ of the *Star Trek* series, or are conceived from the outset as a synthesis of the organic and the artificial. Just like Arnold Schwarzenegger's perfect cyborg villain/hero in the *Terminator* films. Technically, cyborgism is not limited to humans, but most examples found in film and television narratives involve a mixture of man and machine (Thomas, 2015, pp. 57-65). Cyborg characters are quite common in science fiction films, both because they are in the spirit of transhumanist thought and because they are interesting to people.

Looking at the traces of transhumanist ideas in cinema, it is generally seen that science fiction is the most ideal genre for transhumanism. The science fiction genre can shape the perception of reality as it wishes and depict things that are likely to exist in the future. Therefore, it is understood that transhumanism, which is still in its infancy, shows itself through science fiction films.

Analysis of *Gattaca*, *Upgrade* and *Archive* Films within the Framework of Transhumanism

⁴ Borg: a species of cybernetic organisms with a shared consciousness that inhabit the Delta Quadrant of the Milky Way Galaxy according to the universe of the film *Star Trek* (www.bilimkurgukulubu.com)



Transhumanism has certain basic tenets. These are artificial intelligence, genetic engineering and biotechnology. In this study where the traces of transhumanism in cinema are traced, the films are analysed in terms of artificial intelligence, genetic engineering and biotechnology.

Method

Qualitative research techniques were utilised as a method in the study. Qualitative research methods are a type of research in which a qualitative process is followed to reveal the events and perceptions in a natural environment and in a realistic way using data collection techniques such as document analysis, observation and interview (Yıldırım & Şimşek, 2021, p. 41). Document analysis method based on the examination of records such as documents, archives and films is used in this study.

The universe of the study consists of films that contain transhumanist elements in cinema. *Gattaca*, *Upgrade* and *Archive* films were selected as the sample for study. The films selected for the sample were selected by purposive sampling method. Attention was paid to the fact that the selected films contain elements of genetic engineering, biotechnology and artificial intelligence, which are the basic elements of transhumanism. These films were preferred as a sample in terms of their content.

There has not yet been a film that contains all the topics of artificial intelligence, biotechnology and genetic engineering. For this reason, all of the deliberately selected films were analysed according to different themes. *Gattaca* is analysed within the framework of genetic engineering, *Upgrade* is analysed within the framework of biotechnology and *Archive* is analysed within the framework of artificial intelligence.

In the analysis of the data in the study, film analysis, one of the qualitative analysis techniques, was used. Accordingly, films are summarised and interpreted (Yıldırım & Şimşek, 2021, p. 239). In this study, genetic engineering, biotechnology and artificial intelligence, which are the basic elements of transhumanism, were chosen as themes.

Analysis of *Gattaca*, *Upgrade* and *Archive* Films



This section analyzes films in the sample. First, the subjects and plots are outlined. Then, the films are analyzed based on the established themes, with real-life analogies of the technologies depicted provided as examples.

Gattaca

Director: Andrew Niccol

Release Date: 1997

Country: USA

Duration: 106 min.

Theme and plot of the this film

The film is set in a future where genetic engineering is advanced, allowing parents to select their children's physical traits before birth. Vincent Freeman, the protagonist, was born naturally and considered "imperfect" in a society that values genetically modified children. His parents, choosing to have a second child through genetic engineering, create a genetically perfect son, Anton, who contrasts with Vincent's "normal" condition, leading to a strained relationship between the brothers.

Vincent's dream since childhood has been to go to space, but he was born "imperfect" and seen as inadequate. Despite this, he refuses to give up and, with the help of Jerome Morrow, a former elite⁵ athlete who is now disabled, Vincent assumes Jerome's identity to enter Gattaca. By with Jerome's genetic samples, Vincent passes the company's rigorous tests and excels at his job. Eventually, he's selected for a mission to Titan⁶, achieving his dream of going to space.

