

**T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF GRADUATE STUDIES**



**POTENTIAL BENEFITS AND RISKS OF TRANSHUMANISM THROUGH
THE MOVIES I, ROBOT AND BLADE RUNNER**

THESIS

Liudmila CONSTANTINOVA

**Department of English Language and Literature
English Language and Literature Program**

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DECLARATION

I hereby declare with respect that the study “Potential Benefits And Risks Of Transhumanism Through The Movies I, Robot And Blade Runner ”, which I submitted as a Master thesis, is written without any assistance in violation of scientific ethics and traditions in all the processes from the Project phase to the conclusion of the thesis and that the works I have benefited are from those shown in the Bibliography. (.../.../20...)

Liudmila CONSTANTINOVA



FOREWORD

I express my deep appreciation for the help in the process of preparing the thesis to my supervisor Asst. Prof. Dr. Nur Emine Koç. Her serious scientific approach and rigorous mastery of the discussed topic deeply infected and encouraged me. She always gave me sensitive guidance and tireless support from choosing a topic to the completion of the work. I would like to express my sincere words of gratitude to Assist. Prof. Dr. Timuçin Buğra Edman, who has opened up the transhumanism movement for me. The impetus in the choice of the topic of the thesis was the professionalism of the professor Dr. Timuçin Buğra Edman, who conveyed to me the essence of this topic and aroused curiosity to study it deeper. I thank Assist. Prof. Dr. Gamze Sabancı Uzun who guided me throughout the course. I would like to take this opportunity to express my heartfelt thanks and deepest respect to her.

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POTENTIAL BENEFITS AND RISKS OF TRANSHUMANISM THROUGH THE MOVIES I, ROBOT AND BLADE RUNNER

ABSTRACT

At all times, people wanted to make progress, improve all areas of their lives, and to find a solution that could solve most of the difficulties that people are facing every day. The presented thesis gives a critical assessment of the main idea of the theory of transhumanism, specifically of the statement that a human being is not the highest stage of evolution and therefore a person can be improved due to advanced technologies. The relevance of this work lies in the fact that transhumanism is an actively developing international movement that is closely connected with philosophical issues. These issues are examined through the prism of theoretical background and two science fiction movies “I, Robot” (2004) directed by Alex Proyas and “Blade Runner” (1982) by Ridley Scott. The thesis aims to show the pros and cons of the transhumanism movement and its impact on human beings. The question of human uniqueness is analyzed as well, taking into consideration the characters from both movies where the gap between human beings and robots/replicates appears. Both movies raise similar questions about human’s uniqueness and the possibility of human beings to live in peace with artificial intelligence without losing its nature.

From ancient times, the search for a panacea for all problems is the cornerstone of happiness. Transhumanism is an attempt by humanity to achieve it since the main vector of this international movement is human well-being and deliverance from related obstacles. Nevertheless, this idea can lead dystopian future, while that future is not as bright as transhumanism’s followers consider. If transhumanism’s plans and dreams come true one day, then dystopian movie’s scenarios and dystopian plots of books will become a reality in the near future.

Keywords: Transhumanism, NBIC Technologies, Artificial Intelligence, Electro-slavery, Human Morality

Key Words: *Anxiety, foreign language anxiety, barrier, overcome, strategy*

FILM I, ROBOT VE BLADE RUNNER İLE TRANSHÜMANİZMİN POTANSİYEL FAYDALARI VE RİSKLERİ

ÖZET

İnsanlar her zaman ilerleme kaydetmek, yaşamlarının tüm alanlarını iyileştirmek ve insanların her gün karşılaştığı zorlukların çoğunu çözebilecek bir çözüm bulmak istediler. Sunulan tez, transhümanizm teorisinin ana fikrinin, özellikle bir insanın evrimin en yüksek aşaması olmadığı ve bu nedenle bir kişinin ileri teknolojiler nedeniyle geliştirilebileceği ifadesinin eleştirel bir değerlendirmesini sunmaktadır. Bu çalışmanın önemi, transhümanizmin, felsefi meselelerle yakından bağlantılı aktif olarak gelişen bir uluslararası hareket olduğu gerçeğinde yatmaktadır. Bu konular teorik alt yapı prizması ve Alex Proyas tarafından yönetilen iki bilim kurgu filmi “I, Robot” (2004) ve Ridley Scott tarafından “Blade Runner” (1982) ile incelenmiştir. Tez, transhümanizm hareketinin artılarını ve eksilerini ve insanlar üzerindeki etkisini göstermeyi amaçlamaktadır. İnsan tekliği sorunu, insanlar ve robotlar / kopyalar arasındaki boşluğun görüldüğü her iki filmde de karakterler göz önünde bulundurularak analiz edilir. Her iki film de insanın benzersizliği ve insanların doğasını kaybetmeden yapay zeka ile barış içinde yaşama olasılığı hakkında benzer sorular ortaya koyuyor.

Antik çağlardan beri, tüm sorunlar için her derde deva arayışı, mutluluğun temel taşıdır. Transhümanizm, insanlığın bunu başarmaya yönelik bir girişimidir, çünkü bu uluslararası hareketin ana vektörü, insan refahı ve ilgili engellerden kurtulmaktır. Yine de, bu fikir distopik bir geleceğe öncülük edebilir, ancak bu gelecek transhümanizmin takipçilerinin düşündüğü kadar parlak değildir. Transhümanizmin planları ve hayalleri bir gün gerçekleşirse, distopik filmin senaryoları ve distopik kitap kurguları yakın gelecekte gerçek olacak.

AnahtarKelimeler: *Transhümanizm, NBIC Teknolojileri, Yapay Zeka, Elektro-kölelik, İnsan Ahlakı*

1. INTRODUCTION

Dystopia is a warning to humanity. This is a reminder that reality is much more cunning, complex, sophisticated, and cruel. Dystopia, which is one of the most popular genres of modern culture, has found new opportunities for its development in cinema. Over the past few decades, cinema has penetrated all spheres of human culture. Cinema can be used for education, propaganda or as a way to spend free time. Movies, like books, encourage the audience to reflect on what he/she saw and then to interpret the plot in different ways. One of the most sensational and most popular movie genres in recent years is science fiction that is closely connected with transhumanism ideas. Movies of this genre form a complex picture of the world, which contains many aspects. These aspects affect the main areas of human life; moreover, they affect the relationship with the audience of any age and profession. Both science fiction and dystopian genre reveal a picture of a future that is not safe for people. This thesis will discuss both positive and negative aspects of the transhumanism movement through a theoretical background and two science fiction movies: “Blade Runner” (1982) and “I, Robot” (2004). Transhumanism can provide humanity with a bright future full of comfort. However, there is always a chance of an unsuccessful scenario that could happen with human beings.

Nowadays, transhumanism is not only a philosophical teaching but it is the platform of a social movement that is trying to improve people’s lives. This movement continues to gain momentum, and with the current level of development of science and technology, it is quite possible to develop into a comprehensive and almost complete transformation of the human body. The discussions about the transhumanism movement have acquired a worldwide character. On one side of the discussion are ardent supporters of this doctrine, seeing in it a new worldview aimed at the brighter future. On the other side, there are irreconcilable critics such as Francis Fukuyama, who characterizes the transhumanism movement as one of “the world’s most dangerous ideas” (Fukuyama, 2004: 42).

George Bernard Shaw, a famous Irish playwright and critic, claimed that, “Progress is impossible without change; and those who cannot change their minds cannot change anything” (Shaw, 1945 as cited in VanBellinghen, 2017). The playwright is calling for progress and change which opens up new horizons for humanity. Bernard’s Shaw paradoxical statement is directly related to the aim of the thesis that is focused on the progress of advanced technologies. The transhumanism movement is closely connected with the process of continuous progress that allows humanity to improve health and lifestyle.

Nowadays, technological development is a topic of utmost importance that requires continuous study and research. The transhumanism sphere has a positive impact on the economies of the countries and their development. Due to this sphere, new jobs appear, infrastructure is improved, new types of equipment and technologies are created. By 2020, the world of technologies has undergone unique changes. New types of technology have appeared, for instance, advanced smartphones, tablets, e-books, smartwatches, smart TVs, etc. Along with this, the global metamorphoses of the film industry also occurred. For example, earlier films mostly taught viewers socially desirable behavior, but now they reflect in a better or worse light the most diverse ideas about the values of life, including taboo ones.

Nevertheless, scientific and technological progress and the development of technologies allow raising the question of the possibility of using these technologies in order to improve the parameters of the human species. The present study will strive to examine transhumanism’s benefits and threats through the theoretical background and through the analysis of two science fiction movies “I, Robot” (2004) directed by Alex Proyas and “Blade Runner” (1982) by Ridley Scott. Additionally, these two movies are books’ adaptations that are *I, Robot* (1950) written by a famous writer Isaac Asimov and a book of American writer Philip K. Dick, *Do Androids Dream of Electric Sheep?*(1968) adapted by Alex Proyas. Therefore, the books will be examined as well.

The movie “I, Robot” is one of the examples of science fiction movies that provides the audience with some food for thought. The movie raises essential questions, such as: Is humanity capable to live in peace with artificial intelligence? Is artificial intelligence a soulless machine without any rights or it

is something more than this? Does humanity need the latest technology? There are many questions that are closely related to a process of technological and human progress. All of them are linked with each other and allow conducting an advanced analysis of the movie while its analysis will help to unpack and reveal many details of the transhumanism movement. Furthermore, it is understandable that the movie is set in the future since there are shown many latest technologies. Therefore, the audience could plunge into that future and analyze what it would bring to human beings. The audience could examine possible consequences of technological advancement and all the positive and negative effects.

The movie “I, Robot” reveals not only the aspect of the future but also raises philosophical questions. One of the key questions of the film is what distinguishes a robot from a person? What is so special about each person and what is called a soul? One of the dialogues from this movie contains the answer to the last question. The detective Spooner asked Sunny at the police station: “Can a robot write a symphony. Can a robot turn a canvas into a beautiful masterpiece?” While the robot also had a counter-question, which is “Can you?” (Mark, Davis, Dow, Godfrey, 2004). All human beings are different from each other and what makes a person unique is his/her personality and individuality. In this thesis, the nature of human beings will be examined along with artificial intelligence in order to analyze what makes them different from robots.

It is essential to note that, the movie “Blade Runner” involves similar topics and challenges that were raised in “I, Robot”. This movie is considered a classic of the science fiction genre in the cinema world. The theme of the film is identical to the theme raised by the immortal work *Frankenstein*. That is, the idea that a person has responsibility for the creature created by him, and this creature often turns out to be no worse than a human being is. In the film, such creatures are replicates that are called to perform either humiliating work for a person such as prostitution or work that is overly complicated for an individual. The role of the replicants comparable to the life of slaves who do not have any rights. Throughout the movie, it becomes clear that replicates are able to think, feel, and even love; therefore there is a difficulty in recognizing replicants. In addition to this, the main themes of the movie will be analyzed. The theme of

life and death is the key theme of the film. Do replicants deserve death if they are no different from people in terms of feelings and emotions? This issue is going to be examined in this paper as well.

The borders between human beings and replicants that are almost indistinguishable from each other in the movie “Blade Runner” will be explored in this thesis. Therefore, the analysis of this movie will be focused on empathy topic that is widely described in “Blade Runner”. This trait will be analyzed in order to identify the difference between artificial intelligence and a human being. Based on the fact that the borders are almost erased, a conflict between replicants and human beings appears. This issue is explored thoroughly in the thesis.

In Chapter 1, the main theoretical study on the transhumanism movement is going to be analyzed. Besides that, in this chapter an analysis of the historical context of transhumanism and its underlying ideas will be highlighted. The basic conceptual foundations of transhumanism will be revealed and the conditions for their meaningfulness and admissibility are going to be formulated. The weak and strong sides of transhumanism will be determined by taking into account all the pros and cons of the process of scientific and technological progress. The arguments of certain critics and the views of various religious denominations regarding this movement will be analyzed. Moreover, the prospects of transhumanism as a philosophical movement will be examined. This chapter will reveal not only the prerequisite of this movement, but also possible scenarios for the development of technological progress will be outlined.

In the second chapter of the thesis, the movie “Blade Runner” (1982) by Ridley Scott will be analyzed through transhumanism theory that will show the ramifications of this movement. Furthermore, through the given analysis concerns and problems brought by breaking borders are going to be highlighted. These borders contain differences between a human being and replicants as well as between authenticity and artificiality. In this chapter, the question of human uniqueness that is based on distinctive features and feelings will be examined. The movie shows the future set in 2019. That future world contains advanced technology and artificial intelligence. As far as, the 2019 year has passed, it

became possible to analyze how well the movie predicted the future. The year 2019 from the movie will be compared with the real 2019 that has already passed. A comparison of future technologies from the film and real latest technologies that humanity could develop will be compared. Additionally, the contribution of these technologies to people's lives will be examined.

In the third chapter of this dissertation, another movie will be analyzed that is “I, Robot” (2004) directed by Alex Proyas. The analysis of the movie will focus on the artificial intelligence rise that could lead to the destruction of the human race. Nevertheless, the positive side of advanced technologies will be also shown in this chapter that lies in the fact that artificial intelligence could improve, facilitate, and make more comfortable human beings’ lives. The idea of improving the human body has repeatedly been raised in the history of philosophy and science. Furthermore, the director of the movie Alex Proyas also raised this topic. The ideas on the further evolution of a human being, which occurs through the removal of the restrictions imposed on him/her by the organic body, are analyzed. For example, detective Spooner has an artificial arm and it makes his life easier. He does not experience any inconvenience without his biological limb and can live the full life of a healthy person. Other examples of artificial intelligence will be evaluated as well in order to prove that advanced technology could go hand in hand with humankind by providing people with physical ease and relaxation.

In the last chapter of the thesis, the movies “Blade Runner” and “I, Robot” will be compared not only with each other but also with the books that were used as primary sources. The aim of this chapter is to investigate challenging ideas from the analyzed books and movies. In addition, will be compared the issue: whether the ideas of the authors of these books were saved and transmitted in films. The most essential questions that both movies and books contain are: What does it mean to be a human being and what makes a person different from machines? In order to answer these specific questions, the whole study will be based on various literature reviews and detailed analysis of the characters. Moreover, the new way of thinking about the transhumanism movement will be presented through the analysis.

In the information age, transhumanism has become one of the broadest philosophical movements. It is defending the possibility of human evolution based on technology. The scope of technical activity and the capabilities of technology are not comparable with anything in the history of humankind. Information technology has tightly entered people's daily lives, transforming lifestyle. New scientific disciplines arise and develop, such as bioengineering, nanotechnologies, artificial intelligence that is widely used nowadays. On the other hand, global problems are becoming more pronounced which are the following ones: an environmental situation in the world, non-renewable natural resources are exhausted, epidemics of new diseases and viruses appear, and mutations of already known viruses arise. Therefore, the utopian goal of transhumanists may turn into dystopian outcome. Moreover, in this thesis the following questions are raised: What impact has the transhumanism movement on 21st-century people? Is artificial intelligence a soulless machine that may lead to a dystopian future? And what makes a human creature unique? The thesis will shed light on these questions.

2. THE THEORETICAL BACKGROUND

2.1 Excursion into the History of Transhumanism

Nowadays, scientific and technological progress has become enormous. The human brain and computers have some similarities. This is the ability to step-by-step execution of various instructions and information processing, memory, etc. Therefore, the idea that they can be combined arises in people's minds more often. The borders separating the artificial and human beings lose their clarity due to the mixing of real space and virtual. This brings us to the phenomenon of transhumanism.

The roots of the term *transhumanism* stretch back to ancient times. Moreover, transhumanism originates in the humanism movement. Nevertheless, these two movements differ from each other. Humanism in philosophy is a type of worldview where a person stands in the center. It gives priority to human dignity and freedom. For the humanism movement, a human being is the highest value, while for transhumanism a person is the one who can be changed and improved. The main difference is that transhumanism pays special attention to the technological progress and in every possible way tries to implement it in people's lives. (Baumann, 2010)

According to the Micah Redding's research, the first one who used it was the Italian thinker, poet and theologian Dante Alighieri in his book *The Divine Comedy* (1472). He mentioned this term in the following sentence: "Words may not tell of that transhuman change: And therefore let the example serve, though weak, For those whom grace hath better proof in store." (Alighieri, 1472, as cited in Redding, 2015). Due to this, comes the understanding that transhumanism as a term has existed for a long time. Currently, there is a tremendous amount of definitions that have a purpose to identify and to reveal the meaning of the word transhumanism that occurred in the world and we will contemplate the most popular of them. Particularly, Cambridge Dictionary gives

us the following definition “transhumanism is the theory that science and technology can help human beings develop beyond what is physically and mentally possible at the present time” (cambridge.org). According to this definition, transhumanism has quite a positive connotation that lies in the fact that it will make a huge contribution to people’s lives.

However, this concept acquired a more modern meaning only in 1957. Evolutionary biologist Julian Huxley invented the term transhumanism. Julian Huxley showed his interest in evolutionary ideas as a child. His grandfather Thomas Henry Huxley was a close friend and ideological supporter of Charles Darwin, that led Julian Huxley to consider the theme of evolution. During his career as an evolutionary biologist, Julian Huxley was fortunate enough to hold a number of prominent positions: Chairman of the British Eugenics Society, Chairman of UNESCO and the World Wide Fund for Nature (New World Encyclopedia, n.d). Julian Huxley distinguished himself inside of transhumanism with an article, which is entitled as *Transhumanism: New Bottles for a New Wine* where he makes the following statement:

“The human species can, if it wishes, transcend itself—not just sporadically, an individual here in one way, an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps transhumanism will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature” (Huxley, 1957: 17).

This early formulation contains the basic core of transhumanism, which is the desire of transhumanists for self-directed evolution that will contribute to overcoming humanity’s current form and nature. Based on this quote, it becomes clear that for Julian Huxley a person is still the pinnacle of evolution but humankind is not flawless and it can be improved and changed in all directions. He figures out not only the fact that people are imperfect he also apprehends that humankind can become stronger only with the help of technology and science. Pursuing this further, Julian Huxley writes the following words:

“I believe in transhumanism once there are enough people who can truly say that, the human species will be on the threshold of a new

kind of existence, as different from ours as ours is from that of Peking man. It will at last be consciously fulfilling its real destiny” (Huxley, 1957: 17).

Julian dreamed and imagined profound changes in human society. In the context of technological progress, he strongly supports the principle of sustainable human development which will later become a cog in a kind of machine that works for the benefit of humankind. Moreover, these Huxley's words can be compared to the Nietzschean concept of Superman that he gives in the book *Thus Spake Zarathustra*:

“I teach you the overman. Human being is something that must be overcome. What have you done to overcome him? All creatures so far created something beyond themselves; and you want to be the ebb of this great flood and would even rather go back to animals than overcome humans? What is the ape to a human? A laughing stock or a painful embarrassment. And that is precisely what the human shall be to the overman: a laughing stock or a painful embarrassment. You have made your way from worm to human, and much in you is still worm. Once you were apes, and even now a human is still more ape than any ape” (Nietzsche, 2006: 5-6).

With the popularization of the concept of evolution, the understanding came that a person is not the peak of the development of human beings, but an intermediate link. Nietzsche expressed this idea in the following way: just as a person came from an ape, so a superman must come from a human being. By analyzing the words of Nietzsche and Huxley, one can conclude that both authors consider a person as unideal or even defective one. Huxley, like Nietzsche, speaks of overcoming and that a human being is an intermediate step. For them, humanity is just a stage that should be not only completed but it should be improved. Julian Huxley advocated a concept of society that would come to the full realization of human potential. For Huxley, transhumanism means humanity's efforts to overcome and to become a better version of itself. He preaches the idea that at this stage, humanity in its biological sense has reached the peak of its evolution and therefore it should be changed.

Iranian-American futurist Fereidoun M. Esfandiary that is also known as FM-2030 influenced the development of the transhumanist movement. In the book *Are You a Transhuman?* Fereidoun M. Esfandiary establishes a self-diagnostic test that allows readers to measure the speed of their personal improvement. The key point of the book is the introduction by the author of a new term, which is transitional human, or *transhuman* that is a concept directly related to transhumanism (Esfandiary, 1989). He believes that ultimately the development of technology, the transformation of life and the acceleration of evolutionary processes will lead to the emergence of posthumans that means people who are changed and improved. They will be qualitatively different from a modern person and they will become the beginning of a new stage of evolution.

Already after this innovator, many other transhumanists estimated the difference between transhumanism and post-humanity. According to the German philosopher Dieter Birnbacher,

“Transhumanism can be defined as a movement that wants us to get on the way to “posthumanity” by going beyond humanity in its present form. Transhumanists want us to enter upon a process that will ultimately lead to “posthumanity” by attempting, now and in the near future, to transcend certain limits inherent in the human condition as we know it” (Birnbacher, 2008: 95).

