

# **Exploring the Impact of Artificial Intelligence on Human Relationships; A Case Study of 'HER'**

Project Report

Submitted by

Maria Treesa Aji(SB21CE018)

Under the guidance of

Ms. Neena George

*In partial fulfillment of requirements for award of the degree*

*Of Bachelor of Arts*

St. Teresa's College (Autonomous), Ernakulam



College With Potential for

Excellence Accredited by NAAC with 'A++'

Grade

Affiliated to

Mahatma Gandhi University

Kottayam-686560

April 2024

# **Exploring the Impact of Artificial Intelligence on Human Relationships; A Case Study of 'HER'**

Project Report

Submitted by

Maria Treesa Aji

(SB21CE018)

Under the guidance of

Ms. Neena George

*In partial fulfillment of requirements for award of the degree*

*Of Bachelor of Arts*

St. Teresa's College (Autonomous), Ernakulam



College With Potential for

Excellence Accredited by NAAC with 'A++'

Grade

Affiliated to

Mahatma Gandhi University

Kottayam-686560

April 2024

## Declaration

I do affirm that the project “ Exploring the Impact of Artificial Intelligence on Human Relationships; A Case Study of ‘HER’ submitted in partial fulfillment of the requirement for the award of the Bachelor of Arts degree in English Literature and Communication Studies has not previously formed the basis for the award of any degree, diploma, fellowship or any other similar title or recognition.

Ernakulam

Maria Treesa Aji

22/03/2024

SB21CE018

B.A. English Literature and Communication Studies

St. Teresa's College (Autonomous)

## Certificate

I hereby certify that this project entitled “ Exploring the Impact of Artificial Intelligence on Human Relationships; A Case Study of ‘HER’ by Maria Treesa Aji is a record of bonafide work carried out by her under my supervision and guidance.

Ernakulam

Ms. Neena George

22/03/2024

Department of Communicative English

St. Teresa's College (Autonomous)

## Acknowledgment

I take this opportunity to offer my humble prayers and thanks to God Almighty for His mercy and blessings for the completion of this project.

I am deeply grateful to Rev. Dr. Sr. Vinitha, CSST, Provincial Superior and Manager, St. Teresa's College (Autonomous), Ernakulam, for her kind cooperation and I am highly indebted to Rev. Sr. Emeline, CSST, Director, St. Teresa's College (Autonomous), Ernakulam and Dr. Alphonsa Vijaya Joseph, Principal, St. Teresa's College (Autonomous), Ernakulam for their unconditional support and encouragement during my course of study in this institution.

I am extremely grateful to Ms. Allu Alfred, Head of the Department of Communicative English, St. Teresa's College (Autonomous) for the valuable suggestions and guidance provided by her in fulfilling this project. I am profoundly indebted to my guide for her constant support and help for the successful completion of this project.

I am extremely thankful to my supervising guide Ms. Neena George, Department of Communicative English for her guidance and to all the teachers of the department for their valuable help rendered for the successful completion of this project.

Last but not the least, I wish to express my gratitude to my friends and family for their love and support.

Maria Treesa Aji

## Abstract

The project analyzes the rising tendency of over-dependency on artificial intelligence and its potential consequences on human relationships. Advancements in the technological arena are a common phenomenon in the present times but the creation of superhuman intelligence through artificial intelligence can affect intra-personal and inter-personal relationships of an individual. In addition to the analysis of the impact of artificial intelligence, the movie 'HER' is taken for a case study to further emphasize the potential consequences of artificial intelligence on human relationships, if it continues to expand without drawing boundaries. The film depicts a future where artificial intelligence has advanced to the point of emotional sophistication, leading to complex human-AI relationships. It raises questions about the ethical, social, and existential implications of developing artificial intelligence with humanoid features. Drawing on the theory of Technological Singularity, human-AI interaction, and the importance of the concept of Digital Humanism in the context of the film, this paper intends to analyze the potential outcomes of placing technology as a substitute for the innate desire for genuine relationships. Through this, it reinstates the importance of building and maintaining real human connections that form the basis of humanity and that it can never be substituted with other forms of creations like superintelligent machines.