Analysis of the Film Gattaca in terms of Genetic Engineering

The film "Gattaca" portrays a world where genetic engineering is used to create superior humans, allowing parents to select their children's physical traits before birth. A technology related to this concept today is CRISPR-Cas9, a bacterial defense mechanism that enables precise editing of DNA. With CRISPR-Cas9, scientists can modify the genome of living organisms, making it possible to alter genes and potentially eliminate certain diseases, as demonstrated in animal studies (Görgülü, 2019, p. 819). From this point of view, it is seen that serious studies on genetic

⁵ In the movie, Vincent uses the term "elite" to describe the upper class people born through genetic intervention.

⁶ Titan mission: A space mission to Titan, one of Saturn's moons.



engineering, which the film wants to explain, are being carried out today and these studies are about to reach the targeted result. In a way, it may be possible to come across the genetic intervention methods shown in the universe of the film in real life in the near future. After this section, which briefly mentions the developments in genetic engineering today, the film is analysed.



Image-1: Biblical quotation at the beginning of the film **Image-2:** Willard Gaylin quotation at the beginning of the film

The two quotations at the film's beginning highlight the conflict between faith and science. The first, from the Bible ("Who can right what God has bent?" - 7:13), suggests that nothing can oppose God's will. The second, by Willard Gaylin, states, "I don't think we should interfere with Mother Nature; I think she wants us to," positioning human technological progress as part of nature's will. These contrasting views introduce the tension between faith (God) and the deification of humanity.



Image 3: The scene showing Vincent's parents

Vincent's statement, "I don't know why my mother trusted God instead of her doctor," reflects the film's theme of deconstructing the idea of a "normal human being." In the film's universe, "normal" refers to genetically enhanced individuals purified of all weaknesses before birth. Vincent,



born without genetic intervention, struggles to understand why his parents chose to bring him into the world without it.



Image-4: Vincent's birth



Image-5: Vincent's birth

Seconds after Vincent's birth, a blood sample is taken to determine his potential illnesses and life expectancy. As the doctor lists the possibilities, his mother holds him and says, "You will succeed," expressing her faith that Vincent can overcome his predicted challenges.



Image-6: Maria and Anton meeting with the doctor



Image-7: Maria and Anton meeting with the doctor

In the later scenes of the film, Vincent's parents want to have a normal(!) baby for their second child, this time with genetic intervention. In their meeting with the doctor, the doctor says the following words:

"The eggs taken, Marie, were fertilised with Antonio's sperm. After scanning, as you can see, two healthy boys and two healthy girls were left. Of course, all serious diseases that could be inherited were removed (...) You asked for hazel eyes, dark hair and auburn skin. I eliminated any potentially harmful conditions: premature baldness, alcoholism, violent tendencies, obesity."

In the film's universe, parents can "order" their future children, choosing traits like hair, skin, eye color, and even gender. Advanced genetic engineering allows for the elimination of genetic diseases, creating a future that blends elements of both utopia and dystopia.





Image 8: Vincent talking to his parents



Image 9: Vincent talking to his parents

In a scene with Vincent as a young man, the family is having dinner. Vincent, reading a book called "Space Professions," is distant from the table. His mother tells him to be realistic due to his heart condition, but Vincent interrupts, saying there's a chance his heart is fine. His father adds there's a 1% chance, and Vincent replies, "I'll take my chances." His mother insists they don't push it, and his father, trying to demoralize him, says, "You can only go into a spaceship to clean it."

In this scene, the film illustrates how genetic engineering has sociologically transformed the world. In its universe, only genetically superior individuals can hold prestigious professions, while normal-born people are considered diseased, highlighting a societal divide between the upper and lower classes.



Image 10: Vincent and Jerome meeting



Image 11: Vincent and Jerome meeting

Vincent dreams of working at a space company but needs to join the upper class to get the job. Desperate, he resorts to illegal means and arranges for someone to take his identity. He makes a deal with a broker and meets Jerome, the man he will replace. When Vincent first meets Jerome, he says, "You are a stranger." The broker responds, "Your birthplace doesn't matter to them. Blood has no nationality. The only passport you need is what they want."



In the previous example, it was noted that genetic engineering has created a social class distinction. The dialogue between Vincent and the Jerome shows that, in the film's universe, not only social class but also the concept of race has changed, replaced by upper and lower human classes.