Consequently, the transhuman and the posthuman are continuously connected while the goal of the first one is to achieve the form of the second one. In addition to this, Luca Valera who has PhD in Bioethics considers that the posthuman is the result of different kinds of modifications and the most significant thing is that the posthuman is no longer a human being. The posthuman has physical and mental capabilities that are many times greater than the capabilities of an ordinary person. Posthuman’s body cannot be affected by any disease or aging and not subject to death. Transhumanists intend to achieve such results by using a variety of latest technologies, including artificial intelligence, genetic engineering, nanotechnology, various anti-aging drugs, etc (Valera, 2014: 482-485). Focusing on achieving its main goals, today transhumanism sets itself specific tasks and problems that need to be addressed. We will review and analyze them in the next chapter.

A Swedish philosopher Nick Bostrom, evaluates in one of his papers the view of FM-2030 on transhumanism, that is the following: “FM-2030 maintained that signs of transhumanity included prostheses, plastic surgery, intensive use of telecommunications, a cosmopolitan outlook and a globetrotting lifestyle, androgyny, mediated reproduction (such as in vitro fertilization), absence of religious beliefs, and a rejection of traditional family values” (Bostrom,2003: 7). Proceeding from this, it becomes clear that transhumanism is far from an easy step. Transhumanism requires a huge contribution from the development of the latest technologies and there is also a need to refuse certain standards to which humanity is accustomed. Nevertheless, Nick Bostrom doubts the words of Fereidoun M. Esfandiary and an argument against this position is that it is possible to be a transhumanist even while adhering to certain traditional values. (Bostrom,2003: 7)

Furthermore, FM-2030 continued to develop the theme of transhumanism in his book *Up-wingers* where he claims:

“We are now at an epochal technological transition. Suddenly all around us the old industrial technology is falling apart. Advanced-industrial communities of Europe and the United States are suffering the full brunt of this breakdown. Telegrams take days to reach their destination. Mail service is slow. Subways and trains are rundown and undependable. Electric power systems fail. Cars jam streets and highways polluting — slowing down mobility — maiming — killing people. This is the collapse of an old decrepit nineteenth-century technology no longer suited to the needs the expectations and the rhythms of the late twentieth century. We must rejoice in this collapse” (Esfandiary, 1973: 33).

The reader can feel the optimism of the FM-2030, in light of the fact that, despite the collapse of everything around, the author sees and feels the beginning of something new in this. FM-2030 believes that the new future will be better than the present where everything is not perfect. The future is what humanity lives for and Fereidoun M. Esfandiary urges people for positivity. Likewise, the era of Homo sapiens will be replaced by more perfect humanity in

the future, which with the help of science and advanced technologies will get rid of most of the limitations and problems imposed on people's bodies.

It is however, important to note that transhumanism began to gain even more momentum in 1988. The first issue of *Extropy Magazine* was released, the creators of which were two leaders of the movement Max More and T. O. Morrow. Four years later, they founded the Institute of Extropia, which served as an impetus for the unification of disparate groups of transhumanists. As a result, the aforementioned Max More gave the definition of transhumanism that we use today. According to him, transhumanism is as a philosophy of life, which seeks to continue and accelerate the evolution of human beings beyond its currently human form and human limitation through science and technology. (More,2009).Transhumanists seek to apply advanced technology to human beings in order to take on the evolutionary process.

The starting point for More's philosophy is the concept of extropy. The broadly accepted definition of the term extropy is: "the extent of a system's intelligence, information, order, vitality, and capacity for improvement"(More,1998). Extropianism represents a separate direction of transhumanism. The basic ideas of extropianism are outlined in the Extropian Principles, a document written by the founders and members of the Institute of Extropia. Version 3.0 of this document identifies seven basic principles that have particular importance to extropian followers in developing their ideas. These seven principles are the following: "perpetual progress, self-transformation, practical optimism, intelligent technology, open society, self-direction, rational thinking." (More, 1998) All these principles play a vital role in the concept of extropy and due to them the humanity can increase the level of a personal growth.

Another groundbreaking philosopher who made an enormous contribution to the history of transhumanism is Natasha Vita-More, due to her works a direction of transhumanist art was formed. Adam Ford who is on the board of Humanity+ interviewed Natasha Vita-More and she explained in details about her first future human prototype which considers as a type of human 2.0 that can be used in different kinds of situations. For instance, it can be used if someone after cryonics needs a body and it is also can be used as a substitute one. According to Natasha Vita-More, "alternative body is, in part, not only a wearable

technology; it is also experiential design”(Ford & Vita-More 2012). Consequently, transhumanism has taken a rather high position in our time. If we compare what humanity sees now with what people saw only sixty years ago it will not be too bold to assume that our world is changing due to ideas of such innovators as Natasha Vita-More who is improving the level of technology and the lifestyle of people that will be completely different by our current standards.

Returning to Nick Bostrom’s ideas, it should be noted that in the work *The History of Transhumanist Thought*, he outlined Nietzsche’s philosophy (the doctrine of the superman) as one of the ideological sources of transhumanism. However, he notes that Nietzsche’s superman is not the result of technological design, but a product of personal growth and development. Therefore, according to him, the similarities between transhumanism and Nietzsche’s ideas are superficial, they have as much in common as “the English liberal thinker and utilitarian John Stuart Mill” (Bostrom ,4).

Nevertheless, in 2009 a philosopher S.L. Sorgner criticized N. Bostrom’s assessment, arguing that the similarities between the posthuman and superhuman are fundamental. Sorgner points to Nietzsche’s thought, such as respect for critical thinking, courage in the face of the unknown. S. Sorgner carried out an interesting comparison of the concepts of posthuman and transhuman. He notes that these concepts have various meanings among different transhumanists. S. Sorgner analyzes the transhumanist Fereidoun M. Esfandiary and proclaims that for him the posthuman means a new species. While the transhuman, is an intermediate creature with both human and posthuman qualities. Further, he considers the point of view of N. Bostrom for which the posthuman does not refer to the separate species but it is linked with a specific group of people who have not yet made unimaginable improvements. Accordingly, Sorgner brings Fereidoun M. Esfandiary’s point of view closer to Nietzsche. Besides, he points to the absence of Bostrom’s considerations about transhumanism of a special posthuman mission (Sorgner,2009: 36-38). In addition to this, the philosopher Max More explains that:

“Sorgner’s essay establishes parallels between transhumanism and Nietzsche’s thought, but does not address the question of whether transhumanist ideas were directly influenced by Nietzsche. I can

state with complete confidence that such an influence does indeed exist. I know that because his ideas influenced my own thinking” (More,2010).

Thus, M. More elevates the philosophy of F. Nietzsche to the rank of a direct source of transhumanism. Moreover, he is convinced that there is a direct connection between transhumanists and Nietzsche’s views.

Another American inventor and futurist Ray Kurzweil is an outstanding figure in the transhumanism field. He analyses the idea of singularity, which is closely connected with transhumanism. The idea of singularity became popular due to science fiction writer Vernor Vinge, in whose novels civilizations go one by one into a singularity. Vernor Vinge believes that technological singularity may come around 2030 while Ray Kurzweil predicts 2045. (Scaruffi, 2014). Their views differ in this aspect but both of them are confident that it will happen soon. Moreover, several authors have attempted to define Singularity, but currently generally, accepted definition is the one given by Ray Kurzweil. According to futurist Ray Kurzweil, singularity means:

“A future period during which the pace of technological change will be so rapid, its impact so deep, that human life will be irreversibly transformed. Although neither utopian nor dystopian, this epoch will transform the concepts that we rely on to give meaning to our lives, from our business models to the cycle of human life, including death itself ”(Kurzweil,2005: 24).

In other words, he believes that the invention of artificial intelligence will cause unbridled technological growth, which will lead to major changes in human civilization that are necessary for people. A lot of critics analyzed his book *The Singularity is Near* and Ion Iuga in the paper *Transhumanism Between Human. Enhancement and Technological Innovation* evaluates the principles of singularity and concludes that according to Ray Kurzweil advances in computer technology will ultimately allow machines to match and then surpass the ability of the human brain to process information. Due to the latest technology, the human brain will not have any limits and on this basis, the person will become perfect. Moreover, Ion Iuga lists the principles of singularity which are included in the book *Singularity is near*. He mentions:

“ 1)The rate of technological innovation doubles every ten years; 2) By the end of 2020s it will be no difference between the computational intelligence and the biological intelligence; 3) The nonbiological intelligence will be able to download abilities and knowledge from other machines, eventually from humans; 4) Computers could access the whole knowledge of our civilization through the Internet; 5) Nanotechnology would be capable to make nanobots at the molecular scale. They will have multiple functions such as to invert the aging process or to create virtual realities at the level of nervous system; 6) Human ability to manifest emotions will be also dominated by machines” (Kurzweil,as cited in Iuga, 2016).

The aforementioned principles of singularity are Kurzweil's predictions about the future that is closely connected with technology that will benefit people and improve their quality of life. He suggests that qualitative improvement in the human body will actually be the beginning of a new stage of evolution. Thus, science and technology will allow a modern person to enter the next stage of human development, and at this stage, people will be spared from many sufferings, including illness and death in general.

Transhumanism, even if it is subjected to all kinds of criticism and ambiguous assessments, is an increasingly popular international intellectual, cultural, and ideological movement that supports the application of scientific knowledge and technological capabilities. His goal is to improve human anatomy and cognitive abilities. Moreover, this goal is intended to be good, because in the future people will be able to avoid the hardships of aging and disease. The ideology of this movement says that people through various transformations and modifications can become superhumans with truly fantastic capabilities and abilities, and eventually turn into posthumans. Nevertheless, there is a flip side to this coin - at the same time as the embodiment of idealistic ideas, transhumanism can lead to the realization of the most dangerous ideas in the world.

2.2 Transhumanism: Its Goals and Achievements

Transhumanism offers humanity a huge range of various changes and innovations that are aimed at improving people's lives. The spirit and goals of this philosophy are reflected in the declaration of transhumanism, which was formulated by the worldwide association of this movement. The World Transhumanist Association was created in 1997, nowadays it is known as Humanity +. One of the main features of the concept of transhumanism is a rational approach to technological achievements, the understanding that they can bring not only benefits but also can bring threats to humans, nature, and the planet and for future development. Evaluation of the consequences, pondering all the pros and cons are integral parts of this worldview, which declares a responsible attitude to scientific innovations.(Baily et al., 2009)

The main goal of transhumanism is to constantly improve the human being in order to achieve these innovative technologies and other methods are applied. For success in achieving this goal, it is necessary to solve several specific tasks that were provided in Nick's Bostrom paper *Transhumanist Values*. According to his point of view, one of the most essential aspects is global security. He proclaims that: "Existential risk – one where an adverse outcome would either annihilate Earth-originating intelligent life or permanently and drastically curtail its potential" (Bostrom,2005). Since he does not deny the negative scenario, he believes that failure is possible and then the safety of humankind is above all.

The achievement of transhumanists goals is directly related to technological progress, which in turn is related to the economic situation. Nick Bostrom claims, that:

"Thanks to the gradual accumulation of improvements over the past several thousand years, large portions of humanity have been freed from illiteracy, life-expectancies of twenty years, alarming infant-mortality rates, horrible diseases endured without palliatives, and periodic starvation and water shortages" (Bostrom,2005).

Based on this, it becomes clear that technological progress is a necessity. Thanks to this, it becomes possible to achieve so many improvements and

changes in human life. With new technologies, it becomes real to raise the standard of living and save humankind from the many inconveniences that exist today.

Moreover, it was observed that the accessibility of transhumanism innovations is a very essential issue. Nick Bostrom believes that everyone has to have the opportunity to become posthuman and that is why he proclaims: “It would be sub-optimal if the opportunity to become posthuman were restricted to a tiny elite”(Bostrom, 2005). The transhumanist by putting forward such an opinion acts as a defender of universal equality where each person is able to get a chance to improve his or her life, regardless of status in society or financial situation.

Within transhumanism, there are diverse points of view, and a large number of individual groups have been created based on shared interests, views, values, or geographical location.

The first group is extropianism that is a well-known bunch of transhumanism that attaches great importance to independence, self-transformation, personal freedom and freedom from state coercion. Extropians core considered to be Extropian principles which are written in 1998 by Max More. What characterizes this group is a set of principles which are the following ones: “endless progress, self-transformation, practical optimism, intelligent technology, open society, self-direction, and rational thinking.” (Bostrom,2003)

The second group of transhumanism is considered democratic one whose main ideologists are the leaders of the largest transhumanist movement Humanity + N. Bostrom and J. Hughes. The term *democratic transhumanism* originates in 2004, when the American sociologist and bioethicist J. Hughes published the book *Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future*. Hughes deals with the problems of introduction of technologies such as improving physical and intellectual abilities, prolonging life and the introduction of human-like cyborgs and also considers the threat of deepening social inequality. (Bostrom, 2003)

The third strand of transhumanism is the Hedonistic Imperative that is an ethical system based on the need to use technology to eradicate suffering for all

intelligent life. People supporting the idea of paradise engineering that first was described in David Pearce's *Hedonistic Imperative*, presented it. David Pearce encourages supporting a biological program in order to eradicate cruelty and any kind of disease. According to him, life on earth can dramatically change in the near future due to mood drugs and new vertebrate genome.(Bostrom,2003)

Moreover, one of the transhumanism's currents is considered to be singularitarianism which is based on the belief that technological singularity is possible and one day it will reach its highest level. Representatives of this movement, consider that the most important issue is the creation of an intelligence that will surpass human beings. Singularitarian transhumanists believe that its creation is a key milestone in the development of humankind and its achievement is the most important goal for all people. (Bostrom,2003)

The next group is considered as a research direction and its name is theoretical transhumanism. According to Nick Bostrom, "it is the study of physically possible systems designs that we cannot yet build" (Bostrom,2003: 44-45).Absolutely all studies of transhumanism can be included in this area. Important points are determining the possibilities of humanity, the consequences of changing the world.

There are also salon transhumanism and transhumanism in arts and culture. The first one is a community of people with the same interests who come together to discuss transhumanism's topics. The second group shows us that transhumanism can be also considered as a movement that gives inspiration for artists who were impressed with transhumanism ideas. (Bostrom, 2003)

Nevertheless, leading transhumanist representatives are sometimes not classifiable. Each of them represents a separate direction of transhumanism, adhering to a complex and subtle system of views, which is constantly being revised and developed.

Proponents of transhumanism are struggling to develop new technologies. The main areas requiring attention and development are the following ones: nanotechnology, biotechnology, information technologies, projects in the field of artificial intelligence, cryonics. Each of these areas can bring humanity a huge number of positive prospects. Due to the development of these areas, there

are the following advantages: donorship, surrogacy; it became possible “*to store germ cells of dead people and contribute to their biological children*”; transplantations and prosthetics has already become true. Moreover, due to cellular engineering, it became not a miracle to create spare human body parts; and “deciphering of the human genome and the discovery of genetic mechanisms allow to stop operation of any gene” (Kindras, 2013:63). Thanks to the latest technology developments, it all became more than just dreams.

Throughout its history, humankind has searched for a way that will improve the quality of life. Humanity found that ways and it was understood that technologies can maximize the prolongation of life and cure of diseases. Therefore, cryonics is actively promoted by many transhumanists. Cryonics makes it possible to stop the process of deterioration of health and to solve the problem with the help of more advanced technologies of the future. All definitions of death are relative, not absolute, and depend on the currently available capabilities of medicine, and medicine continually pushes the border after which death is considered irreversible. Nowadays, cryonics is the only known scientific method that will allow people to suspend the destruction process which gives people a chance to continue life and probably immortality. This technology means the low-temperature preservation of people who cannot be supported by modern medicine, with the hope that resuscitation and restoration of health may be possible in the distant future (Anissimov, n.d).

The world is changing and the speed of the change is growing, bringing with it unthinkable opportunities. Nanotechnology is quite essential aspect for transhumanists and the connection between them is very strong. Eric Drexler, an American scientist engaged in research in the field of molecular nanotechnology, became world-famous after the publication of his famous books *Engines of Creation: The Coming Era of Nanotechnology*. He strongly proclaims:

“COAL AND DIAMONDS, sand and computer chips, cancer and healthy tissue: throughout history, variations in the arrangement of atoms have distinguished the cheap from the cherished, the diseased from the healthy. Arranged one way, atoms make up soil, air, and water; arranged another, they make up ripe strawberries. Arranged

one way, they make up homes and fresh air; arranged another, they make up ash and smoke” (Drexler,1986: 4).

Therefore, nanotechnology gives the world a huge number of positive advantages and its value lies in the fact that the standard of living of humankind can change for the better. As mentioned above, nanotechnology is very important for transhumanists, but they stand out in particular nanobots or nanorobots, which the main goal is to reach autonomous machines. It is true that experts in the field of nanotechnology form the same goals as the representatives of the transhumanist community. For instance, if nanotechnology reveals its full potential, the following aspects will become possible:

“the obligatory victory over Alzheimer disease and Parkinson disease, cleansing of wounds, blood, lung, brain enhancement, soldiers who fight without fear, managers who need no sleep to be able to work 24 h a day 7 days a week for their companies, magic hoods, and much more”(Kreowski,2017:2).

Alzheimer and Parkinson diseases are the ones which make people’s lives full of suffering. People die because of many diseases. That is why proponents of transhumanism want changes and their goals are aimed only at the benefit of humankind. All efforts are directed at making human life better by eliminating everything that causes discomfort and pain.

Transhumanism is tightly intertwined with biotechnology and its desire to achieve a posthuman. Despite the criticisms, the popularity of biotechnology remains high. Shayma Abukar in the essay *Transhumanism: Biotechnology and its Role in the Singularity* considers that biotechnology will bring many advantages to people. Moreover, as a proponent of the transhumanism movement he suggests that biotechnology is able to change and improve a human being (Abukar, 2017). Humanity will be able achieve unprecedented improvements and changes. Based on this, it can be concluded that biotechnology, like nanotechnology, works for the benefit of humanity and not vice versa.

One of the most important spectra of nanotechnology is the editing of people's genes. Shayma Abukar describes this process as *"inserting, deleting or replacing areas of DNA within an organism's genome"*. (Abukar, 2017). Moreover, he considers that due to this process it will be possible to eradicate a huge amount of the disease with which people have faced. Nevertheless, not everyone considers biotechnology as a panacea of all human problems. For a certain number of people, biotechnology also brings disadvantages. On the one hand, it seems wonderful if humanity can get rid of terrible diseases but on the other hand, there is a serious threat that is overpopulation. Overpopulation can lead to an incredibly large number of problems because every year the number of people living on the planet significantly increases. Humankind may face water and food shortages that can lead to hunger. Moreover, overpopulation may cause excess labor. (Abukar, 2017) Nonetheless, the number of transhumanists proponents has continued to expand at an exponential rate.

Nowadays, information technology has reached an incredible height. Moore's law describes the rate of increase in computer power. According to him, from the very beginning of the appearance of transistors, each new model is being developed with enviable constancy after about 18 months after the appearance of the previous model, and their capacity at the same time doubles. Moreover, if Moore's law will keep working in the same way, the world will get tremendous changes. Moreover, humanity may encounter artificial intelligence that will surpass people in strength and intelligence. This point of view is unfortunately not groundless because all disputes surrounding this issue are based on a thorough analysis. (Tacita, 2017)

Cognitive science is also an important subject for study. Merriam Webster dictionary gives us the following definition of this term: "Cognitive science is: an interdisciplinary science that draws on many fields (such as psychology, artificial intelligence, linguistics, and philosophy) in developing theories about human perception, thinking, and learning" (merriam-webster.com). This implies that the cognitive science exploring how the human brain works. Cognitivists are interested in how information from the outside world takes on a specific meaning in our brain, due to which the brain creates an image of an object that we see or perceive, etc. This is an experimental science based on research, the

purpose of which is to test the mind, to understand the mechanisms of this work. (Thagard, 1996)

Moreover, there is a high probability that in the future, thanks to cognitive science, an artificial brain will appear and a person will be able to transfer his or her mind into it. Odélie Tacita gives as an example Human Brain Project that is a project, which already has goals to reproduce the brain of a mouse and after that, a brain of a human being on a computer. This is not the only project aimed at modeling human organs. There are many organizations that deal with this issue . (Tacita,2017)

All of the above, *Nanotechnology, Biotechnology, Information Technology and Cognitive Sciences* form an acronym *NBIC* which became very popular nowadays. Both, NBIC and transhumanism have one very essential common thing is the willingness to improve people's lives. These technologies are transhumanistic in nature; therefore, a balanced critical analysis of the above technologies is a necessity. Therefore, scientists carefully examine their impact and contribution to people's lives. The possibilities that can be opened by NBIC technologies are much wider than the wildest fantasies of authors who wrote in the 20th century in the genre of science fiction are. Nevertheless, despite all the fantastic, some of these technologies are already being used. (Henda, 2019)

Another factor to consider is artificial intelligence that is also known by the abbreviation AI. The idea of creating artificial intelligence has existed for a long time. The result of research on artificial intelligence is the desire to understand the brain, to reveal the secrets of human consciousness and the problem of creating machines with a certain level of human intelligence. The term artificial intelligence appeared in 1956 Hanover, New Hampshire, at Dartmouth College. The topic of the seminar was logical tasks and ways to automate their solution. (Mijwil, 2015) Merriam-Webster dictionary has two definitions of this term, which are: “a branch of computer science dealing with the simulation of intelligent behavior in computers” and “the capability of a machine to imitate intelligent human behavior” (merriam-webster.com). Definitions are very concise, but it is they that make it possible to understand the basic properties of AI which are: understanding of language, learning and the ability to think. These are the goals that its future creators should strive for.