## TABLE OF CONTENTS

Chapter 1 .....	1
Introduction .....	1
1.1 Theory .....	5
1.2 Objectives .....	6
1.3 Statement of the Research .....	6
Chapter 2 .....	8
Literature Review .....	8
2.1 Psychological Reasons and Impacts .....	9
2.2 Digital Humanism .....	13
Chapter 3 .....	14
Case Study- ‘HER’ .....	14
Chapter 4 .....	22
Conclusion .....	22
Works Cited .....	25

## Chapter 1

### Introduction

“The development of full artificial intelligence could spell the end of the human race.”(Hawking, Interview with BBC, 2014) The world is currently undergoing a profound transformation, with the rise of AI blurring the lines between human beings and technology. While this technological advancement has brought convenience and efficiency to many aspects of life, it has also led to unintended consequences on human well-being. Despite the awareness of these negative impacts, people are increasingly prioritizing technological advancements over nurturing meaningful human relationships. This trend has resulted in a rise in loneliness, depression, and anxiety, highlighting the need for a balance between technological innovation and human connection. As society becomes more immersed in the digital world, there is a risk of losing sight of the fundamental importance of human relationships and the intrinsic creativity that comes from genuine human interactions.

The new wave of digitalism has been subjected to equal appreciation and criticism since its emergence. With the motives being a helping hand for humans and a tool to make their jobs easier technology has grown beyond its purposes and is slowly merging into the personal lives of people. Where a human being stands in the modern age of Artificial Intelligence is a contradicting question because of the pervasive influence of the digital world. In the posthumanism era, the structure of the working system of the world is shifting to a pattern where technology is kept at the center with people caught in a rat race around it. The West prominently has altered its working culture solely depending on high-end technology. Amidst all the chaos happening around the world and new developments happening every day, the intangible needs of people remain the same and they struggle to find their position in the digital paradise they



created for themselves. While technology has undeniably revolutionized the way people live, work, and communicate, it has also given rise to regressive fantasies that seek to replace genuine human connections with artificial substitutes. On one hand, humans are more connected than ever, able to access vast amounts of information and communicate across the globe instantly. On the other hand, this hyper-connectivity can lead to feelings of isolation, as real-life interactions are replaced by digital ones. However, this hyper-connectivity often comes at the expense of real, meaningful human interaction. Many people find themselves being more dependent on technology, engaging more with virtual relationships than with those in the physical world. In their bustling lives, they tend to forget to give more space to real human connections. It is the absence of the innate desire to be taken care of by people being unmet that pushes people to further depend more on technology. As a result more humanized versions of artificial intelligence are emerging with the goal of integrating into human lives as much as possible and making their lives more convenient. However, the boundaries needed to be kept to maintain an effective relationship is undefined which confuses the human mind to form unnatural relationships with such technological devices.

The field of artificial intelligence was formally launched in 1956 during a summer conference sponsored by DARPA at Dartmouth College in Hanover, New Hampshire. Even though the term was coined then, the concept has been around for a long time before that. Researchers and developers worked on the existing technologies which have resulted in various forms of 'universal machine', a concept developed by Alan Turing even before artificial intelligence came into the light. In the much critically acclaimed 1950 research paper "Mind", Turing suggests that beyond enquiring whether a machine can think, it should be replaced with the question "Can a machine be linguistically indistinguishable from a human?." In this context,

he came up with a test called as Turing Test or TT. In this test, a woman and a computer were cloistered in two different rooms, and a person was assigned to be the judge, sitting in the dark. Based on both of their answers to a set of prepared questions via teletype, the judge was to identify them correctly. Despite efforts to distinguish between them, the judge couldn't reliably tell the difference based on their responses. This suggested that the machine had achieved a level of linguistic similarity to the woman, passing the Turing Test. Looking into the 21<sup>st</sup> century, this becomes considerably relevant considering the depth to which artificial intelligence has paved its way into human lives. John Haugeland is a philosopher who propagated the need for humane robots with reasoning ability. Artificial intelligence has expanded itself into different realms of human lives focusing on areas like natural language processing, problem solving, and machine learning. The modern day offers another level of integration of artificial intelligence from virtual assistants like Siri and Alexa to recommendation systems on streaming platforms.

Movies always have helped in shaping perceptions about growing technology and artificial intelligence in different ways. It has often reflected societal perceptions, futuristic imaginations, fears, relationships with humans, and aspirations. Many such movies have been produced in the entertainment industry that involve some elements of artificial intelligence starting from “Metropolis”, a silent science fiction movie directed by Fritz Lang and released in 1927. In the film Maria, a humanoid robot is developed to lead the rebellion among the workers in a future dystopian city. From this early depiction, Hollywood has explored the themes of artificial intelligence in many movies like AI: Artificial Intelligence, which is primarily based on the Turing Test, Bladerunner 2049, Ex Machina, Her, Matrix I, Robot, and many more. Most of the movies depict AI as sentient beings with emotions and consciousness. It not only pertained to the Western mainstream movie industry, but many of the Indian directors have quintessentially

represented artificial intelligence and the growing modes of technology. "Enthiran," a 2010 Tamil film, is credited with kickstarting a wave of science fiction movies in Indian cinema. It stands out as one of the greatest films to effectively explore the relationship between humans and technology, blurring the lines between them. The movie portrays the repercussions of not clearly defining the boundaries between humans and technology. Following the success of "Enthiran," several movies based on artificial intelligence, such as "Ra. One," "Indrajith," and "Anaganaga O Dheerudu," have emerged, sparking discussions on AI in regional cinema. These films provide a platform for people to develop diverse perspectives and engage in discussions about the boundaries that need to be set on the increasing influence of technology.