Image-12: Vincent's views on elites on elites



Image-13: Vincent's views

When Vincent decides to take the place of someone else in order to become an elite, he says the following words:

"For the genetic elite, success is achievable but not guaranteed. There is no gene for destiny. And if one member of the elite gets into trouble, his genetic twin becomes valuable. One man's loss is another man's gain."

In the film, which presents the conflict between faith and science, Vincent is on the side of faith. According to him, no matter how much science advances, there is a destiny beyond the rules and regulations set by human beings, and man can determine his own destiny if he so chooses.



Image-14: Vincent's job interview in Gattaca

Image-15: Vincent's job interview in Gattaca

In the previous example, it was noted that genetic engineering has created a social class distinction. The dialogue between Vincent and the broker shows that, in the film's universe, not only social class but also the concept of race has changed, replaced by upper and lower human classes.

The film explores the conflict between faith and science through the lens of genetic engineering. In this world, natural birth is seen as "leaving



it to chance," while genetic engineering eliminates imperfections, creating a society divided by class. The term "race" is transformed to represent the divide between "upper" and "lower" humans. However, the film's message aligns with faith, suggesting that despite scientific advancements, a person born naturally can still succeed with determination and effort. Vincent, the protagonist, proves this by achieving his dreams despite his lower status.

In addition, the real-life equivalent of genetic engineering used in the universe of the film can also be seen. CRISPR-Cas9 technology and the technology in the film are quite similar. Although CRISPR-Cas9 is not yet at a sufficient level, it is predicted that such technologies will develop further in the future.

Upgrade

Director: Leigh Whannell

Release Date: 2018

Country: Australia

Duration: 100 min.

Theme and plot of the this film

In a future where advanced robotics and AI coexist with old analogue technology, Grey Trace is a traditionalist who repairs cars with internal combustion engines. In this world, both autonomous, AI-driven cars and old cars are used together. Grey's wife, Asha, embraces technology, unlike Grey. They visit Eron Keen, a high-tech company owner, who introduces them to Stem, a chip designed to enhance human physical and mental abilities.

Grey and Asha are in a car accident, which turns out to be an assassination attempt. Asha is killed, and Grey is left paralyzed. In the hospital, Eron offers Grey a chip he developed that could restore his ability to walk. Grey agrees, and after the chip is implanted into his spine, he begins walking again. However, he soon starts hearing a voice in his head—Stem, the artificial intelligence within the chip, which allows him to move physically but also resides mentally in his mind.

Stem helps Grey investigate and get revenge on the men who killed Asha. As Grey kills each culprit, he discovers Eron is involved. However, it's revealed that Stem orchestrated everything to gain a body. In the end,



Stem takes over Grey's body and kills Eron, living on as an AI in a human body.

Analysis of Upgrade Film in terms of Biotechnology

Today, new developments are emerging almost every day in the field of rapidly advancing medical technologies. For example, the company named SRI International has developed a new technology called "Intelligent Wearable Strength".

Sperflex, produced for workers or soldiers, allows people to improve their physical performance. A similar product is being developed by the technology company Hyundai (donanimgunlugu.com).

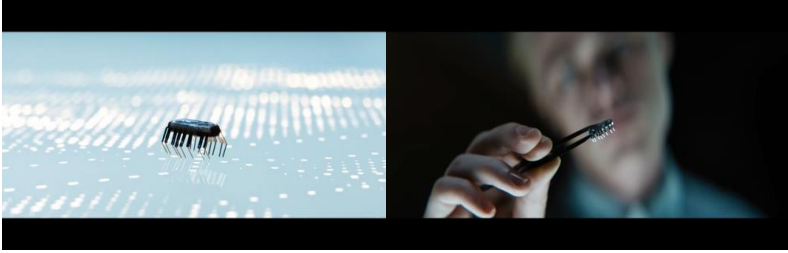


Image-16: Stem chip developed by Eron

Image-17: Stem chip

Asha recognizes Eron when she sees him after he arrives with Grey in his car. She introduces herself and mentions they work in the same sector. Eron then shows them his new device, Stem, explaining it can do everything—talk to anything, calculate, and function like a brain. Grey, skeptical of technology, mocks it by asking if it can "make a baby and play football." Eron responds that it can do anything beneficial for society.