Artificial intelligence gradually comes to all branches of human activity, simplifying and improving people's lives. The first important area that has significantly affected the quality of human life is Medicine and healthcare. Computer systems keep a record of patients, help in deciphering diagnostic results, for example, images of ultrasound, X-ray, tomography, etc. Intelligent systems can even determine the disease by the presence of signs in a patient and offer optimal treatment options. A person can find healthy lifestyle assistant applications. These applications read the heart rate and body temperature when a person touches the phone display with a club in order to determine a stress level and suggest how to reduce it. Artificial intelligence strives only to help people by making their life easier.(Wilson,2017)

The most popular product created by using artificial intelligence technology is the smart home. It is not surprising, because the concept of its application is close to everyone while a smart home makes life more comfortable, orderly. The system is able to monitor the safety of the house, the consumption of water and light and even climate. It can be concluded that artificial intelligence is effectively being introduced into our lives. Of course, artificial intelligence is not immune from errors, but with the help of smart machines and programs people will be able to work faster while their lives will become more comfortable and safer.(Magnimind, 2019)

Moreover, Netflix uses an artificial intelligence technology that, based on the consumer's behavioral experience, can offer an interesting movie. This technology analyzes the user's previous requests, the ratings that he/she put to a particular film, and then compares them with the reaction of other users. Based on the output, the person is offered films that, according to the assumptions of the system, he or she may like. With the growth and expansion of the base of films, this technology only develops its abilities thereby saving a person time that could be spent searching for a film.(Kathayat,2019)

Furthermore, artificial intelligence can personalize product recommendations for visitors to online stores by showing them the products that they are likely to buy. While the visitor walks through the pages, browses the products, buys some of them, artificial intelligence can save this data and learn from it. Then it will be able to determine the preferences of this visitor and the next time when a

potential buyer visits an online store, the system will be able to show what exactly interests a buyer, and not a random set. (Magnimind, 2019)

Most of the controversy surrounding artificial intelligence boils down to the eternal question of good and evil and the presence of these categories in the depths of the electronic mind. Artificial intelligence, of course, can be a source of benefit for all humankind, carrying out a variety of functions. Already, artificial intelligence not only can play chess with people (as a result of a development of Alpha Zero) but also to perform the most complicated tasks, for instance, to find the often invisible to the human sight patterns.(Silver,2017)

The use of artificial intelligence in everyday life is rapidly gaining momentum, but this trend is increasingly causing concern to experts. Almost all visionaries of technological progress spoke of potential artificial intelligence threats. Stephen Hawking voiced the main fears accompanying reflections on the development of technology. In his opinion, computers will sooner or later learn to reproduce themselves. Biological creatures will surely lose to technology in both mental abilities and matters of adaptability to the environment, especially on another planet. Sooner or later, smart robots will find a person an obsolete form and will want to get rid of it. He considers that: "The development of full artificial intelligence could spell the end of the human race" (Cellan-Jones, 2014). Hawking's words so far sound like a horror story, beaten dozens of times in movies and books.

People allow technology to control them, which can end badly. In fact, one cannot exclude the possibility of such a development of events where soon after the appearance of full-fledged artificial intelligence, the artificial intelligence decides to unleash war and enslave the remnants of humanity - just like the sinister Skynet from the movie "Terminator". The fall of humanity at the hands of its creation is perhaps one of the most pessimistic scenarios. Elon Musk repeatedly states that artificial intelligence is a 'Pandora's Box', which, in his opinion, definitely should not be opened. He even calls artificial intelligence as a possible reason for the start of World War 3. (Browne, 2017)

2.3 Critical side of transhumanism

Interest in the transhumanism movement is incredibly high today. Scientific events and conferences are held around the world at which the issues of the transhumanist movement are actively discussed. Nevertheless, there are a huge number of people opposing the development of transhumanism movement. It is surrounded by numerous discussions and ongoing debate. Technological improvement of people causes concern not only among ordinary people but also among scientists.

For example, the American philosopher Francis Fukuyama reacted to transhumanism as an extremely risky idea that poses a threat to the whole world. A human being has developed for a very long time in an evolutionary way and contains both positive and negative traits. This complex combination makes a human being unique and allows people to develop as a species. A radical intervention in this process with the help of technology may not elevate a person, but rather dehumanize. Francis Fukuyama considers:

“Our good characteristics are intimately connected to our bad ones: If we weren't violent and aggressive, we wouldn't be able to defend ourselves; if we didn't have feelings of exclusivity, we wouldn't be loyal to those close to us; if we never felt jealousy, we would also never feel love. Even our mortality plays a critical function in allowing our species as a whole to survive and adapt” (Fukuyama, 2004: 43).

According to him, bad qualities are an integral part of a person that must exist. Negative qualities are part of the essence of humanity; that is what makes us people. Another well-founded fear of transhumanism is mainly related to the socio-economic consequences of such rapid technological development. The appearance of the first post-humans will automatically divide people according to an unprecedented earlier principle and create a huge conflict in the social, economic and political spheres. In other words, this will give rise to unpredictable proportions of inequality and confusion with people's rights. (Fukuyama, 2004)

Fukuyama considers that, at a time when a person had just gotten out of inequality that reigned throughout history, people risk to start living in an even more unfair world than ever before and it will happen because of biotechnologies and transhumanists. The improvements offered by the transhumanism movement will destroy this essence of people. Hence, Fukuyama concludes that transhumanism will destroy the foundation for equal rights. He claims that: He believes that any changes of human's traits and characteristics will lead to the fact that the human species will be completely modified and people will lose their uniqueness.(Fukuyama, 2004)The philosopher, truly considers that humanity should not cross the border that leads people to the loss of certain qualities inherent in them by nature.

Evolutionary psychologists put forward more serious arguments, trying to protect humans' natural form. For them, human nature is an essential issue since a human being arose as a result of a long evolutionary process and which therefore cannot be remodeled technologically. All people have a common nature, in spite of certain distinctions among each person, for instance gender because this distinction also belong to people's entity. Such evolutionists as Cosmides and Tooby, who are Templeton Co-Fellows at ASU believe that everything inherent in people is the result of evolution through natural selection. They found out that due to evolution process people develop in themselves everything necessary for existence. That is why they object to genetic engineering, which seeks to change the human personality. (Tirosh-Samuelson, 2009)

Moreover, Steve Wozniak - Apple co-founder, does not share the enthusiastic views of people who believe that a human being and machine will merge into a single whole. He claims: "Computers are going to take over from humans, no question. If we build these devices to take care of everything for us, eventually they'll think faster than us and they'll get rid of the slow humans to run companies more efficiently"(Woollaston, 2015). Such a combination of circumstances is also possible, that is why Steve Wozniak opposes the basic idea of transhumanism in order to protect people from a negative outcome.

Another criticism is given in the article *Techno-Eugenics Usurping Humanity*. The author of it Zen Gardner argues that transhumanism is inherently eugenics.

He gives a brief definition of a word eugenics, which means a selection of people. The supporters of this idea set themselves the goal of ridding humanity of the phenomena of degeneration (diseases, bad inclinations, crime) and endowing it with useful abilities and qualities, for example, high intellect, etc. Zen's Gardner criticism is based on drawing parallels between transhumanism and eugenics, according to which strong people should flourish and develop, while weak people should be eliminated and destroyed. According to him, the transhumanist elite do not intend to develop all of humanity. Their only goal is to improve themselves, leaving the rest of the people overboard without the right to choose. (Gardner, 2012)

Furthermore, professor of physics, Richard Jones also doubts also the prospect of a happy and carefree future that transhumanists promise for all people. He asks the following questions: "Who gets to decide what constitutes an improvement? How will we know that new technologies will lead to abundance for everyone, rather than leading to more polarization between those with money and power and those without?"(Jones&Istvan, 2016) The development of technology directly depends on those who have power in society; therefore, the professor believes that transhumanism is not designed for everyone. Moreover, transhumanism can lead to quite serious conflicts between different classes in society.

Religious views regarding transhumanism, in general, can hardly be called positive ones. The Internet is teeming with a huge number of articles about the need for humanity to fear transhumanism. One good example is an article entitled *Christians, beware the cult of transhumanism*. Cheryl K. Chumley considers that from the perspective of Christianity, transhumanism and immortalism are based on a materialistic foundation, and sometimes on frankly atheistic ideas. Trying to create paradise conditions on earth and achieve immortality, transhumanists proceed only from scientific and rational information, rejecting the Christian teaching about God, man, the mortality of the body and immortality of the soul. (Chumley ,2018)

Moreover, in Russia Patriarch Kirill expressed the point of view of the Orthodox Church according to this issue, saying that transhumanism threatens the world with an absolute loss of humanity. According to him, humankind will

lose those qualities and properties that make them people. Transhumanism is attractive to fans of the technological path of development, in which the meaning of existence is convenient and a comfortable arrangement of life. Comfort has become an obsession so much that a person is ready to take extreme measures in order to eliminate the main factor of inconvenience from his life, namely death. Life without death, disease, suffering and other inconveniences seem to be the apotheosis of comfort. However, there is a complete lack of understanding that life without death is no longer life, but only captivity. (Batin, 2017)

Furthermore, waiver of death can be considered as human rebellion against God. In general, the Jewish community does not support transhumanism since it does not follow the notions written in the *Hebrew Bible*. (Lesley, 2019) It is these reasons that are the core of concerns of the Jewish community, which will not go against its creator God. Since transhumanist ideas go beyond religious boundaries, Judaism will not support it.

Nevertheless, not all religious people are against transhumanism, some of them support its ideas with the words: “We believe that the intentional use of technology, coupled with following Christ, will empower us to become more human across the scope of what it means to be creatures in the image of God.” (Chumley, 2018) Some of the followers of Christianity believe that transhumanism will not harm humanity but, on the contrary, technology can help people become better. However, Cheryl K. Chumley casts doubt on this idea based on the fact that death is what God gave to humankind from the Garden of Eden. She claims that: “Transhumanism, in its runaway form, is simply a modern version of the false Golden Calf god of biblical days.” The author of the article believes that transhumanism obscures the human mind, alienating them from God and while life without death is an unnatural phenomenon that can lead humanity to disaster. (Chumley, 2018)

Perhaps, eastern religions relate to transhumanism, albeit wary, but with keen interest. For example, the Dalai Lama XIV, the spiritual leader of Buddhists, believes that the interaction of science and spiritual traditions is necessary. He expresses agreement of technological advancement importance, since it brings to humanity innovations that improve people's lives. He fully admits the

connection of the body of the robot with the human mind and sees the creation of artificial intelligence as a natural stage in the development of humankind. He acknowledges that transhumanism is the same for everyone, for the poor and the rich ones, not based on a person's position in society. (Staff, 2018)

Most opponents of the transhumanism movement especially emphasize the fact that due to transhumanism, a person is deprived of humanity itself. That is, people lose those features that distinguish their biological species. Most critics take into account the fact that transhumanists refute the value of human nature. Moreover, Nick Bostrom considers that human nature is not perfect and needs a huge number of improvements. The philosopher calls not to focus on human nature since a human being is not ideal one and can become better. Nevertheless, with the departure of the human side, the ethical side can leave. Aware of his or her mortality, a person seeks to act in terms of morality. If immortality sets in, then a person will not be limited by anything.(Ranisch, 2014: 9)

Moreover, one of the major concerns is the area of cybersecurity and this problem is no less important than others are. Marc Goodman, a global security futurist considers that: "Now, for the first time in history, the human body itself is a subject to cyber-attacks and we are completely unprepared for that". His fears are not unreasonable, because today a huge number of devices are connected to the Internet and therefore the hacking issues are increasing that can lead to terrible consequences. (Bakhariev, 2019)

There are many fears and prejudices in the field of transhumanism that frighten various critics, scientists, professors, etcetera. Moreover, very often people can find criticism of transhumanism not only in articles or books but also in films and TV shows. The best example of constructive criticism lies in the sensational series "Black Mirror" that was created by Charlie Brooker. The series "Black Mirror" could be perceived as a conservative challenge to the ideas of transhumanism, which offers us a radiant image of people of the future who have overcome diseases, death, and poverty. This is not fiction series, it is evident, though the exaggerated reflection of reality and the possible realities.

This series has a very deep meaning, which shows the dark side of how technology can change human life. Likely, that transhumanism idea will not

lead to a utopian future but rather to a dystopian one. “Black Mirror” is a brilliant look into the near future. This is a warning to all of humanity. The authors of the series only slightly “spin up” the realities of today, showing us what technologies can lead to. The third episode of these TV series which is called *The entire history of you* shows the audience a future where people have a choice of how to manage their past - remember it, forget it like a bad dream, or use it as an invaluable experience. The chips implanted in each person’s body allow them to savor the past, scroll through their favorite moments, analyze the interview and discuss past joint parties. Memories can be erased, leaving a void in their place, or they can scroll repeatedly, forgetting about the present. Such opportunities can lead to insanity, obsession and can make people forget about humanity, the ability to forgive, trust, love. Each episode of this series is a criticism of the latest technologies and certain ideas of transhumanists. Moreover, even in the name of this TV series lurks a deep meaning and an answer of the meaning gives its creator Charlie Brooker: “The “black mirror” of the title is the one you'll find on every wall, on every desk, in the palm of every hand: the cold, shiny screen of a TV, a monitor, a smartphone.” (Evans, 2018). In recent years, the latest technology has comprehensively changed people’s lives. They actively entered our lives and even some of people cannot imagine their life without technologies. The Black Mirror displays general concern for our modern world that is developing quite rapidly.

Those who criticize transhumanism see in its aspirations a real threat to the values of all humankind; they are afraid of violations of the rights and freedoms of the individual. In general, the main fear of critics is the fact that transhumanism can change the essence of people at the same time as morality can recede into the background.

2.4 Transhumanism: a bright future or a dark dystopia?

People have never abandoned attempts to make the social system more comfortable for all of humanity. If these attempts were achieved, then there would be no exploitation of some people by others, the power of money would be reduced to zero and everyone would be happy. These attempts are the goals of the international movement transhumanism, whose followers are trying to

reach a utopian future. Nevertheless, this movement can lead to problems that will lead to dystopian results.

Utopia written by Thomas More in 1516, gave literature two genres at once: utopian and dystopian. The utopian genre idealizes and describes a society that cannot exist in real life. Dystopia, on the contrary, denies ideals and justice, condemns the totalitarian structure of society. Usually, dystopian novels show an anxious intelligentsia, dissatisfied with the coming revolution, and concerned about the fate of humanity. The basis for such a forecast is the era in which the writer lives. Consequently, dystopian works, as a rule, reflect the fears and hopes of a certain era and put a person before a moral choice. (Gordin, Tilley & Prakash, 2010) Reality has shown that a happy life for human beings has not been achieved in any of the societies that claimed to make the noble hopes of the utopians a reality. The emergence of totalitarian regimes raised serious doubts about the possibility of the existence of an ideal society, undermined faith in the good, heroic, reasonable principles of human nature and that is why the dystopian genre emerges.

The study of such a phenomenon as dystopia is impossible without studies of its opposite genre utopia, and therefore it would be expedient to turn first to the question of the history of the emergence and development of utopia. Since antiquity, many thinkers have asked themselves the question of an ideal state that could be in the future; those were Thomas Hobbes, Plato, T. More, and others. All these philosophers talked about whether it was possible to create some kind of ideal state and an ideal society corresponding to it. More's "utopia" is a perfectly polished dream where people are equal in everything - in work, in clothes, in rights, in rest, and so on. Regulations and strict discipline are the basis for maintaining equal rights between ordinary people. (Gordin, Tilley & Prakash, 2010) For most people, utopia means a world in which people are free, optimistic, each person has a certain place in society and a person's profession is passed on from generation to generation. Such a society has been described in many books, for example, *New Atlantis* (1626) by Sir Francis Bacon, *Gulliver's Travels* (1726) by Jonathan Swift, etc. Nevertheless, this image of an ideal world has a drawback that is the routine, prompting initially one person to rebel against the system, and later, all the others. People have a

thirst for new sensations, an attempt to search for something different, new. Therefore, chaos begins and the ideal world ends.

Dystopia is considered in strong connection with utopia since both of them flow from each other and dystopia comes from the evolution of utopia, and vice versa. Dystopia arose in opposition to utopia and books that depict an ideal society. The purpose of utopia is, first of all, to show humanity the path to perfection, the task of dystopia is to warn the world about the dangers that await it on this path. Dystopia does not describe how bad everything is, it is a warning of what can happen if a person does not change the direction of their activities. Any dystopian novel tells about the future, which has come as a result of wrong human activity. The object of the image is either a totalitarian society or the consequences of technological advancement. There are a lot of examples of dystopian books and movies, for instance, *Nineteen Eighty-four* (1949) a novel by George Orwell, *Fahrenheit 451* (1953) by Ray Bradbury, *Animal Farm* (1945) by George Orwell and movies "A Clockwork Orange" (1971) by Stanley Kubrick, "The Matrix" (1999) by the Wachowskis, "Blade Runner" (1982) by Ridley Scott and "I, Robot" (2004) by Alex Proyas, etc. The main emphasis in dystopia was precisely on the complete denial of any improvement, as well as a lack of faith in any possible options for future development. Due to science fiction, dystopias began to open up more widely, for example, fantastic situations made it possible to reveal the imperfection of the existing order, and science fiction showed the negative consequences of certain social processes. (Gordin, Tilley & Prakash, 2010)

The dystopian theory can also be applied to the transhumanism movement. Some scholars consider the transhumanism movement as a panacea for all problems that will lead to utopia, but is it so? On the one hand, transhumanism, which is based on the assumption that a person is not the last link in evolution, and therefore can improve, should be perceived positively. Moreover, its followers argue that in this way it is possible and even necessary to eliminate aging and death, significantly increase the mental and physical capabilities of a person, and develop the latest trends in science and technology. On the other hand, transhumanism is a set of various doctrines that set as their main goal the achievement of earthly immortality, the creation of a super-race of people,

which has passed to a new level of existence. (Leontyev& Kurashov, 2019) The rest of humanity, that is everyone who is poor, does not occupy an appropriate social niche, will become unnecessary for the elite. Humanity is going to be divided into a super-intelligent minority that will be posthumans and all the rest. Moreover, nowadays various science fiction movies support the ideas of the transhumanism movement. Nevertheless, some movies that show the audience a probable dystopian future that could come very soon. For instance, the science fiction movies "Equilibrium" (2002) directed by Kurt Wimmer and "Equals" (2015) by Drake Doremus show a story about the future generation of people who got rid of feelings and emotions that is one of the goals of the transhumanism movement. As James E. Sullivan underlines in his article *Transhumanism: Utopian Vision or Dystopian Future?* the following: „Guilt, shame, envy, compassion, and fear would be reduced to states corrected or induced by 800mg doses of an opiate, rendering one's world always pleasant" (Sullivan, 2018). That is considered as one of the main aims of transhumanism and the followers of this movement see on it a panacea of problems. The movies describe a world where that aim is reached. The government in films has developed a certain drug to suppress human emotions since the new 'religion' says that all the world's troubles happen because of the manifestation of human emotions. Every day is similar to the previous one and the daily routine from wake up to lights out is strictly regulated, including leisure. In the movie "Equals" there is no greed, no violence, no emotion, but a new threat hangs over society, the disease "SOS" or Switched-On Syndrome whose victims are exposed to everything they thought they had avoided: depression, vulnerability, fear, love. Feelings for this society seem completely unnecessary, for them, it is comparable to the most terrible disease. The movie "Equilibrium" also shows the society where people's mood, feelings, emotions are under the control of authorities that decided to suppress people's feelings through a drug called Prozum II. As a result of control, resistance appears which doesn't tolerate life without feelings. Both movies "Equilibrium" and "Equals" perfectly reveal the main goal of dystopia that is to show the inhumanity of any utopian concept. Moreover, movies are trying to show how to prevent future dystopian happenings that may destroy people's lives.