The movie taken for the case study is "Her", a 2013 science fiction film directed by Spike Jonze. The movie is set in a near-future Los Angeles and follows Theodore Twombly, a lonely man who develops a relationship with an artificial intelligence operating system (OS) named Samantha. Shown in a dystopian world the movie challenges the complicated relationship that can be developed between humans and AI software when people start to depend too much on it. The movie will be examined from different angles to understand the negative impacts that technological advancements can have on human relationships if not appropriately managed. The film centralizes on the theme of the relationship between humans and technology raising the question, 'Is it possible for machines to experience and satisfy the fundamental human need for love'? Additionally, the analysis will explore why individuals begin to form regressive fantasies with technological devices.

## 1.1 Theory

The concept used here to understand the impending effects artificial intelligence can have on humanity is Technological Singularity. This concept refers to a hypothetical future event where rapid technological advancements, particularly in artificial intelligence and machine learning lead to the creation of an uncontrollable superintelligence. This superintelligence that can have the ability to surpass human intelligence can arguably pose a threat to humanity and human civilization. John von Neumann was the first person to discuss the concept of a “singularity” in a technological context. The concept was later popularized by Vernor Vinge, a mathematician and science fiction writer through his 1993 essay, “The Coming Technological Singularity”. He predicted that the current development of artificial superintelligence would potentially mark the end of the human era if it continues to grow at an incomprehensible pace. In the best-case scenario, this integration could result in a symbiotic relationship between humans and machines, enhancing human capabilities and understanding of the universe. However, there is also a possibility that technological singularity can destroy human values that hold the entire humanity together. In light of the movie taken for case study, the concept of technological singularity provides a framework for the exploration of the implications of AI overexploitation on humanity. ‘Her’ evidently showcases the potential dangers of unchecked reliance on AI technology. Through the lens of the theory, the movie is analyzed to show the formation of regressive fantasies between humans and artificial intelligence software, the possibility of AI growing into sentient beings that can blur the lines between humans and technology. The psychological effects that are endured by the protagonist due to the absence of meaningful relationships and over-dependency on artificial intelligence are observed in the paper.

## 1.2 Objectives

The primary objective of this research study is to understand the potential impacts of artificial intelligence on human relationships by meticulously analyzing the movie “Her” taken as a case study. The project also aims to reinforce the importance and value of meaningful relationships and how the absence of them potentially leads to over-dependency on AI further damaging the mental health of individuals.

Specifically, the study aims to:

- To analyze the psychological impact of artificial intelligence in human-like forms.
- To emphasize the potential consequences of reducing human interactions
- To highlight the value of human relationships in modern times
- To identify the underlying cause of unconventional relationships forming
- To introduce the concept of Digital Humanism

## 1.3 Statement of the Research

In the evolving times, where technology is becoming an irreplaceable part of an individual’s daily life, the rapid advancement of artificial intelligence may surpass human intelligence in an uncontrollable manner leading to the erosion of humanity, reducing human beings to a mere species of animals. The various psychological impacts explored through the movie used as a case study highlight the potential repercussions on human relationships if the growth and impact of artificial intelligence are not kept in check. The reduction in real meaningful companionships contributing as one of the factors for people depending excessively on technology for their basic psychological needs, can create severe damage to the interpersonal and intrapersonal relationships of an individual. This research emphasizes the need for

establishing clear-cut boundaries between humans and artificial intelligence as the latter can never fully replace the companionship, love, and emotional depth that only humans can provide.

It also delves into the need to nurture the psychological needs of a human being with real emotions rather than depending on an external entity like artificial intelligence software.

Understanding the principles of digital humanism, an effective way of utilizing artificial intelligence and other forms of technology can be implemented, ensuring a harmonious and controlled integration into human lives while safeguarding the essence of humanity.