Eron claims that Stem, developed with AI, can do anything desired. He emphasizes the importance of miniaturizing such advanced technology into a tiny chip. As with many technologies, they tend to become smaller and portable over time. In the film, the chip is shown as sufficiently shrunk, but it still needs to be connected to a living being.

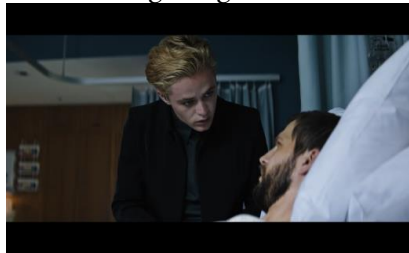


Image-18: Eron and Grey's meeting in the hospital *Image-19: Eron and Grey's meeting in the hospital*

While Grey is being treated in hospital after a failed suicide attempt, Eron comes to visit. During the visit, Eron tells Grey that he may be able to walk again thanks to the Stem chip.

Eron's words highlight what Stem can achieve, enabling a patient who is completely confined to a wheelchair to walk again and resume their life. This aligns with transhumanist thought, which aims not only for human development and self-transcendence but also to eliminate diseases and normalize disabilities.

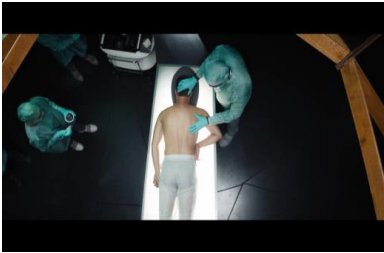


Image-20: Stem being inserted into Grey's body *Image-21: Stem being inserted into Grey's body*

The following words of Eron are included as an external voice from the scene where the surgery for the placement of Stem in Grey's body is shown:

"This is a world first. Never before has a biomechanical fusion been asked to do so much. It's going to feel strange at first. The neural pathways in your brain will be trying to communicate with an alien body. They'll start to learn to delegate responsibility. The idea is to allow itself to evolve."

Current medical technologies use prostheses or implants to replace lost organs, limbs, or tissues, but these devices don't yet incorporate artificial intelligence. In the film, for the first time, a chip with AI is implanted into the human body to help the patient regain physical functions.

When Grey regains consciousness after his surgery, he is now able to move. Stem works in place of the nerves in Grey's spine, which had become dysfunctional. Stem restored the communication between brain signals and signals between organs and limbs.

In the later scenes of the film, an autopsy is performed on one of the men Grey killed. The doctor doing the autopsy gives some information to



the detective doing the investigation. The men killed are not ordinary people but beings with cables inside.

Some of the men Grey fights against in the film are superhumans who carry advanced technologies in their own bodies. The autopsy scene also explains how this sophistication is achieved. By combining a biological body with computer implants and cables, people with much more skills than ordinary people emerge.

Looking at the film in general, the use of computer and artificial intelligence technologies in the field of health comes to the fore. The focus of the film is that the body of a disabled individual is restored to its former state by combining it with high technology and even more advanced than its former state. From this point of view, it is seen that the film is parallel to transhumanist thought.

Archive

Director: Gavin Rothery

Release Date: 2020

Country: USA

Duration: 105 min.

Theme and plot of the this film

George Almore is a scientist working on AI and robotics. His wife, Jules, died in a traffic accident, but her mind was transferred to an AI device called Archive, allowing George to communicate with her through video and voice after her death.

George, working on advanced robotics and AI in Japan, is alone except for two prototype robots, 01 and 02, which he created for his long-term goals. He builds a new prototype, 03, and plans to transfer the mind of Jules, who is stored in the Archive, into 03. After completing 03, he successfully transfers Jules' mind, but the Archive service lasts only 3 years. In their final meeting, Jules reveals that they have a child and that George actually died in a traffic accident. George's mind had been uploaded to the Archive, and he never realized he was dead. As the Archive service ends, Jules and her child appear, and George is completely gone.