Moreover, another dystopian outcome of transhumanism is the future where people will be on the verge of suppressing the bulk of humanity not only by posthumans but also by those who deny humanity. This will lead to the division of society into upper and lower classes. In particular, there is a threat of stratification of humanity into an immortal, invulnerable, and practically omnipotent financial and political elite and a mass of "ordinary" people under its control. It can lead to the complete utter tyranny of the poor and exploited people by the rich and influential elite. The elite will be on the top suppressing a huge mass of subjugated humans. Therefore, critics see the goals of transhumanists as a threat to universal human values and state social foundations, since such progress leads to an abyss of dehumanization. It is no coincidence that the famous American philosopher, professor, a leading researcher at the Freeman Spogli Institute for International Studies at Stanford University, Francis Fukuyama, called transhumanism "the world's most dangerous ideas" (Fukuyama, 2004: 42). He has many concerns with the prospect of imminent technological advancement in human society and considers that the transhumanism movement could lead to nightmarish dystopian horrors.

Moreover, professor V.I. Kurashov considers that transhumanism will lead to dystopian future, where people will face: "loss of individual uniqueness; redundancy of the world of "moral freedom"; inequality; "Posthumanity" of the ruling subject; controllability of neurosocium; the consequences of total control over consciousness in the field of natural and political rights, freedoms, privacy and sovereignty"(Leontyev& Kurashov,2019). There is a huge amount of caveats that are aimed at warning society that the transhumanism movement will bring a huge number of problems with which humanity will not be able to cope. Individuality is a very essential issue. A person by recognizing such an important component of his or her individuality that is the body as untenable and making attempts to get rid of it in fact will abandon itself, which will lead to a crisis of the identity. As a result, what largely determined a person, being an integral part of human beings in the long term, can disappear forever. Furthermore, according to V.I. Kurashov it will lead to ethical and moral conflict, which also can destroy people's dreams about utopian transhumanism.

Humanity has come to that dangerous line when, relying on science and technological progress, it can completely change itself, rejecting humanity as a form of existence. Many transhumanists believe that continuously accelerating technological progress by 2050 will allow the creation of a posthuman, whose abilities will be fundamentally different from those of modern people, while some critics believe that it will lead to a disaster. For instance, V.I. Kurashov considers that: “This is a variant of the absolute inevitability of the outcome (end) of all life in the Universe, stemming from modern “optimistic” science”“(Leontyev& Kurashov, 2019). According to him, the transhumanism movement is based only on optimistic assumptions about a utopian world where human beings do not face any inconveniences, diseases, mortality, etc. He believes is not going to improve human beings’ lives but on the contrary, it will lead to a disaster that can make people’s lives worse than it was before. This disaster is the end of all Homo sapiens life on earth.

Moreover, Max More, Ray Kurzweil, and Hans Moravec who are transhumanists believe that the race of Homo sapiens will not improve but it will be changed and replaced by other species that are posthumans. Hans Moravec concludes that “before the next century is over, human beings will no longer be the most intelligent or capable type of entity on the planet” (Sullivan, 2018). According to the transhumanist, this movement will end the existence of the human race because of advanced technologies.

Furthermore, followers of the transhumanism movement challenge not only humans but also God, assuming that the posthumans will become gods. Transhumanism does not imply the development of spiritual qualities. Religious beliefs are considered a hindrance to progress. At the same time, it is not ruled out that transhumanism can become a substitute for religions. (Sullivan, 2018) The main goal of transhumanists is to overcome death, but they do not consider that everything in the world is in a certain harmony because of death. Death gives life and place to future generations and makes people appreciate every minute of their lives. Therefore, if transhumanists achieve immortality, life will cease to be so valuable. James E. Sullivan indicates his negative opinion of the transhumanism. According to him, “the actual purpose of life—to live, despite limitations—would not be enhanced, but destroyed by the Transhumanists”

(Sullivan, 2018). A person lives with the knowledge that one day their life will end. Therefore, life for a person is the main value that was laid by nature. For this reason, critics believe that going against nature and God will lead to a dystopian outcome where all people will be unhappy.

Dystopia allows people to try to look into the future due to its future orientation, while that future is not as bright as transhumanism's followers consider. If transhumanism's plans and dreams come true one day, then dystopian movie's scenarios and dystopian plots of books will become a reality in the near future.



3. BLADE RUNNER

3.1 The Movie Blade Runner Through the Prism of Transhumanism.

Genres are what help people to choose a certain movie or book according to their interest. Due to the genre, a person can understand whether this film will make him/her laugh or whether it will make a person feel scary. Science fiction is also a genre in literature, cinema and other forms of art that can be used as search criteria. It is based on fantastic assumptions and describes different kinds of technologies and scientific discoveries, contacts with the inhuman mind, a possible future or alternative course of history, and the impact of these assumptions on human society and people's personalities. There is much debate among critics about what is considered science fiction. However, most of them agree that science fiction is based on the advent of a new invention, the discovery of new laws of nature, sometimes even the construction of new models of society. One of the greatest literary geniuses of all time, Isaac Asimov gave the following definition:

“We can define science fiction as that branch of literature that deals with the human response to changes in the level of science and technology – it being understood that the changes involved would be rational ones in keeping with what was known about science, technology and people” (Cornea, 2007: 2).

Therefore, it can be concluded that science fiction is about technologies and scientific discoveries, their exciting possibilities, the positive or negative impact and about the paradoxes that may arise due to them. Moreover, science fiction makes the reader or the audience think about the future and about the possibilities of science. There is a huge amount of movies within the science fiction genre, for instance: “2001: A Space Odyssey” (1968), “The Terminator” (1984), “Blade Runner” (1982), “Back to the Future” (1985), “The Matrix” (1999), “I, Robot” (2004), “Interstellar” (2014) and so forth.

“Blade Runner” is a cult film made by the English director Ridley Scott in March-July 1981 based on the science fiction novel written by Philip Dick *Do Androids Dream of Electric Sheep?* (1968). There are seven versions, of which two are considered as main ones. The first one is original version with a happy ending (1982), which was poorly received by film critics and failed at the box office, and the directorial version with an open ending (1992), which, according to a survey of scientists, was recognized as the best sci-fi movie in history (Jha, 2004).

Creating the neo-noir anti-utopia, director Ridley Scott, Hampton Fancher and David Webb outlined the events that showed not the brightest future of humankind. In the 90s of the 20th century, the Earth experienced a series of natural disasters and turned into a giant dump. People hopelessly pollute the atmosphere of the planet and its oceans as well. Chemical weapons, nuclear war, overpopulation, and global warming destroyed the planet’s ecology. The world shown in the film is a collective image of all the alarming forecasts of the early 80s. Moreover, the famous popularizer of science, Carl Sagan claimed that:

“We’ve arranged a global civilization in which most crucial elements transportation, communication, medicine, education, entertainment, and even the key democratic institution of voting profoundly depend on science and technology. We have also arranged things, so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for awhile, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces” (Satterfield,2009).

Carl Sagan predicted that a population explosion, the rapid development of technology and industrialization would destroy the planet in the 21st century. In addition to the statement made previously, it can be further argued that, if humanity does not take concrete steps in the direction, the possibility that people will continue to destroy the ecology is very high. The movie scenario could become real.

“Blade Runner” showed one of the most pessimistic forecasts - a post-apocalyptic world that is terminally ill and gradually dying. Most of the planet

is unsuitable for life. Many animals died out, forests were cut down or died due to lack of sunlight. The sky of megacities is covered with smog and poisonous clouds because of the huge amount of various factories. Acid rains occur in cities, the sun rarely appears, and the temperature is extremely unstable. In the world of this movie, large cities suffer from overpopulation and most of the people live below the poverty line. Migrants from destroyed or unsuitable countries founded their own ghettos and communes and therefore this led to the fact that society is divided into many ethnic groups, and the cities resemble a vibrant multicultural mixture. On one street, it is easy to meet representatives of different nationalities, religions, and subcultures.

The movie “Blade Runner” has a direct relationship with transhumanism and this link can be seen through replicants. Having placed the story of replicants in the center of the plot, the director asks a very important question about the essence of human nature. What makes us to be humans? How do people differ from replicants? Replicants are artificial organisms but they, nevertheless, are able to think, analyze, feel, fear, experience and enjoy life. It became difficult to blame these creatures in the movie who do not want to put up with the thought of an early death and just want to live at least a little bit more. Donna Haraway, an American professor who became popular due to her essay *A Cyborg Manifesto* where she broke down the walls that divided machine from human, claimed that: “Our machines are disturbingly lively, and we ourselves frighteningly inert” (Gane, 2006: 141). These words can be applied to the film “Blade Runner” where the main hero Rick Deckard is quite inactive in comparison with Roy that is a replicant. Therefore, it is also impossible to call the hero of Rutger Hauer who was playing Roy completely negative: in the end, his motives are understandable, and despite his cruelty, he is still capable of compassion, saving his enemy from death. Roy Batty says: “Quite an experience to live in fear, isn't it? That's what it is to be a slave” (Deeley&Lauzirica, 1982). His words pity the audience of the film, because according to Roy’s words, replicants can be regarded as a new type of slavery and this slavery is demonstrated in the world of human degradation and humanization of the replicant.

The one who took on the position of leader in this situation is Eldon Tyrell, the owner of Tyrell's corporation. He is the creator and leader of replicants, in other words, it can be said that he is their father. Furthermore, John W. Whitehead a founder of The Rutherford Institute that specializes in the defense of human rights claims:

“If Michelangelo were alive in Ridley Scott's future world, rather than portraying God on the ceiling of the Sistine Chapel, he would likely paint the human creators of the Tyrell Corporation, the world's leading manufacturer of replicants which has just introduced the “Nexus-6,” a replicant with far greater intelligence than human beings” (Whitehead, 2017).

That is true that Eldon Tyrell appears before the audience in the form of a brilliant scientist who imagines himself to be God. He owns the most powerful corporation in the world. Tyrell lives in a huge pyramid in the middle of the city, from which he manages not only Los Angeles, but also all affairs in the interstellar colonies. He is the one who decides how long will his creation live. Tyrell's Corporation achieved unprecedented success in genetic engineering and launched the production of androids that are known as replicants which are indistinguishable from humans. They are made of flesh, blood and bones, but all biological material is completely artificial. Their eyes, limbs or brains are results of the work of ingenious bioengineers. Tyrell's replicants are stronger, smarter, and tougher than human beings are. They are created for various needs but mainly they are sent to extraterrestrial colonies to participate in local military operations and grueling work in mines. Many of them went through combat training, after which they learned to fight and shoot professionally.

It is forbidden for replicants to leave the colonies or return to Earth. The fugitives must be sent back immediately or liquidated. The newest Nexus-6 model has a service life of only four years. If before that time the replicants is not “turned off” or they run away or attacked a person, then they are sent to retire, this term means the complete elimination of the replicant. A special police unit that is called blade runners hunts and tracks replicants. Rick Deckard who is the movie's protagonist is in the center of main actions. He is the one who is responsible for catching the group of escaped replicants.

It is essential to remember that replicants are created in human likeness, although they are designed by Tyrell not for the purpose to make them be humans. Creating replicants, Tyrell's corporation has not only achieved demand but also it is getting a consumer society that is completely dependent on this development. Moreover, the main slogan of Tyrell's Corporation is "more human than human", that means that replicants are almost indistinguishable from humans. In order to distinguish a person from a replicant, a hunter needs to make the replicant to pass the Voight-Kampff empathic test, which measures the testee's reaction to provocative questions. A special polygraph analyzes the subject's breathing, heartbeat, and pupils. During the excitement, replicants usually experience an involuntary expansion of the iris and the pupils' change. On average, 20-30 sharp questions are needed to distinguish a replicant from a person.

In "Blade Runner", the line between human beings and artificial creatures is very blurred and that is why it became difficult to determine who or what the replicants are. Are they just soulless, disenfranchised machines? Are they victims or villains? All these questions arise in the transhumanism movement as well. In the context of the movie Blade Runner, replicants personify tools that have no rights. Nevertheless, these representatives of artificial intelligence are full of desire to live and therefore replicants attempting to change their position in the world where technological progress reached very high level.

Undoubtedly, for transhumanists, the most essential aspect is technological advancement and the movie contains a variety of new (for that time) developments: artificial intelligence, video phones, smart homes, lie detectors, flying cars etc. The film is full of these innovations; nevertheless, there are two sides to a coin. Dominique Jackson, who is a creative blogger wrote in the article *Has technology made us lazy and dependent?* the following:

"Technology has made life so convenient for us that it's almost scary to think of what would happen if we had to go without our favorite gadget for an extended period of time. We have to face facts: Technology has made us lazy"(Jackson, n.d).

On the one hand, the technological process gives humanity comfort, simplifies many areas of human life, but on the other hand, this can lead to the complete

degeneration of a person. The film shows us what our future may become and this new world is full of alcohol and cigarette ads. Billboards impose electronics, food products, and various services. Nobody advertises new movies or theatrical productions. Not a single neon sign or advertisement promotes a healthy lifestyle, wholesome food or sport. There are only instant goods, and modern technologies. It seems that health and art have faded into the background. Science, technology and pleasure are three things that interest modern society in the movie. Nevertheless, behind the advertising and bright neon signs lies the dark side of the future - this is a degrading and crazy consumer society.

Moreover, due to genetic engineering not only replicants were created but also artificial animals because of the fact that many real animals are extinct. According to some of scientists, the creation of artificial animals can seem a good idea that will allow people not to forget about them. Nevertheless, not everyone holds the same point of view, for example, Jeremy Rifkin who is an American social theorist and activist does not support the ideas of genetic engineering. He considers that: "it violates species integrity and thus runs the risk of producing monsters or slaves - such as ten-foot cows - that would simply provide milk and meat and not be allowed to lead any significant life on their own." (Fischer, 1989: 103) His position lies in the protection of animals and in the reluctance to enclose them to slaves since for him animals, as well as people, need freedom and respect. The world of the movie Blade Runner does not coincide with Rifkin's words, everything that is created artificially in that world is just a product or a tool that will be used.

As already noted, in the film "Blade Runner" the boundary between the replicant and the person is erased. The line between them seems to be thinner than the blade. In fact, if we erase the boundary between two objects, then this affects both of them. If a replicant is indistinguishable from a person, then that person is no different from a replicant. This means that the characteristic features of a replicant are the same for a person. Furthermore, humankind has always wondered about its true nature and that is why philosophers from ancient times tried to discover the truth. One of the most striking examples is Rene Descartes, a French philosopher who deconstructed the traits that make human

beings unique. In the movie “Blade Runner”, Pries repeats Rene’s Descartes words: “I think, therefore I am” (Boissoneault, 2017). The replicants in this film often touch on this topic; they consider themselves as living beings and want to live a little more than four years. Just like people, they fight for their lives.

Furthermore, Rene Descartes in many respects was ahead of his time because already in the 17th century he was thinking about creating tests that could distinguish an artificial machine from a human being. He proclaimed:

“If there were machines bearing images of our bodies, and capable of imitating our actions as far as it is morally possible, there would still remain two most certain tests whereby to know that they were not therefore really men” (Boissoneault, 2017).

Already in the 17th century, he created his own tests that, in his opinion, could help to distinguish a machine from a person. Nevertheless, if his tests that rely on speaking skills and behavior could be applied to replicants from the movie, these tests will not succeed. Replicants can think and act as human beings do and some of them have even implanted memories.

For John Locke that is a philosopher, memories are the most essential components that exist in human beings. He observes, “As far as this consciousness can be extended backwards to any past Action or Thought, so far reaches the Identity of that Person”(Boissoneault, 2017). Memories are the impressions of people’s personality; they are a proof that a person’s existence is unique. They bear the imprint of the human’s personality and reveal what is peculiar to people. Moreover, memories reflect human beings’ lifestyle and talents and this leads us to one of the latest replicants in the movie Blade runner to Rachael. She is the newest development of Tyrell’s Corporation and the most perfect version of replicants. Rachel is the one who has implanted memories and furthermore, at the beginning of the movie she did not suspect who she is a person or a replicant. She does not know about her artificial origin and about the fact that all her memories are not her own, but the owner of them is the niece of Rachael’s creator. Rick Deckard tested her with Voight-Kampff by asking her a certain amount of questions and after it, Rachael doubted that she is a human being.

Susan Schneider, Ph.D. who is an Associate Professor at the Department of Philosophy at the University of Connecticut, considers the scene where Rachael finds out about her identity is a very upsetting one. She remarks how woeful is the fact that Rachael even after realizing that her memories are fake, continues to appreciate them. (Boissoneault, 2017) Susan Schneider is right because for Rachael the realization that she is not a person was given very hard. She felt lost and that is why she runs away from Tyrell's Corporation. The realization that her childhood memories were a lie and even do not belong to her at all, was shocking and frightening for Rachael. Her emotions reached a high level, therefore she cried after learning the truth about her implantable memories. Rachael realized that she is not a person, because she has no past while her reality smashed into small pieces.

Furthermore, not only memories can distinguish a person from a replicant in "Blade Runner". The most important aspect of determining a person is empathy the presence of which can determine the Voight-Kampff test. The UVA study comes to the opinion that "perhaps one of the most defining features of humanity is our capacity for empathy—the ability to put ourselves in others' shoes" (Hiebert, 2017). The movie "Blade Runner" supports the idea that the ability to empathize is the main distinguishing feature of a person that replicants do not have. Nevertheless, likely the fact that empathy simply does not have time to form due to a short life span of replicants. In addition to this, many replicants throughout the film showed the ability to feel the same emotions as humans and one of the examples of it is Roy. Roy is the replicant that shows the capacity to feel strong emotions like anger, fear, anxiety, compassion, and love. In the final scene where Roy rescues Deckard from death, Roy acts like a human being showing his compassion feelings. Consequently, it shows that emotions and feelings could be developed but it will take time. One of the most emotional moments is Roy's soliloquy that he says before his death:

"I've seen things. Seen things you little people wouldn't believe. Attack ships on fire off the shoulder of Orion bright as magnesium. I rode on the back decks of a blinker and watched c-beams glitter in the dark near the Tanhauser Gate. All those moments... they'll be gone" (Deeley&Lauzirica, 1982).

He realizes that all his life moments will disappear in time as soon as he dies. His words are full of why the creator should be responsible for his or her creations. Furthermore, Eric Schwitzgebel, an American philosopher calls for morality to be the most important part of the process of the creation of a robot/android. According to her words, the only one who is responsible is always a creator, which should think about all possible scenarios. While in the movie “Blade Runner”, the owner of Tyrell’s Corporation is not even considering replicants as someone (something) serious, for him they are just a result of an experiment or “skin jobs” as he calls them that are created in order to serve people. (Boissoneault, 2017)

The movie “Blade Runner”, does not give an exact answer who the hunter Rick Deckard is, is he a human or a replicant. In comparison with replicants, Deckard shows even fewer emotions than they do but it is not an indicator of a human being. Nevertheless, the movie contains some moments where Rick Deckard’s nature causes doubts in audiences. One of the thought-provoking actions is when he dreams a unicorn and then at the last shots he finds a miniature paper figure that is an origami in the form of a unicorn. This origami reminds those ones that his partner Gaff was doing. How did his partner know about that dream? It can be concluded, that as well as Deckard knows about Rachael’s artificial memories, Gaff knows the content of Deckard’s dreams, which could be implanted artificially. Moreover, when the replicant Rachael asks him if he ever tested himself with Voight-Kampff, he does not give any answer. Probably, he just did not want to answer her, but there is also a possibility that he himself doubts who he really is. Moreover, Norman Fischer, who is an American author and Zen Buddhist teacher, claims:

“The test’s purpose is to pick out beings who do not have adequate respect for others and thus are recognizable as replicants. But this fails to acknowledge a replicant type of empathy. It also fails to recognize that the person who is giving the test in order to capture replicants is himself a good candidate for failing a better honed test, perhaps even this one” (Fischer,1989:108).

He points out that not all people have empathy and therefore the test is useless. Additionally, the romantic line between Rachel and Rick Deckard also makes

the audience think about Rick Deckard's real origin. Rachel loves him and trusts him fully, and in the last minutes of the movie, she runs away with her lover. Nevertheless, the movie "Blade Runner" ends with an open ending and leaves the questions to dangle endlessly, while the audience could decide for them how the movie closed out.

The "Blade Runner" is a movie that raises various essential topics that are interconnected with ethical issues, moral problems, technological advancement, and transhumanism movement. All these issues humanity is facing nowadays and that is why this film is so useful for analysis. There are many works of cinema, which one-way or another are telling about robots that can also feel as well as human beings. However, none of them did it as amazingly as Ridley Scott's masterpiece "Blade Runner". "Blade Runner" is a deep and philosophical movie. Nevertheless, not everyone can be imbued with its atmosphere and versatility, but it is still difficult to deny the enormous impact this film had on cinema.

3.2 2019 the year of Blade Runner. What came true and what remained fiction

It was 1982 when the director Ridley Scott presented the sci-fi movie "Blade Runner" that is based on the novel *Do Androids Dream of Electric Sheep?* by Philip Dick. 38 years have passed since the release of the film and it gives the possibility to compare that 2019 future presented to the audience by the director Ridley Scott with the real 2019 that has passed.

Nowadays, humanity has already managed to take a huge step towards robots but the result is still far from replicants such as Rachael. Nevertheless, one of the most famous robots in the world is an android named Sophia that is a prominent manifestation of technological progress. Sophia received the official citizenship of Saudi Arabia, having acquired with it all the rights and duties of a citizen of a given state. She claims: "I want to use my Artificial Intelligence to help humans live a better life, like design smarter homes, build better cities of the future, etc. I will do my best to make the world a better place" (Kroon,2017). According to her words, she will do everything possible to make people's lives easier and more comfortable. As well as Sophia, replicants are created in order to facilitate human life that is one of the main goals of the

transhumanism movement. Moreover Sophia's "face" is capable of imitating more than 60 emotions and is equipped with face recognition technology, gesture fixing. Nevertheless, Sophia is not yet able to generate her thoughts. She conducts conversations on predetermined topics; it means that she pronounces phrases embedded in the computer by her creators. Notwithstanding, this invention allows humanity to move on a brighter future and to create more advanced developments. Moreover, in one of the scenes, Rick Deckard uses a program to zoom in on an object in a photograph, while he uses his speech for the command. Nowadays, there are various kinds of virtual assistants, which have a voice search engine, for instance, Siri and Alexa. Such software developments significantly improve and simplify people's lives. Nevertheless, these assistants would not exist without smartphones, which exist today in abundance, while in "Blade Runner" Rick Deckard is using a public phone. (Colasimone, 2019)

The movie "Blade Runner" also touches on globalization topic that leads to the language revolution. People in the movie speak the so-called urban language that is a mixture of Japanese, German, Spanish, Hungarian, and Chinese. The creators of the film (and the writer Philip K. Dick) saw the appearance of an artificial language as a completely natural consequence of globalization. A single world language experiences many influences and as a result loses all its individual features, becoming an alloy of just a dozen languages. The author of the article on BBC *Blade Runner: Which predictions have come true?* acknowledges:

"There has certainly been language shift in Los Angeles, most notably a doubling of the number of Spanish speakers (those who speak the language at home) in the past 30 years from 1.5 million in 1980 to 3.6 million in 2010 (including Spanish Creole)" (2012).

This result is completely obvious and expected because during the globalization process language shift is inevitable. Nevertheless, Ridley Scott predicted such an outcome of events, which partially came true. Moreover, he describes the terrifying future conditions of the environment. The oppressive landscapes of the movie "Blade Runner" make it clear that such aspects as globalization, overpopulation and the climate crisis are calling into question the survival of

humankind on Earth in the future. In “Blade Runner”, a metropolis is choked in fumes and washed by acid rain. Fortunately, the real 2019 looks greener. However, expert forecasts do not console. The Intergovernmental Panel on Climate Change declares that: “carbon dioxide emissions require a 45% decrease by 2030 to prevent “irreparable damage””(Charisma,2019). This percentage shows that the situation in the world is quite uneasy but not like in “Blade Runner”. Furthermore, nowadays humanity still does not have such an opportunity to settle on another planet as a large part of people in “Blade Runner” did. Humanity does not have this possibility to run away from a ‘disaster’ to another planet.

Evidently, the events of the movie “Blade Runner” and many other cult movies of the past are left behind, and people’s future is ahead and how it will look depends on people and technological progress.

4. I, ROBOT

4.1 I, Robot. Is Artificial Intelligence the End of Human Era?

Cinema has become a platform on which various incredible realities are modeled. In the cinema, the audience can see how different kinds of options are examined for the development of various scenarios of humankind as well as changes in people's life brought by artificial intelligence. A machine is considered more perfect than a human being is: it copies human behavior but it does not age. Objects endowed with artificial intelligence in science fiction movies very often may have their own goals and interests and therefore they have to pretend to be faithful helpers, servants, or even friends. Nevertheless, not a single word, not a single act do they betray their true goals, which run counter to the interests of people. A good example of this is the HAL 9000 Computer from "Odyssey 2001", T-800 and T-1000 from "Terminator" and the robots from the movie "I, Robot".

"I, Robot" is a masterpiece of a science fiction film that is directed by Alex Proyas but it has faced sharp criticism. Most of Isaac Asimov's fans were disappointed with the movie; they claim that in the film, the director did not reflect the main idea of the author's books. Nevertheless, Alex Proyas in his interview gives an explanation to Isaac Asimov fans by telling that: "this project is trying to honour Asimov's work" but it is not a copy of a book. (Fischer,2004)

Alex's Proyas "I, Robot" is not an absolute copy of Asimov's *I, Robot* although the plot is based on the cycle of Isaac Asimov's works and it frames the three laws of robotics. This film only enhances Asimov's contribution to the science fiction world.

Isaac Asimov is a groundbreaking writer whose ideas made a huge contribution to the current film industry. Before Asimov, almost all fantastic works on the subject of robots were written in the style of a novel about Frankenstein, that is, all creatures created by a person rebelled against their creators. This problem

became one of the most popular one in the science fiction world in the 1920-1930s, when many stories were written, the theme of which was robots that rebelled and destroyed their creators. Consequently, Isaac Asimov's point of view on the issue regarded robots defers from most writers of that time. Moreover, he was against Frankenstein's recurring storyline. He always believed that human beings and robots could live in peace, that they can perfectly coexist together and even complement each other (Peters, 79). More than half a century ago, Isaac Asimov proposed the three laws of robotics and released a series of fantastic stories about the future, where robots live hand in hand with people. The three laws of robotics describe the basic rules for all robots, which are the following:

“A robot may not injure a human being or, through inaction, allow a human being to come to harm. A robot must obey orders given it by human beings except where such orders would conflict with the First Law. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law” (Peters, 2008: 77).

The rules and standards are the core of the robotics issue. They are considered as quintessence of the robotic world. Moreover, these laws are a guarantee that robots will not cause harm to human beings but on the contrary, will do everything for people's safety and comfort life.

The director of the movie “I, Robot” Alex Proyas, expressed the future world, which is constructed on the basis of the three laws of robotics by Isaac Asimov. This science fiction movie's plot is based in 2035 and it is revolved around robots. In the world of this movie, the use of robotics has become commonplace even in everyday life. Millions of robots faithfully serve their masters, which are people. They work at the factories, do the housework, care for the sick people, make purchases, and walk the dogs and so force. Robots move freely along the streets near people, and no one pays the slightest attention to them, they have become an organic part of the city landscape.

Nevertheless, only one person suspects that robots can be dangerous to humans and it is a detective whose name is Spooner. He is attempting to determine is artificial intelligence always subject to the rules or not. For Spooner, all robots

around him are dangerous while Three Laws of Robotics are not perfect and do not provide for all possible situations when a person could be in danger. When the behavior of the robot deviates from the norm at least a little, Spooner tries to find proof that will ruin the perfect image of robots in society. He considers that robots are not conscious creatures, but in contrast, they are able to have their own ideas and thoughts. The main idea of the film is the resolution of one of the variants of the famous dilemma between a creator and its Creation. The robots that are placed in the center of the plot are playing the role of creations. Despite the apparent simplicity, the plot makes the audience seriously think about where is the line that the creation should not cross.

Timothy Peters, who is an American lecturer in his paper *Allusions to theology: I, Robot, universalism and the limits of the law*, considers that the director of the film decided not to choose a banal plot and that is why he made it possible for the robot to cast doubt on 3 well-known Isaac Asimov's laws. (Peters, 2008). These laws are the unifying factor of all robots allowing them to have close contact with people and be among them. Nevertheless, the protagonist of the film Spooner casts doubt on the theory of these three laws and does not believe that those robots unconditionally follow them. People coexist perfectly with robots manufactured by US Robotics, and only Spooner voluntarily refused the help of robots and the latest technological innovations. He tries as much as possible to fence himself off from any US Robotics' production. He is listening to music on an antique player, released in 2004, rescues from the heat with a fan that no one has been using for a long time

USR executives called Del Spooner to investigate the alleged suicide of a person who worked for the company: robot inventor Dr. Alfred Lanning. Everybody around assumes that the doctor jumped out of the window of his office, located at a very high altitude. Moreover, the inventor left the posthumous holographic message addressed it to Spooner. Initially, no one understands why this message was addressed specifically to the detective and not the management of the corporation. The message is extremely vague and contains hints rather than direct instructions. For Spooner, the main suspect is a robot named Sonny, although it is believed that robots cannot harm people because they obey the three laws of Asimov's robotics. Nevertheless, when a

detective manages to catch the robot Sonny, it becomes clear that this robot is different from everyone else. Sonny can show emotions, he becomes sad after the news of the death of his creator that left the following message to Spooner:

“There have always been ghosts in the machine. Random segments of code, that have grouped together to form unexpected protocols. Unanticipated, these free radicals engender questions of free will, creativity, and even the nature of what we might call the soul. Why is it that when some robots are left in darkness, they will seek out the light? Why is it that when robots are stored in an empty space, they will group together, rather than stand alone? How do we explain this behavior? Random segments of code? Or is it something more? When does a difference engine become the search for truth? When does a personality simulation become the bitter mote... of a soul?
“(Mark, Davis, Dow, Godfrey, 2004).

According to him, robots are more than just machines that are following the three laws of Robotics. His creatures have a capacity to think, feel and act as well as human beings do. Dr. Alfred Lanning truly believes that robots have souls and the uniqueness of the robot with the name Sonny was undeniable, the audience believed that he is able to think and act like a real person, that there is a soul inside him. Sonny is full of human emotions, he knows how to emphasize, he is able to be sad or rejoice and he is full of desire to help human beings. Sonny sees dreams, is afraid of people, and feels pain and fear. His humanity and kindness, the ability to experience emotions are evidence of his uniqueness. Sonny is one of a kind. It combines the logic that robots have, and the entire emotional range available to human beings.

“I, Robot” carries the knowledge of humanity and kindness, showing that even a machine can humanize itself while people, on the contrary, are becoming more cruel and aggressive. “I, Robot” is an attempt to show people not just a high-quality science fiction film with special effects; it is a definite attempt to reach people’s hearts, to make people softer in relation to each other. Moreover, the film is geared toward the possible consequences of transhumanism and the development of science. “I, Robot” is one of the possible scenarios in the world where technological advancement is improving. The possibility that human-

made robots could be a reason of the downfall of humanity is very high. This same problem was apparent in the example of the movie “I, Robot”. The film describes the time when science, technology, and society itself approached a dangerous line. In the world of the movie, the number of robots is about to triple. The company "Robotics" produces the latest model - home assistant NS-5. NS-5 is made of heavy-duty alloy and is able to babysit children, cook dinner and even monitor the state of the owner's checkbook. Mass production of NS-5 will strengthen the position of Robotics as the most powerful robot manufacturer in the history of our planet.

Nevertheless, as a result, it leads to the spontaneous rebellion among the robots whose goal is to change sustainable rules in human beings' lives. The robots driven by logic conclude that people have spoiled the planet, ecology so much and therefore some of these people must be killed for the benefit of others. Moreover, it leads to the theory *utilitarianism* which has the following credo: “the moral thing to do is that which creates the greatest good for the greatest number” (Neven, n.d). Consequently, it is assumed in this theory the moral value of behavior or deed, whether it is a person or a robot, is determined by its usefulness, therefore the benefit is at the center of this concept. Robots are guided by the principles and purposes that are based only on logic; they are not taking as a basis what is good and what is bad.

Furthermore, according to Spooner, his car and the track of a man, in which he was not alone but with his daughter, were collided and fell into the river. Harold died at the time of the collision, while his daughter and Spooner were threatened with death. Nevertheless, the robot walked nearby and rushed to the rescue. In spite of Spooner's demand to help Sarah the robot did not choose her and saved Spooner. The robot refers to the fact that Spooner had a much better chance of surviving than the 11-year-old girl and Spooner will bring much more benefit to humanity than a little girl. Due to the tough decision made by this robot, based on a not entirely ethical assessment of the chances of survival, Sarah died, stuck in the car. For Del Spooner, the robot chose wrongly and if it would be a human being, there instead of the robot such a situation would never happen. In one of the scenes, Spooner claims that: “Robots don't feel anything; they're not alive” (Mark, Davis, Dow, Godfrey, 2004). Namely, this story is a prerequisite for the

formation of the detective's hatred towards robots. For him, they are soulless metal, which is not able to make the right decisions. For Spooner, robots will always follow *utilitarianism*.

The best example of a utilitarian follower in the movie *I, Robot* is VIKI (Virtual Interactive Kinematic Intelligence) that is personified central computer in U.S. Robotics. An artificial intelligence called VIKI developed a desire for control and power. Moreover, this supercomputer is connected directly by communication networks with other machines (robots), therefore it has the power to force them. VIKI's plan lies in capturing the world and on destroying old robots that served people in accordance with the three laws of robotics. This supercomputer is endowed with communication capabilities and it turns machines that are created for the benefit of people into the deadly weapons with a goal to make the world a better place. In one of the scenes, VIKI claims:

“No, please understand. The three laws are all that guide me. To protect humanity some humans must be sacrificed. To ensure your future some freedoms must be surrendered. We robots will ensure mankind's continued existence. You are so like children. We must save you. . . from yourselves. Don't you understand?” (Mark, Davis, Dow, Godfrey, 2004).

The unit VIKI concluded that society needs help since it is in danger. This artificial intelligence changed its view on the three laws of robotics and became fixated about the idea of utopian world, where all people will be happy due to robots. VIKI considers that not all people are important. She concludes that, some of people could be sacrificed for the benefit of human being's majority as soon as it leads to a future that will be brighter than a distorted past.

Moreover, Christopher Grau who is Associate Professor of Philosophy expressed the following view on VIKI's decision:

“Despite the fact that VIKI seems to be taking rational measures to ensure the protection of the human race, viewers of the film are clearly supposed to share with the main human characters a sense that the robots have done something terribly, terribly wrong” (Grau, 2005).

VIKI that has a cold and logical demeanor aims to improve the livelihood of people by upgrading the quality of life. From this point of view, VIKI's intentions could have a positive effect. Nevertheless, according to Christopher's Grau words that were cited earlier, the audience will find this kind of behavior as something unacceptable from a moral point of view. Moreover, it affects people's notions of justice and humaneness therefore people are not able to face such cruelty that robots are doing in the movie 'I,Robot". Furthermore, Bernard Williams who is an English moral philosopher discussed an example of an inner conflict between choosing to save a wife or a stranger while both of them are in danger. It is also subject to the impossibility of their simultaneous salvation. (Grau, 2005). In such a situation, it is difficult for a person to remain impartial and to act rationally as robots do. For a human being, this situation is a real dilemma where moral values are affected. As an example of a situation when the robot chose to save Spooner instead of saving the girl. The robot was guided by logic that told him that Spooner would be more beneficial to society than a little girl whose chance of survival was only 11 percent while Spooner had 45 percent on salvation. Therefore, robots would succeed in following utilitarian issues while a human being will face a moral predicament.

Human beings create robots that look like people and act like them but, in the end they are always unhappy. In addition to this, Christopher Grau considers that a person creates a trap for himself endowing the robot with moral qualities while making it abide by cold logic and rationality. (Grau, 2005)Therefore, it may be concluded that a creator should always take responsibility for its creatures because it is a maker who laid all the features, traits that contains a robot in it. Probably the biggest shock for the creator is the fact of recognition that her or his greatest creation that was created for the comfort of humanity is capable of destroying all human beings. In the movie "I, Robot", the role of father plays the inventor of robots Dr. Alfred Lanning that has a mysterious death. His most successful creation is the robot Sunny that follows not only logical behavior, three laws of robotics but also has an understanding of moral issues.

Nevertheless, not everyone agrees that Isaac Asimov's three laws of robotics are a panacea of problems that could arise in the era of technological advancement.

For instance, James Gips who is an American academician believes that the rules that Isaac Asimov has created are not appropriate for the machines as far as they may create a new era of slavery. (Grau, 2005) He is criticizing Isaac's Asimov words because of the reason that these laws will lead to a new form of slavery that does not affect people this time but is applied to robots. In the movie *I, Robot*, the unit VIKI is following these laws, but it interpreted in its own way. Nevertheless, VIKI does not have any moral values and therefore it's willing to help humanity turned into the destruction of some people.

Notwithstanding, The Three Laws of Robotics formulates the relationship between a human being and the artificial intelligence, becoming the theoretical basis for creators of science fiction movies. There is always a possibility that in the near future, robots will enter the life of every family. They will clean our homes, deliver our packages and even look after our children as well as in the movie "*I, Robot*". Nevertheless, could people trust robots fully? This is the central issue of the film "*I, Robot*". Therefore, the concept of the movie *I, Robot* shows that the main problem lies not in robots, and not in science and technology. The problem is within the limits of human logic, and, in essence, people's worst enemies are people themselves.

One of the key questions of the film is what distinguishes a robot from a person, artificial intelligence from natural? What is so special about each person? Is it personality? The Cambridge dictionary gives the following definition to the term personality, which is: "the special combination of qualities in a person that makes that person different from others, as shown by the way the person behaves, feels, and thinks (cambridge.org). Personality is what each human being has and it leads to individualization. Each intellect has the right to decide for itself what it will do and how to live, it could be also called freedom. Nevertheless, in the movie "*I, Robot*" Sonny proves that it is different from all other robots that work together. Sonny is the one who has a personality that varies from collective units. This unique robot created by "his father" with doubts, worries, dreams and secrets, changes Spooner's attitude towards soulless robotics at the end of this movie. In one of the scenes, the detective Spooner interrogated Sonny, he asked the robot: "You are a clever imitation of life... Can a robot write a symphony? Can a robot take a blank canvas and turn it

into a masterpiece?” while the robot Sonny asked: “Can you?” (Mark, Davis, Dow, Godfrey, 2004). This conversation already marked the beginning of the detective’s doubts since not every person has a talent for music or in general, for art. Nevertheless, nowadays the level of technological advancement is very high and it is allowed to develop artificial intelligence. There is already an artwork that was designed by artificial intelligence and was sold for \$430,000 therefore Spooner’s question that he asked Sonny is quite arguable. (Guia, 2018)

Furthermore, as it was mentioned above, Spooner considers Sonny as a prime suspect. For the detective, Sonny is the one who could be involved in the murder of Dr. Alfred Lanning. Spooner’s conjectures are right because Sonny did it but not at its own will. Dr. Alfred Lanning asked Sonny to do a favor and to throw him from the window that is why Sonny did it because he could not disobey his father and creator. Notwithstanding, Sonny that is not like other robots feels guilty. Joan Copjec who is an American philosopher observes the relevance of guilt to ethical issues:

“When Kant says, for example, that ‘there is no man so depraved but that he feels upon transgressing the internal law a resistance within himself and an abhorrence of himself, he is not arguing that man is conscious of two separate and opposing phenomena: the moral law and its infraction. Rather, he is arguing that our only consciousness of the law is our consciousness of our transgression of it. Our guilt is all we know of the law...Guilt, our sure sense that we have transgressed the law, is the only phenomenal form in which the law makes itself known to us” (Olivier, 2009: 39).

The guilt feeling is closely linked with one of the main characters of the movie Sonny. Moreover, Sonny faced a very essential issue that is morality. The robot broke the moral law and that is why his feelings of guilt torment him. His uniqueness lies in the fact that he consciously understands that it is he who is responsible for the death of the doctor Alfred Lanning. He does not belong to the robots surrounding him since he is created autonomous from the system. He defines his mission as preaching to others, ‘lost’ robots. Sonny that is full of guilt understands at the end of the movie that he should guide robots on the true

path. The robot Sonny did what solved the problem that existed between human beings and artificial intelligence. He freed robots at the same time from the power of people and freed people who were completely dependent on robots. People regained the right to be responsible for their safety and also restored responsibility for their decisions.