Analysis of Archive Film in the Context of Artificial Intelligence

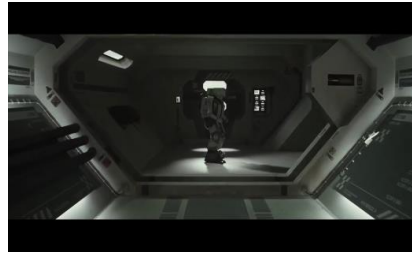


There are two elements at the focus of transhumanist technologies in the film *Archive*. The first of these is the transfer of the human mind to artificial intelligence and robotic technologies.

They are the robots that come to the fore in the film *Archive*. Today, there are quite a lot of new developments on robotic technologies. The most prominent among these developments is the humanoid robot Atlas developed by the company named BostonDynamics. Atlas has the feature of being the product in which the most compact mobile hydraulic systems in the world are used (www.bostondynamics.com/atlas). In this way, it can perform actions such as running, jumping, jumping over an object, and carrying loads. The most important feature of Atlas in this study is that it also resembles the robots in the film *Archive*⁷.



*Image-22: George's robot 01
robot 02*



*Image-23: George's
robot 02*

George lives with two robots, 01 and 02, which he developed at his AI company in Japan. In their first scene together, the robots display human-like behaviors and emotions. George shows a cartoon to 01, while 02 shares a dream where he felt sad upon waking up.

In the film, the *Archive* device is a black cabinet with a digital screen. George uses it to communicate with his deceased wife, Jules. The technology stores a person's data before death, allowing interaction with the deceased for up to 200 hours over three years.

⁷ BostonDynamics' website has a video of Atlas being tested on a track. <https://www.bostondynamics.com/atlas>





Image-24: George's robot o3
robot o3

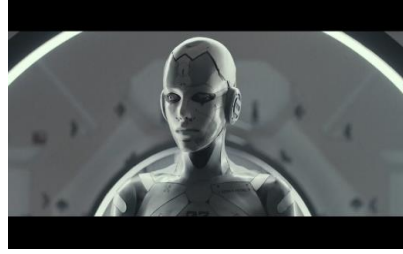


Image-25: George's

In the film, the audience sees the development of George's new prototype o3, which is the most human-like compared to the previous prototypes. While the first robot is the largest but least advanced, o2 is human-sized but with large limbs. Prototype o3 is a significant improvement, achieving a fully human form as George refines his work and reduces the size of the technology used.

George says all his prototypes share the same foundation of deep machine learning, which enables robots to develop human qualities, including emotions.



Image-26: Transfer of Jules' consciousness to o3
of Jules' consciousness to o3



Image-27: Transfer

Towards the end of the film, George uploads Jules' mind, extracted from the Archive system, into prototype o3's AI. This merging of human consciousness with robot AI suggests that immortality can be achieved by placing a human mind in a perfect, self-sustaining body that doesn't require basic needs like food, sleep, or rest.

Looking at the film in general, many traces of Transhumanist thought can be seen. Archive technology is the most important element in the film. The fact that the human mind can be stored externally under certain conditions and continues to live even after death is in accordance with the arguments of transhumanist thought. Because in transhumanism, the



transfer of human consciousness or the transfer of artificial intelligence to human consciousness is aimed. On the other hand, the high level of robotic technologies in the film can also be read in the transhumanist framework. With the method George describes as deep machine learning, robots can be given human qualities. It is a feasible thing to create a more robust, inexplicable, tireless, sleepless and more advanced body than the human body. However, in addition to all these, adding human qualities such as (emotion, sensation, analytical thinking) means building an entity beyond human beings.

The technological developments in "Archive" closely mirror real-life advancements. For example, DeepBrain AI's technology allows people to interact with deceased loved ones, similar to the Archive tech in the film. Additionally, Boston Dynamics' Atlas robot, particularly prototype 02, resembles the robots in the film. These parallels make it crucial to analyze "Archive" from a transhumanist perspective.