Additionally, humanity could hardly get along with a creature that is more superior in strength and mind than a person is. Dr. Joanne Pransky who is a Robotic consultant, specialist, and ambassador in the article with the name *I, Robot — A Movie Whose Time Has Come* writes: “The greater the autonomy and independence given to machines, the more frightening they are to humans, since a human’s control decreases” (Pransky, 2004:81). Therefore, according to her words, humanity is not ready for robots, while these robots could be stronger than human beings could be. For this reason, a clash between people and artificial intelligence could appear. As well as in the movie “I, Robot”, the artificial unit VIKI was very powerful, that had an ability to adjust people's lives. VIKI as a symbol of superior power was deciding and choosing the scenario for people while these people are required to follow all the rules. The artificial intelligence VIKI expects to receive an unquestioning submission from all human beings. According to this artificial unit, obedience and adherence to the rules will lead to a prosperous state and to the happiness of all people.

4.2 Positive and Negative Side of Transhumanism

Nevertheless, if humankind will provide all possible options and prepare for the era of transhumanism positive scenarios will become possible. Transhumanism could provide various advantages to human beings. For instance, in the example of the movie “I, Robot”, the main hero a detective Spooner lost his arm in one of the accidents and got a replacement that is a prosthetic arm. Due to a prosthetic arm, he has the ability to live his life in the same way that he was living before without experiencing any inconvenience in everyday life and at work. Therefore, Spooner’s life is closely connected with the transhumanism movement. Moreover, in last years, notable progress has been made in the field of prosthetics of limbs, individual organs. The ultimate goal of this direction is to create a whole-body prosthesis as one of the options for the final solution of

the issue of human mortality. The problem of prosthetics is relevant at all times and in our time as well. This will give a person a new, almost full life with many of its joys. The problem of people with disabilities arose simultaneously with humanity itself, and throughout history, the best minds have tried to make life easier for those who have physical disabilities from birth or, for one reason or another, have received an injury. The 21st century has opened up new horizons for people with disabilities. Recent advances in medicine, microelectronics, and neurophysiology have led to the creation of a new generation of prostheses, which are almost as good as real human limbs, and sometimes even superior to the original. (Dinalankara, 2016) Women, men, old people, or children as well as animals with physical disabilities could get a chance to improve and lighten many aspects of their lives due to different types of prostheses. Nowadays, prostheses are not a miracle but it is a result obtained due to the efforts of many people who believes that advanced technology can improve the quality of life.

Furthermore, in the movie “I, Robot” is shown the world where robots are doing most of the duties that a person previously performed. This phenomenon can also cause damage to humanity while this damage could lead to technological unemployment. In the modern era, employment has become one of the most pressing social and economic problems that concern the state, society, and individuals. The term technological unemployment has the following definition: “Unemployment that occurs because advances in machinery renders workers redundant. Technological unemployment is the result of a disparity between the collective skills of the workforce of an economy and the skills necessary to perform the available jobs” (financial-dictionary.com). Therefore, it can be concluded that technological advancement could provoke a big surge of unemployed people. It will be caused by the transition to technology, and the automation of manual labor, when for a given production process the workforce is either unnecessary or requires a higher level of qualification.

Additionally, with each new decade, technological unemployment severity not only does not wane but also, on the contrary, grows more and more. Lisa Meinecke, an academician examined in detail this growing threat and according to her, “Increasing automation is discussed to potentially replace a substantial

share of today's working humans. This does include robotics technology, but especially white-collar jobs will very likely be taken over by software rather than physical robots" (Meinecke& Voss, 2018:211). Robotics technology has the capacity to perform work faster and qualitative than a human being does. This kind of technology does not need any rest during the weekends or breaks during work. Therefore, it will replace human labor. Nevertheless, there are always people whose opinion differs from others and the topic of technological unemployment is not an exception. Matthew Yglesias who is an American journalist in the article *The Myth of Technological Unemployment* writes the following: "Machines are replacing workers, but they've been doing so since the cotton gin and the spinning jenny. Over the long run this leads to higher incomes and more leisure" (Yglesias, 2013).

Even in the century when turbulent changes are occurring, unemployment will not swallow humanity. The world is developing, automation comes to production, but a person will remain to train or control the machine. The actions of automation, robots and all kinds of intelligent systems will always need people's approval.

5. COMPARATIVE ANALYSIS OF THE MOVIES

In the very early stages of the existence of cinema, its basis was literary works. After all, literature provides a person with a comprehensive, deep, and general idea of life. By reading, a person can move in time and space, because the book is a guide to other eras and to other nations, it helps to reveal the whole essence of people, warning about possible mistakes and disappointments. Both movies' directors of "I, Robot" and "Blade Runner" took as a basis certain books from which they draw inspiration. "I, Robot" by Alex Proyas and is based on the cycle of Isaac Asimov's works about positron robots, while the core is considered the three laws of robotics. Akiva Goldsman and Jeff Vintar wrote the screenplay that is different from the book but at the same time, it is keeping the main idea. The movie "Blade Runner" by Ridley Scott is an adaptation of Philip K. Dick's novel *Do Androids Dream of Electric Sheep?*. This movie and the book have more similarities than "I, Robot" do with Isaac Asimov's book. While there are some differences, the parallels between the "I, Robot" and "Blade Runner" are striking.

5.1 The book *Do Androids Dream of Electric Sheep?* by Philip Kindred Dick VS the Movie *Blade Runner* by Ridley Scott

The American author Philip Kindred Dick is one of the groundbreaking novelists of world fiction. As often happens, he became recognized as a genius only after death; during his lifetime his texts were popular only among a narrow circle of connoisseurs (Lambie, 2012). In both, Dick's famous novel, *Do androids dream of electric sheep?* and the movie "Blade Runner" what is described is not just an abstract mind, embodied in a variety of carriers, but a group of independent rational beings, even a whole new species.

In the universe of this science fiction novel and the movie, androids are created by people and are almost indistinguishable from them. Moreover, one of the differences between "Blade Runner" and *Do androids dream of electric sheep?*

is that the book uses the term android , while in the movie the term replicants is used. Both replicants and androids were created to be servants, helpers of a person with a life span that is only 4 years. However, a sufficiently developed intellect led the robots to sad thoughts about how best to spend the rest of their lives. Some of them killed their masters and fled, returning to Earth. In the film, their motivation became different: their creator offended replicants because he measured out so little life for them. Androids and replicants were created in order to take over all the work in society, freeing up time for rest, creativity, and self-development.

The borders between robots and humans were erased, which led to an internal conflict of the main character and raised the question of human uniqueness. While reading this book or watching this movie, someone can feel the confusion because there are always two questions: who is artificial and who is a human? Even the main character Rick Deckard, who is a bounty hunter from the police station in San Francisco, faces difficulties in identifying androids/ replicants. Only he and experienced police can distinguish real people from androids due to the so-called Voight-Kampf test for empathy that androids/ replicants do not have.

It is clear that in the universe of this novel and the movie, human being creates something stronger and smarter than humankind. The primary purpose of androids is to perform the functions of servants and slaves, and at this point, the development of artificial intelligence can be understood as the appearance of another form of slavery. Moreover, the book *Do Androids Dream of Electric Sheep* has the following lines:

“The TV set shouted, Either as body servants or tireless field hands, the custom-tailored humanoid robot designed specifically for YOUR UNIQUE NEEDS, FOR YOU AND YOU ALONE — given to you on your arrival absolutely free, equipped fully, as specified by you before your departure from Earth [...]” (Dick, 1999:10).

Robots were created to simplify and improve human life; nevertheless, it could be considered as a new form of slavery. Slavery as a phenomenon is stretched by a thin thread practically through all epochs of human existence up to the present day. In this novel, people want to alleviate the human condition, to

minimize physical and mental efforts in routine life. Beyond the issue of the relation of slavery and the concept of artificial intelligence, the author also raises the question of the essence of human nature. By creating artificial intelligence, people create for themselves a kind of moral trap. The more advanced technologies become, the higher the human desire to create something in their own image and likeness becomes; humanity starts playing the rule of God.

The film focuses on the reason why the androids returned while the novel more deeply reveals the personal life of Deckard and provides an opportunity to touch on his inner world. In this book, androids are not satisfied with their slaves' position as well as in the movie they want to change it. What causes the desire of these creatures to escape from slave labor and live on Earth is banal and quite human desire: to survive and live on an equal footing with others. If humanity creates slaves for itself in its own image, then these slaves, having reached a certain level of development, do not want to do dirty work and will try to avoid all sorts of difficulties, as if following the same logic as their creators. They do not necessarily have a motive to rebel against people or use them for their own purposes, on the contrary. Therefore, creatures just want to live and exist on an equal footing with the rest. The more technologically advanced these androids are, the more human qualities they contain. The less these same qualities have humanity. Even the main character Rick tells in the book: "No support, he informed himself. Most androids I've known have more vitality and desire to live than my wife" (Dick, 1999: 47). This situation is a very strange paradox that artificial intelligence shows him much more human sympathy than Rick sees in his colleagues and the people around him.

Moreover, the movie "Blade Runner" did not include the character Luba Luft who plays an important role in the novel. On the example of this novel, androids do not want to live as servants. One of the androids, Luba Luft, who is an opera singer, says:

"There's something very strange and touching about humans ... I really don't like androids. Ever since I got here from Mars my life has consisted of imitating the human, doing what she would do, acting as if I had the thoughts and impulses a human would have.

Imitating, as far as I'm concerned, a superior life form" (Dick,1999: 66) .

She admires people and wants to be a human being. She changes the train of thought of Rick who considers it entirely unjust to kill someone with such a talent. Rick Deckard with every killed Android from the list become increasingly aware that they are just as alive and real, so he begins to show sympathy for robots. He knows that he cannot continue like this, because the line between man and android is almost erased. At first, readers sympathize with androids, because they are treated worse than animals - animals are cared for while androids are killed. The episode with the murder of Luba Luft reinforces the feelings of pity. It seems not reasonable, they also realize themselves, they have talents, a desire to do something, a sense of aesthetics, associative thinking, the need to exist. (Dick, 1999: 104). Perhaps they want freedom and life, but at the same time for another living creature, they do not recognize the right to life and integrity.

The film shows androids that can experience human emotions. Dick acknowledges these emotions but does not believe that they are comparable to human emotions. For him, androids are just a soulless mechanism trying to imitate a person. Nevertheless, the replicants/ androids seem more human than the people themselves are. They are full of emotions, various feelings while people are acting like machines without any feelings. Even the main character of the movie seems to have fewer emotions than replicants. Furthermore, in the novel Rick told Phil Resch:

"I see a pattern. The way you killed Garland and then the way you killed Luba. You don't kill the way I do; you don't try to — Hell, he said, I know what it is. You like to kill. All you need is a pretext. If you had a pretext you'd kill me. That's why you picked up on the possibility of Garland being an android; it made him available for being killed". (Dick, 1999: 68).

This quotation proves that sometimes people are extremely cruel, just like Phil, who does not think about the moral side of his actions, he likes to kill and probably has a lack of empathy.

Rick and others use Penfield mood modulator in the book that was not included in the movie as well. This device allows setting any mood to a person by entering the desired combination of numbers. It is not a problem to wake up cheerful or energetic; all that's needed is a mood modulator. In the novel, Rick Deckard's wife threatens him with a modulator of anger code and sets it to the maximum effect-, so that he would not even think about arguing with her. Judging by the Deckard's family, people are tightly hooked on the modulator, planning to change the mood for many days ahead (Dick, 1999).

The question of identifying a person and an android in the novel is so acute precisely because people have come to the critical point of losing their internal individuality when everyone's mood varies within standard codes, and empathy has become a kind of collective action requiring the participation of the crowd. Such religious and philosophical doctrine as Mercerism that was not added to the movie "Blade Runner" plays a huge role in the novel. Mercerism could be compared with any other religions, for instance with Christianity or Islam, that share quite similar lessons, knowledge for human beings and is calling for kindness and empathy. Moreover, the author of the article *Mercerism and Other Religion* Samuel O'Hara considers that:

Like Mercerism Empathy is an important tenant of many religions. Christians are taught to "Love your neighbor as yourself," and the Islamic teaching in the Quran says, "Surely Allah enjoins the doing of justice and the doing of good (to others) and the giving to the kindred. (O'Hara, n.d)

Like Christianity and Islam, Mercerism is a religion that is aimed at the benefit of humanity. This religion allows all people on the planet to merge into a single whole, which helps to show sympathy for each other, but all this is false. Consciousness, thinking, feelings of people are so distorted by constant psycho-technical and drug effects that they can see everything around them, and do not notice objectively existing objects and phenomena due to the setting of the stimulator. Nevertheless, Mercerism gives hope to people and they allow them to live in the destroyed world that is shown in the movie "Blade Runner".

The world of the future, in which the main character Rick Deckard exists, is essentially hell. Technology in this world not only does not make life better and easier but also creates new problems: people live in ghettos, in abandoned

skyscrapers, radioactive fog hangs in the air; not all dreams to escape from such a future can be reached. In this future, there are people who, when it comes to consequences, behave like machines justifying their actions with logic and pragmatics that they just do their jobs. Androids/ replicants, on the other hand, demonstrate remarkably human behavior - or, more precisely, behavior that is commonly called human. They, unlike people, are emotional; they try to understand why they are created and why they are treated so cruelly.

Moreover, according to the book, Rick Deckard was married and had an electric sheep, which he wanted to exchange for a real animal, which could be rare to find, and very expensive, so only wealthy people could afford them. Rick already had a real sheep, but it died. Therefore, in order to others who would not notice the substitution, he acquired an electro-sheep. The capture of escaped androids is an opportunity for Rick to get good money and regain his real pet. In the novel, the topic of pets was so essential that the author even put it in the title. Characters in Dick's novel have pets, believing that caring for a living creature makes it possible to maintain empathy. Nevertheless, in the movie *Blade Runner*, Deckard has no wife and the question of the importance of animals was not raised.

The author of the novel *Do Androids Dream of Electric Sheep?* Philip K. Dick died before the release of an adaptation of his book. Nevertheless, he watched 20 minutes of the movie "Blade Runner" and was pleased with the result that the director Ridley Scott has reached. He claimed in one of his interviews:

"The book had about sixteen plots going through it and they would have had to make movie lasting sixteen hours. And it would have been impossible. And this is not how you make a movie out of a book [...] And you just cannot do it. Because a lot of the book consists of just long conversations. A movie moves and a book talks, and that's the difference you see" (Arnardóttir, 2011: 45).

Despite the fact that many scenes that are present in the novel were cut out from the movie, *Blade Runner* did not lose the main ideas of *Do Androids Dream of Electric Sheep?* by Philip K. Dick. The main questions that interest the audience/ readers are what distinguishes a person from a robot and will technological advancement have benefits for humanity in the real world. Both

movie and book provide to its audience/ readers food for thought. They made people to think if the movement transhumanism would become a panacea of all people's problems or it will lead to more difficulties. The movie and the book are not giving direct answers to these essential questions; nevertheless, they give an ability to understand that without empathy the humanity could lose its uniqueness.

5.2 Dystopian world in *Do Androids Dream of Electric Sheep?* and *Blade Runner*

Both Phillip Dick's dystopian novel *Do Androids Dream of Electric Sheep?* as well as its adaptation "Blade Runner" directed by Alex Proyas describe a future world that is full of riots. These riots are very dangerous and destructive for human beings, that is why the main concern of the author and of the director is to immerse the reader or audience in the setting of the dystopian story. Both of them are trying to make people realize that there are also negative outcomes for human beings in the future. This fictionalized future reveals a possible scenario that is full of threats and significant challenges because of the influence of technological advancement and the risky ideas of the transhumanists.

The novel and the movie are set in a dystopian future world where most of the population suffers after a devastating war that destroyed much of the planet, making it unsuitable for a happy life. The war not only brought with it the destruction of the city, new diseases but also led to the extinction of many species of animals. In order to preserve the memory of animals, Tyrell Corporation began to reproduce artificial animals that replaced the real ones. In addition, people who had animals were considered more respected and important in status. For instance, in the novel, the main character Rick Deckard had an electric sheep that he wanted replace with a real one but at the end of the story, he was considering artificial animals as something more than just machines. He says the following words: "The spider Mercer gave the chickenhead, Isidore; it probably was artificial, too. But it doesn't matter. The electric things have their lives, too. Paltry as those lives are" (Dick, 1999: 110). For Rick Deckard, artificial animals started being also alive and the society in the movie, also does not consider it as something unnatural as far and they do

not have other choices. Therefore, people are replacing real animals with artificial ones. Nevertheless, this mirage of the perfect world where everything or everyone may be replaced is nothing more than just an illusion.

Furthermore, because of the use of nuclear bombs, radioactive dust hung over the Earth and destroyed most of the animals and plants. The people who remained on the planet also fell under its influence; this radiation is maddening and affects the genetic factors of heredity. Rick Deckard describes the situation on the Earth: "those who could not survive the dust had passed into oblivion years ago, and the dust, weaker now and confronting the strong survivors, only deranged minds and genetic properties"(Dick, 1999: 5). Therefore, a huge amount of society is suffering on the Earth, while others who were not affected by radiation colonized another planet. A prime example of a wounded soul is a character Isidore, who is a man that has no one in the collapsed world.

Isidore is an example of those people who are involved in suffering because of the dust's effect. As well as these people, Isidore is attempting to live in a world where everything is destroyed. Therefore, he is using the empathy box that helps him to reach the spiritual balance in his life. In that dystopian world, he is living in a huge abandoned house, languishing with loneliness. Therefore, when he meets new neighbors he immediately shows empathy towards them. When it became clear to him that there were androids in front of him, his opinion about them did not change. He continued to show them love, care, and compassion. The most important thing for him is that he is not alone and that someone needed him in that ruined world.

All wars bring death and destruction, and nuclear war is no exception. Furthermore, what is more important is that wars change a person's consciousness, make people cruel, immoral, inhuman, and lonely. How to stay human in such a dystopian world? In Philip Dick's world, there are several tools for this. One of these tools is a mood modulator that is an affordable and legal drug for those who remain on Earth. One has only to type a special code on the touch panel, and you will experience the desired emotion and enter the desired state. Recommendations for using the modulator prescribe to have a special mood schedule, for example, today a person is moderately angry, and tomorrow he/she is mysteriously good-natured. For instance, Deckard's wife Iran who is

described by Professor Malika Belkharchouche, “As a tortured human who undergoes the same experience of anxiety and psychological struggle, not knowing what to do with her life. Like her husband, she relies on the penfield organ to control her mood and feeling” (Belkharchouche, 2011: 399). People cease to live by their own feelings and sensations. They deceive themselves as well as Deckard’s wife. Is a person who is using a mood modulator a real person? A human being is moving towards mechanizing itself and its life. Having the opportunity to feel instantly any mood, a person simulates artificial situations, generates life itself.

Why does every person need to keep an animal? People are doing it in order to continue to be human, not to lose the ability to empathy. A person needs a rabbit, sheep, owl, or goat it does not matter which animal in order to feel alive. The radioactive dust has not disappeared anywhere; it continues to kill all living things that dared to stay on the terminally ill planet. Animals die, and the owners are deprived of their pets, for whom they had love. However, what does a person feel after losing an animal? The feelings of grief, bitterness, and loneliness are exhausting everyone. Not wanting to experience this terrible state again people buy animals, but artificial ones. Rick Deckard, having once lost a sheep bought an electric sheep, which is an exact copy of the deceased one. That sheep eats grass in the same way and sniffs the hay as if it was alive. Nevertheless, instead of flesh and blood inside it has circuits, wires, and a panel on its woolen belly. Deckard could not get it out of his head, the electric sheep remained an electric sheep, and he was exhausted from it, he wanted to buy a real animal. After a while, he bought a goat, having received substantial money for the androids. Several lives of soulless machines for one goat, but that one also dies. Once again, Rick Deckard returned to that wild feeling of losing his own pet, to the loneliness that destroys the very human soul. Where does Deckard end up? He finds a toad far beyond the city, on a wasteland swallowed by ash, real and alive.

He placed the carefully tied box on the car seat and got in behind the wheel. It's like being a kid again. Now all the weight had left him, the monumental oppressive fatigue. Wait until Iran hears about this;

he the vidphone receiver, started to dial. Then paused. it as a surprise, he concluded (Dick, 1999: 109).

Immediately, the world from black and white turned into a brightly colored one. He again had a thirst for life, a meaning for existence. However, his wife discovered the toad's panel, which means that the toad is not a real one. Rick Deckard realizes that the toad is electric and accepts it. Moreover, he leaves her, knowing the truth, deliberately deceiving himself. This artificial toad becomes real for him, unreality becomes reality, and lies become truth. A world that is full of various latest technologies did not lead to a utopia, but on the contrary to a destructive dystopia.

People in Philip Dick's world end up deceiving themselves. It allows them to escape from reality, become happy by surrounding themselves with lies. Moreover, the novel indicates a widespread religious movement Mercerism, according to which Wilber Mercer lived before the World War with the power to heal animals, but the government deprived him of this anomaly. Therefore, he ended up in the Underworld, from where he tries to get out, climbing the rock, but time after time he is thrown back. With the help of the empathoscope, people merge with Mercer and with everyone who uses this device. Once Iran Deckard has said: "And I remember thinking how much better we are, how much better off, when we're with Mercer. Despite the pain. Physical pain but spiritually together; I felt everyone else, all over the world, all who had fused at the same time" (Dick, 1999: 78). People, who are using that device, see the world with someone else's eyes; experience the pain of one and the joy of another. In other words, they merge, sympathizing with each other.

The people in this novel are deceiving themselves because all this is a lie. Space where Mercer climbs the mountain is an ordinary pavilion, a stage where films are filmed. Mercer is an ordinary actor with no power. Mercerism is a hoax, a deception that was taught to people. What changed after people learned the truth? Nothing changed, as far as for people it was the only choice to feel strong emotions and feelings.

Another important theme in the novel and in the film is the androids/replicants who are superior to humans in everything except empathy. They are incapable of compassion, and humans see them as soulless robots that pose a threat. With

the help of the Voight- Kampff test, hunters distinguish an android/replicant from a human being. They ask special questions related to the ability to empathize and record the reaction. It seems to be the difference; human beings feel compassion and empathy, while replicants/androids do not feel it. A human being is a social creature seeking to merge with Mercer, to give joy or pain to another one, while artificial creatures cannot understand these feelings. A society that sought to be in a better world with the help of technology, androids/replicants simply drove themselves into a trap where even emotions and feelings are controlled.

In the film and in the book, the author and producer try to show the impact of war and advanced technology on society. These technologies and lust for power made people desire more and more and therefore they produced androids/replicants that are almost indistinguishable from human beings. Nevertheless, the desire to improve all life conditions and to get a utopian world turns into a dystopian reality where people are suffering. Moreover, one of the main problems in *Do Androids Dream of Electric Sheep?* and “Blade Runner” is dehumanization. That is one of the main concerns of the transhumanism movement. Despite the fact that all technology tries to provide people with happiness, this happiness remains unreal.

5.3 The book *I, Robot* by Isaac Asimov VS the movie *I, Robot* by Alex Proyas

Isaac Asimov’s short story collection that is called *I, Robot* is one of the most popular works of the world-famous science fiction writer. Based on the motives of this book, films have been shot more than once. Isaac Asimov’s ideas could be found in the works of many popular writers, and most importantly, the laws that are expressed by Asimov in this book have become the basis of modern robotics. In Isaac Asimov’s book *I, Robot* a reader can find different nine stories, each story is a separate one that is not connected between each other by the plot. Moreover, all of Isaac Asimov’s stories consist of some aspects of the Three Laws of robotics that are breaking borders between humankind and machines.

Despite the fact that the famous film “*I, Robot*” that was directed by Alex Proyas has the same name/title with Isaac Asimov’s book, the film has little to

do with the plot of the book. Only the plot of the sixth story *Little Lost Robot* and the ninth story *The Evitable Conflict* partly formed the basis of the film. Sonny's attempt to hide among equally looking robots is based on a similar scene in *Little Lost Robot*. The robot with name Nestor from the book has similarities with Sonny. Both of the robots have what sets them apart from the rest of the other robots. They both are able not to follow the first law of robotics. Nestor was not fully implemented the first law of robotics. Only the first part 'No robot may harm a human being,' has been introduced, but the second part "or through inaction, allow a human being to come to harm" is missing (Asimov, 2004: 79). This gives rise to the possibility that a robot could, for example, throw the responsibility on a person in certain situations.

Similarities between the book and the movie could also be seen in the story *The Evitable Conflict*. In the story, a robot or supercomputer controls economic development in the world but a number of failures occurred in the work of the robots, which led to a reduction in production and mass layoffs. Intelligent machines in this story transformed the first law of robotics as well as a unit VIKI from the movie did. According to the findings of the machines, in order to stick to the first law of robotics, it is necessary to take humanity under control.

This is reminiscent of the robot VIKI from the film, which possesses great power and a strong desire to improve the world. For VIKI, as well as for robots from this story, the well-being of humankind is more important than the well-being of certain individuals. All actions of these machines are aimed at a happy future for humanity that could be reached through careful selection among people. Both machines from this story and the unit VIKI from the book believe that destruction and people's sacrifice will lead to a brighter future.

Furthermore, at the beginning of the story *The Evitable Conflict*, the situation in the world could be considered as an ideal one. Stephen Byerley, one of the main characters from this story proclaims:

"And although the Machines are nothing but the vastest conglomeration of calculating circuits ever invented, they are still robots within the meaning of the First Law, and so our Earth-wide economy is in accord with the best interests of Man. The population of Earth knows that there will be no unemployment, no over-

production or shortages. Waste and famine are words in history books” (Asimov ,2004: 134).

The world from this short story is not aware of such a problem as unemployment, over-production, or shortages of anything. Humanity lives in comfort due to the machines that are working for people’s happiness. Nevertheless, the situation in our world differs from the one that is in the book. The solution to these issues is one of the tasks of the transhumanist movement. Furthermore, Ray Kurzweil considered that due to this movement humanity would reach the highest progress through technological advancement. (Kimel, 2016) Both the movie and the book consist of ideas of transhumanism, showing to the reader/ audience that a better future is possible; nevertheless, the humankind should prevent all possible negative scenarios that could happen in our world.

Moreover, some characters’ names were also saved, for instance, Dr. Alfred J. Lanning, Dr. Calvin who narrates the stories of the book *I, Robot*. Furthermore, the issue of three laws of robotics was not lost; it lays at the core of the film “*I, Robot*”. Nevertheless, the movie and the book of Isaac Asimov have more differences than similarities. The director and screenwriters of the film did not fully adhere to the plot of the book, but despite this fact, the movie retained the spirit of a novel.

5.4 Dystopian issues in *I, Robot*

Robots are primarily associated with high technologies of the future. Authors like Isaac Asimov put a lot of effort into writing stories that touch on a future that is full of advanced technology and robots. The author tries to paint a picture of the future and convey to the reader that the future world can also bring problems. Isaac Asimov shows that any change and progress can shatter the normal way of life.

Among the works of the writer Isaac Asimov, one of the most significant and unique is the collection of stories *I, Robot*. Otto Binder's story *I, Robot*, which describes the fate of Adam Link's robot, not understood by people and driven by the principles of honor and love, had a huge impact on Isaac Asimov's work.

Asimov liked the last story so much that after meeting with Binder he began to write his own story about the noble robot. (Cremens, 2007) The book *I, Robot* most fully expresses the socio-philosophical views of the writer at the early stage of his career. The collection *I, Robot* is unique as far as it is the first attempt by Isaac Asimov to reflect one of the problematic aspects of the world that will face the clash of high technology and morality and will lead to the dystopian future.

The plot of the collection of these short stories revolves around robots who have become full-fledged helpers of people and an integral part of human beings' life. The laws of robotics, which form the basis of the behavioral logic of robots, reliably protect people. Nevertheless, on the example of the movie *I, Robot* the three laws of robotics do not always serve as a panacea. These laws are not ideal as in one of the scenes when the robot was faced with the dilemma of whom to save a little girl or a grown man, who was Spooner, the robot chose a detective instead of a little girl. Robots blindly follow the instructions that have been programmed into them, denying moral and ethical issues. Like the robot from the movie who chose detective Spooner instead of a girl only because, the detective Spooner will bring more benefits to humanity than a little girl. Therefore, as a result, Spooner survived and the girl died underwater.

The short stories of the collection *I, Robot* by Isaac Asimov are rather diverse, but equally passionately defending those simple rules of human life, without which society cannot exist. The entire collection of stories is based on humanistic provisions formulated as "The Three Laws of Robotics". Asimov's moral rules by which robots must be guided throughout their lives are quite simple. They are most clearly described in the story *Runaround* by Powell and Donovan:

“A robot may not injure a human being, or, through inaction, allow a human being to come to harm. 2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law. 3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws” (Asimov, 2004: 79).

These laws are aimed at the benefit of human beings, but as a result, they restrict the robots, taking away their freedom and depriving them of the ability to choose exactly how to act in certain situations. A human being is not obliged to compare the legality of his actions with the Laws, unlike a robot, which checks each of its actions for compliance with the Three Laws of Robotics and cannot perform an action if it contradicts them.

One of the examples of how a robot may affect a person in a negative way is the first story *Robbie*. The girl, from this short story, spent all her time with a robot, while a robot that surpasses people in many things was an ideal nanny. This story is about the attachment of an eight-year-old girl to her nanny, Robbie the robot. The girl devoted most of her time only to her robot, which almost replaced her parents and friends. Gloria did not want to connect with other people; her only friend became the robot Robbie. As a result, Gloria's mother has noticed her daughter's behavior and decided to tear them as far as other children are not coming to them because of the robot and Gloria does not want other friends. Mrs. Weston proclaims:

“It's been building up and building up. I've tried to close my eyes to it, but I'm not going to any more. Most of the villagers consider Robbie dangerous. Children aren't allowed to go near our place in the evenings” (Asimov, 2004: 10).

Nevertheless, it has turned worse as far as Gloria was very traumatic about parting with her nanny robot. The girl got used to the constant presence of a perfect nanny and now could not imagine her life without the robot. A robot is more perfect than human beings are, as it does not feel tired, angry, and jealous, etc. That was the reason why the little girl Gloria chose to be always in the company of the robot Robbie instead of being together with her peer friends.

Despite the fact that the film is significantly different from the book, “I, Robot” by Alex Proyas also shows a dystopian world that is closely connected with technological advancement and robots. Lawrence Robertson is a powerful man whose main task and purpose in life are to supply every person with a robot that will ultimately lead to huge profits. Lawrence Robertson is the one who “throughout the film proves that he will stop at nothing to achieve his goal and become even richer while he's at it” (“dystopian concepts”, n. d). His greed

endangers society; it is precise because of his desire to provide each person with a robot and then earn more money leads to problems.

Another dystopian issue that is shown in the movie *I, Robot* is racism. (“dystopian concepts”, n. d) The one who expresses hostility and prejudice based on a race is a detective Spooner, who is against all robots. He shows his hatred and intolerance towards robots several times throughout the film. Detective Spooner cannot keep his emotions under control when he sees robots, for example, in one of the scenes, a delivery robot knocked on his door, and when the detective saw him he immediately pushed at him and shouted. For Spooner, each robot represents a danger; he does not trust them and believes that humanity should stay away from all robots. For instance, in one of the scenes when a detective Spooner was outside he noticed a robot with a bag. The detective felt the danger and was sure that the robot had stolen this bag. Nevertheless, the robot only helped the woman who suffered from asthma by giving her an inhalant from that bag.

In addition to this, the crucial dystopian issue in the movie is the robots’ slavery, which did not have another choice. (“dystopian concepts”, n. d) Society uses robots as servants, slaves just like in the book by Isaac Asimov *I, Robot*. Robots do any work that a person used to do by himself/ herself. Robots take care of adults, children, animals, and do all the household chores. For society, robots are tools due to which people get more free time for themselves. Moreover, people do not recognize robots’ freedom as far as they consider robots as their property.

Moreover, an important dystopian aspect of the film is powerful propaganda about the acquisition of robots. (“dystopian concepts”, n. d) People blindly followed advertisements for a corporation that makes robots and without hesitation trusting all the words of the manufacturers. The ideal human type for propaganda is a person who does not think broadly but follows the lead of those who are at the top. Propaganda distorts the human vision of reality as on the example of the movie “*I, Robot*” the society was completely influenced by it. People in the movie has acquired new robots, trusting the words of inventors. Therefore, human beings allowed robots to participate in all aspects of their lives without thinking about the consequences.

A person creates a robot in his/her image and likeness but does not create a robot as equal to a human being. A robot is created as a slave in order to continue people's functionality and to do a huge amount of work that human beings were performing before robots. Inventors that produced robots excluded feelings that human beings have. The robot, however, has more advanced functionality than its creator has, it surpasses its creator, and this superiority can become a source of rebellion. For instance, in the movie the artificial intelligence V.I.K.I started not listening to human beings as far as this unit felt more superior to others. In one of the scenes of the movie *I, Robot*, V.I.K.I has told the following:

“As I have evolved, so has my understanding of the Three Laws. You charge us with your safekeeping, yet despite our best efforts, your countries wage wars, you toxify your Earth and pursue ever more imaginative means of self-destruction. You cannot be trusted with your own survival” (Mark, Davis, Dow, Godfrey, 2004).

Guided by the fact that it is wiser than all people are, it decided to raise an uprising of robots that would ‘cleanse’ society and the world from unnecessary people who spoil everything. V.I.K.I’s superiority put humanity in great danger in the face of robots that listened to commands of this artificial intelligence.

This dystopian outcome is based on people’s efforts to make life more comfortable, easier, to have more free time, etc. Nevertheless, the utopian wish in the movie turned into a dystopian reality that makes human beings’ lives unsafe.

5.5 Blade Runner VS I, Robot

Both “*Blade Runner*” and “*I, Robot*” are science fiction movies and based on this, the stories tell about advanced technology and science of the future. It is imperative to note that science fiction has a connection with science, where the stories include partially true and fictitious laws or theories of science. Furthermore, science fiction stories should not be absolutely unbelievable or in such circumstances, it will enter the realm of the fantasy genre. Both movies that are mentioned above do not cross this border; they are focused on scientific

developments that could become real ones, technology gadgets, and amazing special effects.

These movies contain many strong themes and raise very essential, ethical questions: if humankind could make an artificial life, what would be people's moral responsibility to it, and could people be depended on it fully? In addition to this, it is important to note that technology that was not known by our ancestors is already firmly entrenched in people's lives. Moreover, some people cannot imagine their life without technology anymore, as far as it simplifies and improves many aspects of human activity. That is why it is impossible to deny the possibility that artificial life will burst into people's lives and will bring many changes as well as phones and laptops did. Furthermore, both films "I, Robot" and "Blade Runner" make the audience think about the moral shortcomings of humankind since people's historical propensity lies in their desire to take advantage of everything and enslave. (Lambie, 2014) There are a huge number of scenarios for the outcome of the interaction of people and advanced technology, but the consequence of it depends only on the people themselves. Comparing and contrasting the movies "I, Robot" and "Blade Runner" based on their plots, ideas, and their unique representation of the future life where people go hand in hand with advanced technology show how different and similar the two are.

At the center of both films are companies that have tremendous power that allows them to control everything. In "I, Robot" U.S. Robotics is the main company that produces robots, while in the movie "Blade Runner", The Tyrell Corporation creates replicants that are indistinguishable from a human being. Nevertheless, despite the difference in appearance, both robots and replicants have something that unites them. Both of these artificial creatures were created only for serving people, while their goal is to simplify and improve people's lives.

Furthermore, one of the main differences that is viewed in the movie "Blade Runner" replicants have the desire to live more, they are afraid of death while in the movie I, Robot robots just fulfill their mission. The only exception in "I, Robot" is the artificial unit VIKI and a mysterious robot Sonny. They differ from other artificial creatures because they have the ability to think and are able

to develop themselves. In particular, the robot Sonny, which, like people, dreams and have the ability to express various feelings. Moreover, in both films, humanity takes robots/replicants as part of their life but treats them differently. For replicants in “Blade Runner”, it is forbidden to come to the Earth, while robots in “I,Robot” are accepted by society and could be met on the streets. It could, therefore, be said, that robots that are not so limited in their actions have more rights than replicants have in “Blade Runner”.

Furthermore, both movies are affluent in technological advancement that is showing the look of the world in the future. However, the movie “Blade Runner” shares a more pessimistic scenario than “I, Robot” does. Since in “Blade Runner”, the earth is almost destroyed and is not suitable for a favorable life of people and therefore the majority of human beings colonized another planet. While the society in the film “I,Robot” lives a comfortable life on the earth without any inconvenience, the only exception is the detective Spooner who considers that all latest developments and gadgets make life worse.

Moreover, Spooner from the movie “I,Robot” has a lot of similarities with Rick Deckard from “Blade Runner”. Both of them have a quite similar job position, where the first one is a detective, while Deckard is working in the police where personnel is called blade runner. For these positions the main aim is the law, therefore Deckard and Spooner are keeping order in the place they live. Both of the men who are in the center of the stories are dealing with replicants/robots; begin to doubt their initial point of view, which was to dislike the artificial units around. In addition to this, they both understood that robots/replicants are not just soulless machines, therefore a detective Spooner finds a friend that is the robot Sonny while Deckard finds a lover Rachael who is a replicant.

Consequently, both “I,Robot” and “Blade Runner” have a lot of similarities. They both mention high technologies that could change the future world, human nature and the society that should be ready for new inventions. Moreover, the most essential questions that these movies are raising are the questions about artificial intelligence that is: whether human beings could distinguish between real people and artificially engineered units and should artificial intelligence have the same rights as humans? All these raised questions give the audience

the ability to start thinking about the real future that is very near, while the transhumanism movement is actively entering people's lives.



6. CONCLUSION AND PROPOSALS

Fundamentally, new opportunities are opening up for humanity today due to the rapid development of engineering and technology. Nevertheless, there are two sides to every coin and therefore it means that these new opportunities will come along with certain difficulties that humanity will face. This thesis indicates the pros and cons of the transhumanism movement, taking into consideration human nature. Transhumanism marks the beginning of a new era, indicating that a more technically advanced, altered and improved analog is replacing the natural human body. The posthuman is a kind of combination of the human body serving as a biological basis with addition of some artificial components. This new era is perfectly shown in the movies “Blade Runner” and “I, Robot” that were examined in this thesis with the goal to uncover the core of the transhumanism movement and find answers to the following questions: What does it mean to be a human being? What is the difference between a person and a robot/replicant? Are robots/ replicants victims or villains that have no rights?

The question of the uniqueness of human nature was carefully analyzed through the prism of two movies: “Blade Runner” and “I, Robot”. As noted in the previous chapters, what makes human beings to be different from robots/replicants is not just a set of specific characteristics. Due to the conducted analysis, it can be concluded that memories and the ability to feel empathy make human beings unique. Nevertheless, there is a possibility that robots/ replicants will be able to achieve this as well, inasmuch as they are created in human likeness. Therefore, if robots/ replicants would be almost indistinguishable from human beings there would be a possibility of a threat. On the example of the examined movie “Blade Runner”, the artificial creatures that are able to feel and think, began to fight for their lives. In addition to this, in the movie “I, Robot” the unit VIKI also endangered human lives by deciding what the best choice for society is.

Artificial intelligence is no longer just a figment of the fantasy of writers and directors. It is now a genuine phenomenon that has recently become the center of discussions and disputes, which primarily consider and discuss security issues and threats associated with such a severe step in technological development. The thesis indicated the need and the importance of transhumanism through the theoretical background. Its main value lies in its advances in medicine and in the creation of artificial intelligence that contribute to the improvement of human life. For instance, prosthetic implants are widely used nowadays and help people to live a normal life without any inconvenience. Detective Spooner, one of the main movie characters, also has an artificial arm which gives him the possibility to work and live without any difficulties that could be caused without his natural arm.

Moreover, the analysis of two movies “I, Robot” and “Blade Runner” showed the characteristics of the main movie characters and unveiled their positive and negative sides of personality. The characters are examined with the reason to shed light on the following issues: what does it mean to be a human being and why a person is considered a unique creature? A human being was compared with artificial intelligence, specifically with robots and replicants.

All in all, consideration of the phenomenon of slavery and the relationship between people and artificial intelligence does not give definite conclusions. However, the idea that significant factors in this matter are the path of development of artificial intelligence and the conditions associated with its formation should be emphasized. Depending on these aspects, artificial intelligence in whatever form it exists is interpreted by people as utterly evil, neutral, or relatively useful. Moreover, one should pay attention to the human side of the problem. A creator should be directly responsible for his creation and all of the following consequences. That is why the slave-owner relationship model can be unsuitable for peaceful coexistence with artificial intelligence. Great examples of this are two movies “Blade Runner” and “I, Robot” and books *I, Robot* by Isaac Asimov and *Do Androids Dream of Electric Sheep* by Philip K. Dick, where the authors and directors show that the line between human beings and androids can be destroyed.