Conclusion

It is possible to see the signs of transhumanism, which aims at the physical and mental development of human beings, in artificial intelligence technologies, bio/nano technologies and genetic engineering. Almost every day, new technological developments that can create curiosity and chills on people have been introduced. These include genetically modified living organisms, artificial intelligence-based bionic implants and prostheses, artificial intelligence software that can behave like a conscious human mind, and humanoid robots.

Concepts such as superhuman, robot, have a very old place in cinema and literature. As can be remembered from the novel *Frankenstein* and the film *Metropolis*, transhumanist ideas are not new in the art world. In this study, in which the traces of transhumanism in cinema are traced, how transhumanist developments are presented in films, whether the transhumanist ideas presented in films can have examples in real life, and even the real-life counterparts of the developments in films were addressed. When we look at the films analysed in the study, it should be seen that high technological developments (which people today see as having the potential to become real) are generally discussed.



The film *Gattaca* is about genetic engineering. According to the universe of the *Gattaca* film, when people want to have children, they can determine the genetic characteristics of their children before they are born. Weaknesses such as disease and early death of individuals whose genetics are changed before they are born are eliminated. Thus, there are elite individuals who are considered superior to those with unmodified genetics. In *Upgrade*, a paralysed person is able to move again thanks to a chip implanted in his spine and even has more advanced physical abilities than before. Such technology does not yet exist in real life. However, there is a possibility that such a technology may exist in the future. Today, developments such as artificial organs and limbs have become quite common in medical technologies. Developments such as artificial camp, insulin pump, dialysis device are used in the treatment of diseases.

The last film analysed within the scope of the study is *Archive*. The main subject of the film is the situation in which the human mind is transferred to an artificial intelligence with its memories and the mind continues to live for 3 years after the death of the person. In addition, it is seen that robotic technologies are quite advanced in the film. In addition, the film also deals with the transfer of human consciousness to a robot with artificial intelligence.

As a result, when the analysis of all three films is examined, it is seen that the films are about transhumanist technologies. The most important point is that the technological developments shown in the films are similar in today's world. Therefore, it is seen that science fiction films featuring transhumanist technologies have an important role in the spread and reproduction of transhumanism. The fact that the events in the films made in the previous years take place or are taking place today also increases the possibility that the transhumanist characters we watch in the films today will be in the future. In the future, a world in which robotic humans, which is seen as an impossible dream for today, will perhaps be possible.

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Öz: İnsanın fiziksel ve zihinsel yeteneklerini geliştirmeye odaklanan transhümanizm, özellikle 20. yüzyılın sonlarından itibaren önem kazanmıştır. Hümanizm ve posthümanizm arasında konumlandırılan transhümanizm, genetik mühendisliği, yapay zeka ve biyoteknoloji gibi ileri teknolojiler aracılığıyla insanları yüceltmeyi amaçlamaktadır. Günümüzde transhümanizmin izleri, tıbbi tedaviler ve yapay zeka teknolojilerinin yanı sıra, özellikle bilim kurgunun toplum için transhümanist fikirleri yeniden ürettiği sinema, edebiyat ve medyada da görülmektedir. Bu çalışma, transhümanizmi filmler aracılığıyla araştırmakta, bu teknolojilerin nasıl tasvir edildiğini ve gerçek dünyadaki ilerlemelerle nasıl ilişkilendirildiğini incelemektedir. Analiz, transhümanist bir çerçevede Gattaca (1997), Upgrade (2018) ve Archive (2020) filmlerini kapsamaktadır. Her film bir çekirdek alanı temsil etmektedir: Gattaca genetik mühendisliğine, Upgrade biyoteknolojiye, Archive ise yapay zekaya odaklanıyor. Nihayetinde, bu filmlerdeki teknolojik kavramların gerçek hayattaki potansiyel transhümanist ilerlemeleri yansıttığı gözlemlenmektedir.

Anahtar Kelimeler: Mantık, bilme, tanıma, fitrat, sensus divinitatis.