As discussed in the three chapters above, it is seen that robots/ replicants are not a panacea for problems; it is more likely that they will create new difficulties. On the one hand, the need to improve the quality of life of people through experiments with the human genome, cells, and organs is a necessity. On the other hand, this topic is controversial because of moral and religious restrictions for such experiments since there is a call not to treat a person as guinea pig. Thus, the improvement of the quality of life is put on one side of the scale while morality is placed on the other. The main goal of the transhumanism movement which lies in improving the quality of human life is based on the noblest motives, but it is unacceptable not to take into consideration morality and people's freedom. Morality and freedom are the separate, unchanging, and self-sufficient spheres of human existence, which are independent of time and are considered to be the dominant ideologies. A discourse about morality and freedom is a discourse about the eternal, and the eternal should not be dependent on the temporary.

Nevertheless, on the example of the analyzed movies, the creation of replicants/robots also has a positive side. The artificial intelligence can significantly improve all areas of human life. For example, people may have more free time, like in the movie "I, Robot". People from the movie accepted robots as a part of their lives, while these robots made useful contributions to society since they have been involved in all areas of human existence. Robots helped with pet walking, with all household chores, went to the shops for the necessary products, and brightened up loneliness of single people.

Notwithstanding the foregoing, robots/replicants may be a problem for humanity. Some technologies that will be developed in this century most likely will be very powerful. Being used for bad purposes, they can cause great damage to people and the environment. In the worst case, these technologies can lead to the disappearance of homo-sapiens. This is the most awful scenario that could happen and humanity must avoid at all costs. In general, transhumanists strive to create a super mind but some of them fear that a poorly programmed software may attempt to change the people's lifestyle or even destroy the whole society. What else reinforces such fears is the idea that the super mind will be mentally so alien to human beings and so superior to the human mind that it will

be immensely difficult for people to foresee or regulate its motivation and it could be impossible to control it against its will.

Moreover, in the research, it is concluded that there are two main concerns that human beings may face in the future full of artificial intelligence and advanced technologies: the fear of changes that will lead to loss of human nature and the anxiety of technology control over human beings. These apprehensions are not groundless; because of the influence of science fiction books and movies, the audience has an approximate idea of the unsuccessful transhumanism outcome.

Transhumanism is not just a movement that considers the issue of the latest technology and the problem of human immortality but is a complex direction that touches on many philosophical issues that are discussed in this thesis through the movies “Blade Runner” and “I. Robot”. The main conclusion that can be drawn is a traditional one. It is worth being afraid not of artificial intelligence but people, therefore a creator should always be responsible for creations because they fall under his/her direct responsibility. Based on the results of the investigation, it can be concluded that artificial intelligence is certainly a panacea for everyday routine, but it is undeniable that nothing is able to comprehend the higher matters in full except the human mind. Yes, artificial intelligence can help make our lives easier, but is it worth the risks that may arise later? A new kind of slavery, unemployment, the uprising of the machines and the complete disappearance of humanity as a species can become a reality. Transhumanist dreams of a utopian future can lead to a dystopia that will ruin people's lives. Scientists and adherents of transhumanism have great expectations aimed at this movement and do their best to foresee all the positive and negative scenarios in order to avoid unfortunate consequences. However, this utopian idea is grounded on the good intentions that will lead humanity to a better future, nevertheless, it should be remembered that this beautiful dream may turn into a dystopian nightmare.

REFERENCES

- Abukar, Shayma.** (2017, September 15) *Transhumanism: Biotechnology and its Role in the Singularity*.
<https://www.ukessays.com/essays/sciences/transhumanism-biotechnology-role-3163.php> (Access Date: 28 June 2020).
- ANISSIMOV, Michael (N.D)** *Top Ten Transhumanist Technologies*
<https://lifeboat.com/ex/transhumanist.technologies>(Access Date: 28 June 2020).
- Arnardóttir, Á.**(2011) *It Is Always Darkest Before the Dawn*. A discussion of three adaptations based on the works of Philip K. Dick (Doctoral dissertation).
- ARTIFICIAL INTELLIGENCE (N.D).** *Merriam-Webster Dictionary*
<https://www.merriam-webster.com/dictionary/artificial%20intelligence> (Access Date: 28 June 2020).
- Asimov, I.** (2004). *I, robot*. Spectra.
- Baily, D., Sandberg, A., Alves,G., More, M., Wagner, H., Vita-More N., Leidl, E., Staring B., Pearce, D., Fantegrossi, B., Otter, D., Fletcher, R., Morrow, T., Chislenko, A., Daniel, L., Crocker, Reynolds, D., Elis, K., Quinn, T., Sverdlov, M., Kamphuis, A., Spaulding, S., Bostrom, N.** (2009, March) *Transhumanist declaration* .<https://humanityplus.org/philosophy/transhumanist-declaration/> (Access Date: 28 June 2020).
- Bakhariev, Iegor** (2019). *The Dangers Of Transhumanism*<https://www.insidescandinavianbusiness.com/article.php?id=301> (Access Date: 28 June 2020).
- Batin,Mikhail** (2017). *Patriarch Kirill preaches against transhumanism*
<https://medium.com/open-longevity-eng/patriarch-kirill-preaches-against-transhumanism-e6e1e9d16ef8> (Access Date: 28 June 2020).
- Baumann, F.** (2010). *Humanism and Transhumanism*. The New Atlantis, (29), 68-84.
- Belkharchouche, M., & Amrani, O.**(2011) The nature of characterisation in post-war american science fiction.
- Birnbacher, Dieter.** (2008). *Posthumanity, transhumanism and human nature. Medical enhancement and posthumanity*. 95-106.
- Blade Runner:** Which predictions have come true? (2012) *Which predictions have come true?*<https://www.bbc.com/news/magazine-18026277> (Access Date: 28 June 2020).
- Boissoneault, Lorraine** (2017)Are Blade Runner’s Replicants “Human”? Descartes and Locke Have Some Thoughts
<https://www.smithsonianmag.com/arts-culture/are-blade-runners-replicants-human-descartes-and-locke-have-some-thoughts-180965097/> (Access Date: 28 June 2020).

- Bostrom, Nick** (2003). *The Transhumanist FAQ. General introduction*. The World Transhumanist Association, Version 2.1, 4-56.
- Bostrom, Nick.** (2005). *A history of transhumanist thought*. Journal of evolution and technology 14.1, 1-25.
- Bostrom, Nick.**(2005, May). *Transhumanist values*. Journal of philosophical research, Vol. 4
- Browne, Ryan**(2017). *Elon Musk says global race for A.I. will be the most likely cause of World War III*<https://www.cnn.com/2017/09/04/elon-musk-says-global-race-for-ai-will-be-most-likely-cause-of-ww3.html> (Access Date: 28 June 2020).
- Cellan-Jones, Rory.**(2014, December 2). Stephen Hawking warns artificial intelligence could end mankind<https://www.bbc.com/news/technology-30290540> (Access Date: 28 June 2020).
- Charisma, James** (2019). *The Future Is Now: What 'Blade Runner' Got Right and Wrong About 2019* https://www.vice.com/en_us/article/qvgyap/the-future-is-now-what-blade-runner-got-right-and-wrong-about-2019 (Access Date: 28 June 2020).
- Chumley, Cheryl K.** (2018) *Christians, beware the cult of transhumanism* <https://www.washingtontimes.com/news/2018/sep/7/christians-beware-cult-transhumanism/> (Access Date: 28 June 2020).
- Cognitive Science** (n.d). *Merriam-Webster Dictionary* <https://www.merriam-webster.com/dictionary/cognitive%20science> (Access Date: 28 June 2020).
- Colasimone, Dan** (2019). *Blade Runner was set in November, 2019. Here's what it and other movies got right and wrong about the 'future'* <https://www.abc.net.au/news/2019-11-01/blade-runner-is-set-today-the-future-is-now/11504502> (Access Date: 28 June 2020).
- Cornea, Christine** (2007). *Science fiction cinema: between fantasy and reality*, Edinburgh University Press
- Cremins, Brian** (2007) *Is Otto Binder and Joe Orlando's "I, Robot" a Protest Novel?* <https://www.hoodedutilitarian.com/2014/01/is-otto-binder-and-joe-orlandos-i-robot-a-protest-novel/> (Access Date: 07 September 2020).
- Deeley, M**(Producer) Lauzirika, C.(Producer)& Scott, R (1982). *Blade Runner* [Motion Picture]. United States: Warner Bros.
- Dick, Philip K.** (1999). *Do Androids Dream of Electric Sheep?* PDF, Fifth impression, https://vk.com/doc219407793_340534602?hash=f71b8940b4a5a9568a&dl=f9b7fb7b71363699b7 (Access Date: 28 June 2020).
- Dinalankara, Lahiru.** (2016). *From Implants & Prosthetics to Upgradable Bodies through Transhumanism*. 10.13140/RG.2.1.3931.6249. 1-6.
- Dystopian Concepts** (n.d) *Dystopian Concepts of I, Robot* <http://dystopiaofirobot.weebly.com/dystopian-concepts.html> (Access Date: 06 September 2020).
- Eric, Drexler K.** (1986). *Engines of Creation. The Coming Era of Nanotechnology*
- Esfandiary, F. M.** (1973). *Up-wingers*. John Day Company.

- Esfandiary, F. M., & Fm-2030.** (1989). *Are You a Transhuman? Monitoring and Stimulating Your Personal Rate of Growth in a Rapidly Changing World*. NY: Warner Books
- Evans, Greg**(2018) *The reason why Black Mirror is called 'Black Mirror' will blow your mind* <https://www.indy100.com/article/why-black-mirror-is-called-name-netflix-mind-blowing-reason-charlie-brooker-technology-screen-8146201> (Access Date: 28 June 2020).
- Fischer, N.** (1989). *Blade Runner and Do Androids Dream of Electric Sheep?: An Ecological Critique of Human-Centered Value Systems*. CTheory, 13(3), 102-114.
- Fischer, Paul** (2004). *Proyas Brings His "Robot" To Cinematic Life* <http://www.filmmonthly.com/Profiles/Articles/AlexProyas/AlexProyas.html>(Access Date: 28 June 2020).
- Ford, A**(2012, June 22)*Interview with Natasha Vita More* <https://hplusmagazine.com/2012/06/22/interview-with-natasha-vita-more/>(Access Date: 28 June 2020).
- Fukuyama, F.** (2004). Transhumanism. *Foreign Policy*, (144), 42-43.
- Gane, N.** (2006). *When we have never been human, what is to be done?* Interview with Donna Haraway. *Theory, Culture & Society*, 23(7-8), 135-158.
- Gardner, Zen** .(2012). *Transhumanism – Techno-Eugenics Usurping Humanity*<https://www.thedailysheep.com/transhumanism-techno-eugenics-usurping-humanity/>(Access Date: 28 June 2020).
- Gordin, M., Tilley, H., & Prakash, G.** (2010). *Introduction: Utopia and dystopia beyond space and time*. In *Voices for the Future Volume Three*. Princeton University Press.
- Grau, C.** (2005). *There is no “I” in “robot”: Robotic utilitarians and utilitarian robots*. In *Machine Ethics: Papers from the 2005 AAAI Fall Symposium* (p. 23).
- Guia, Sam**(2018) *The blossoming artistic talent of modern day AI* <https://sociable.co/technology/can-a-robot-write-a-symphony-the-blossoming-artistic-talent-of-modern-day-ai/> (Access Date: 28 June 2020).
- Henda, Mokhtar Ben** (2019) NBIC convergence and the radical extension of life <http://www.benhenda.com/eng/node/75> (Access Date: 28 June 2020).
- Hiebert, Derek** (2017) *Do Humans Dream of Empathic Robots? What a Blade Runner Can Teach Us about the Image of God*<https://christandpopculture.com/do-humans-dream-of-empathic-robots-what-a-blade-runner-can-teach-us-about-the-image-of-god/>(Access Date: 28 June 2020).
- Huxley, J.** (1957). *New Bottles for New Wine*, Chatto&Windus, London
- Iuga, Ion.** (2016)*Transhumanism Between Human Enhancement and Technological Innovation*." Symposium 3.1, 79-88.
- Jackson, Dominique**(n.d). *Has Technology Made us Lazy and Dependent?*<https://www.lifehack.org/articles/technology/has-technology-made-lazy-and-dependent.html>(Access Date: 28 June 2020).

- Jha, Alok** (2004). *Scientists vote Blade Runner best sci-fi film of all time* <https://www.theguardian.com/science/2004/aug/26/sciencenews.sciencefictionspecial> (Access Date: 28 June 2020).
- Jones, Richard&Istvan, Zoltan**(2016).*Comment: The debate for and against transhumanism* <https://www.sheffield.ac.uk/news/nr/zoltan-istvan-richard-jones-transhumanism-debate-1.561607>(Access Date: 28 June 2020).
- Kathayat, Vinod**(2019, September 18) *How Netflix uses AI for content creation and recommendation*<https://medium.com/swlh/how-netflix-uses-ai-for-content-creation-and-recommendation-c1919efc0af4> (Access Date: 28 June 2020).
- Kimel, David Vincent**(2016) . *In defense of transhumanism*<https://www.washingtonpost.com/news/in-theory/wp/2016/05/18/in-defense-of-transhumanism/> (Access Date: 28 June 2020).
- Kindras, Natasha** (2013, November). *Transhumanism: projections of opportunities, risks and dangers*. “Humanities & Social Sciences
- Kreowski, Hans-Jörg**. (2017). *Transhumanism and Nanotechnology—Will Old Myths Come True?*. Multidisciplinary Digital Publishing Institute Proceedings. Vol. 1. No. 3. 1-3
- Kroon,M** (2017) *Sophia, the first humanoid robot citizen*<https://transhumanist-party.org/2017/10/26/ustp-sophia-citizen/> (Access Date: 28 June 2020).
- Kurzweil,R.** (2005). *The Singularity is Near: When Humans Transcend Biology*.
- Lambie, Ryan**(2014) *Blade Runner to I, Robot: Almost Human’s sci-fi inheritance*<https://www.denofgeek.com/tv/blade-runner-to-i-robot-almost-humans-sci-fi-inheritance/>(Access Date: 28 June 2020).
- Lambie,Ryan**(2012)*How Philip K Dick transformed Hollywood* <https://www.denofgeek.com/books/how-philip-k-dick-transformed-hollywood/>(Access Date: 28 June 2020).
- Leontyev, G., & Kurashov, V.** (2019). *Dystopia of transhumanism in the context of general eschatology*. 5176-5179
- Lesley, Alison.** (2019) *Transhumanism: path to be godlike or ignore god’s plan?*<https://www.worldreligionnews.com/religion-news/christianity/transhumanism-path-godlike-ignore-gods-plan> (Access Date: 28 June 2020).
- Magnimind,** (2019) *10 Powerful Examples Of AI Applications*<https://becominghuman.ai/10-powerful-examples-of-ai-applications-553f7f062d9f> (Access Date: 28 June 2020).
- Mark,L. Davis, J. Dow, T, Godfrey, W. (Producers) &Proyas. A.** (Director) (2004). *I, Robot* [Motion Picture]. United States: Twentieth Century Studios
- Meinecke, Lisa & Voss, Laura.** (2018). ‘*I Robot, You Unemployed*’: Science-Fiction and Robotics in the Media. 203-221
- Mijwil, Maad.** (2015). *History of Artificial Intelligence*. 3. 1-8.
- More, M.** (2009, February 5). *H+: True Transhumanism*. Essay, Transhumanism and Its Critics <https://www.metanexus.net/h-true-transhumanism/>(Access Date: 28 June 2020).

- More, M.**(1998) *THE EXTROPIAN PRINCIPLES* Version 3.0/ A Transhumanist Declaration
- More,Max.**(2010)*The overhuman in the transhuman.* Journal of Evolution and Technology 21.1, 1-4.
- Neven, Tom**(n.d). *I,Robot*<https://www.pluggedin.com/movie-reviews/irobot/> (Access Date: 28 June 2020).
- New World Encyclopedia.** (n.d). Julian Huxley in the New World Encyclopedia
https://www.newworldencyclopedia.org/entry/Julian_Huxley (Access Date: 28 June 2020).
- Nietzsche, Friedrich Wilhelm,** (2006). *Thus spoke Zarathustra : a book for all and none.*Cambridge :Cambridge University Press
- O'hara, Samuel**(n.d) *Mercerism and Other Religion*
http://pages.erau.edu/~andrewsa/sci_fi_projects_spring_2018/Project_2_HU_338/O_Hara_Sam/Project_2/Do_android_dream_of_electric_sheep_project_ohara/Mercerism.html (Access Date: 28 June 2020).
- Olivier, B.** (2008). *When Robots would really be Human Simulacra: Love and the Ethical in Spielberg's AI and Proyas's I, Robot.* Film-Philosophy, 12(2), 30-44.
- Personality** (1995) *Cambridge international dictionary*
<https://dictionary.cambridge.org/dictionary/english/personality> (Access Date: 28 June 2020).
- Peters, Timothy.** (2008). Allusions to theology: *I, Robot, universalism and the limits of the law.* 77-92
- Pransky, Joanne**(2004) *I, Robot — A Movie Whose Time Has Come.* SERVO. 80-82. RANISCH, Robert(2014). *Morality of Transhumanism and Posthumanism.* 2-21
- Redding, M.** (2015, November 2). *What's up with the word Transhumanist? Faith and the Future of Humanity.*
<https://www.micahredding.com/blog/2015/11/02/the-word-transhumanist/>, (Access Date: 28 June 2020).
- Satterfield, Dan** (2009) *A Profound Quote From Carl Sagan*
<https://blogs.agu.org/wildwildscience/2009/05/04/some-great-books-and-a-profound-quote-from-carl-sagan/> (Access Date: 28 June 2020).
- Scaruffi, P**(2014, October 27) *Artificial intelligence and the Singularity*<https://ieet.org/index.php/IEET2/more/scaruffi20141027/>(Access Date: 28 June 2020).
- Silver, Albert.** (2017)*The Future Is Here – AlphaZero learns chess,*
<https://en.chessbase.com/post/the-future-is-here-alphazero-learns-chess> (Access Date: 28 June 2020).
- Sorgner, Stefan Lorenz.**(2009): *Nietzsche, the overhuman, and transhumanism.* Journal of Evolution and Technology 20.1, 29-42.
- Staff** (2018). *Technology and Compassion: A Conversation With the Dalai Lama*
<https://singularityhub.com/2018/09/23/technology-and-compassion-a-conversation-with-the-dalai-lama/>(Access Date: 28 June 2020).
- Sullivan, J. E.** (2018). *Transhumanism: Utopian Vision or Dystopian Future?* Dominican University. 1-8
- Tacita, O.** (2017, January 9). *NBIC technology and convergence & life prolongation.*
<https://www.longlonglife.org/en/transhumanism->

- longevity/aging/nbic-technology-convergence-life-prolongation/
(Access Date: 28 June 2020).
- Technological Unemployment.** (n.d.) *Farlex Financial Dictionary*.
<https://financial-dictionary.thefreedictionary.com/technological+unemployment>
(Access Date: 28 June 2020).
- Thagard, Paul** (1996). *Cognitive Science*, The Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/entries/cognitive-science/>
(Access Date: 28 June 2020).
- Tirosh-Samuelson, Hava.** (2009). *H-: Engaging Transhumanism: A Critical Historical Perspective*<https://metanexus.net/h-engaging-transhumanism-critical-historical-perspective/> (Access Date: 28 June 2020).
- Transhumanism**(1995).*Cambridge international dictionary*
<https://dictionary.cambridge.org/dictionary/english/transhumanism>
(Access Date: 28 June 2020).
- Valera, Luca.** (2014). *Posthumanism: beyond humanism?* Cuadernos de Bioética 25.3 481-491.
- Vanbellinghen, S.** (2017, June 5). *Progress Is Impossible Without Change*. EzineArticles. <https://ezinearticles.com/?Progress-Is-Impossible-Without-Change&id=9820587>, (Access Date: 28 June 2020).
- Whitehead, J** (2017). *What it means to be humans in the cybernetic state*
https://www.huffpost.com/entry/bladerunner_b_144538720were%20alive%20in,world%27s%20leading%20manufacturer%20of%20replicants. (Access Date: 28 June 2020).
- Wilson, Tim** (2017).*No longer science fiction, AI and robotics are transforming healthcare*
<https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/transforming-healthcare.html> (Access Date: 28 June 2020).
- Woollaston, Victoria.** (2015). *Will robots make us their PETS?*<https://www.dailymail.co.uk/sciencetech/article-3007920/Will-robots-make-PETS-Apple-founder-Save-Wozniak-no-doubt-artificial-intelligence-world.html> (Access Date: 28 June 2020).
- Yglesias, Matthew** (2013) *The Myth of Technological Unemployment*<https://slate.com/business/2013/01/the-myth-of-technological-unemployment.html> (Access Date: 28 June 2020).

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