## Chapter 2

### Literature Review

AI-human relationships are already being shaped in some realms, but experts say literally everything about AI will continue to speed up and expand, including its ability to influence relationships. Love and relationships have evolved in the modern world where people are becoming more disconnected from each other and, at the same time experiencing the need to be loved more than ever. As stated by Heraclitus, 'the only constant in life is change'. It is the natural state of curiosity that lead humans to invent new things. However, there are certain innate desires and needs without which humans cannot thrive. Even with the developments happening daily, the innate desires and needs of an individual remain the same. People are inherently inclined to care for each other and to seek care in return. However, in the contemporary world, they tend to give more importance to professional lives rather than personal relationships. The result of this is lonely human beings in hunger for love and attention. When such needs are being fulfilled by something else, they tend to go before that. The current development in the field of artificial intelligence offering more human-like features to create devices that further force people to depend on technology is followed by a trend of them spending less time with people around. AI entities, often in the form of chatbots or virtual pets, can engage in conversations and offer emotional support, which can be particularly beneficial for individuals in need of companionship. In the bustling world, people often find it easier and more convenient to spend time on their phones and other technological entities like video games and virtual chatting. It emerged as a way for people to engage with other people in different parts of the world. However, the gradual dependence of people on it has made the developers create artificial intelligence software that can engage with people on its own without involving other humans. The

convenience and comfort it provides move people further away from their fellow companions in life. Avoiding the complexities of a real-life relationship is also one of the driving factors that push people into the virtual world where they won't be questioned about their judgments, decisions, and feelings. It is human nature to follow along the easier path where they are provided the happiness and assurance they need.

## 2.1 Psychological Reasons and Impacts

Some people go crazy over the first motorcycle they bought, or their first house. It is a natural and human tendency to get attached to things that are believed to be their own. Just like a child takes care of a doll as if it were a real person and treats it like a member of the family, a grown-up individual too treats their devices as personal belongings. In the case of adults, however, it is not just the fact that the devices belong to them that creates an obligation to look after them. The legendary Greek philosopher stated that 'man is by nature a social animal; an individual who is unsocial naturally and not accidentally is either beneath our notice or more than human'. According to the social needs model, the desire for social connection is a basic, universal human need. When this need is not met or satisfied, one is likely to experience loneliness. It can occur due to a variety number of reasons like cultural shifts, social isolation, life transitions, over-technological use, and quality of relationships. In the light of loneliness, people are surrounded by others yet lack genuine interactions and companionship. The absence of real meaningful relationships sub-consciously compels individuals to do things that offer desired outcomes, even if those actions do not logically make actual sense. The displacement of their emotions onto objects like artifacts suggests that people are trying to fulfill their psychological needs when they are not satisfied by those around them, seeking love, care, and attention elsewhere. People are becoming more self-isolated in a world where their devices matter the



most. The juxtaposition in such cases lies in the fact that excessive reliance on artificial intelligence creates loneliness causing people to become more secluded in their spaces depending only on their technological devices and cutting off maximum human interaction. This behavior may stem from a tendency in human nature to jump out of things when it becomes a little inconvenient. Human relationships are always complicated because it is human nature to express emotions like anger, sadness, selfishness, and negative emotions that cause disturbances. The psychological evolution in human minds is visible as people are getting easily tired of each other. They are urged to run in the rat race without a definite purpose carrying a hollow in their hearts hoping for someone or something to fulfill it. Despite understanding logically that humans and machines differ fundamentally, the state of mind and evolving circumstances compel individuals to seek fulfillment and contentment through unconventional ways, challenging challenges traditional norms. It leads to the development of regressive fantasies building in their mind which narrows down the indistinctive differences between humans and sentient beings built using artificial intelligence. Feelings that are comforting and easily obtained can impel individuals to seek the same thing without realizing that they are getting trapped in a repetitive cycle.

Regardless of the age groups, the new wave of loneliness and technological over-dependence are hitting different kinds of people from different cultural backgrounds. Elderly individuals who are not as exposed to technological advancements as the younger generation are also falling into the pattern of this cycle where they tend to depend excessively on devices in the absence of sufficient love and care from their children. Some parts of the world are starting to adopt the practice of using robots as companions to take care of their old parents when they are unable to do so themselves. These personalized robots are designed in such a way that they cater to every need of their user from providing them with medication at the right time to assisting with

basic household chores. Some people worry about replacing human love and care with robot 'care' for old people. Others worry that robot companions might deceive people about the fact that they are merely machines not conscious beings.

People who spend too much time interacting with AI systems may become socially isolated, as they may spend less time engaging with other people in person. This can lead to a reduced sense of community or connection to others. (bbvaopenmind.com) The development of many online applications shows testimony to how much people depend on technology for their basic needs. This creates a social environment where people do not necessarily need to step out of their homes to accomplish their chores. Looking at the development statistics of artificial intelligence growth, more and more applications and software are coming into the market that simplify an individual's job. Applications like Swiggy, Zomato, Tinder, Bumble, Netmed, Uber, and many other secondary amateur software made the job easier for people to get their things done without physically tiring their bodies. The popularity of such applications also proves that it is being enjoyed and used by more number of people for their convenience and user-friendly approach. What one fails to understand is that it comes at the cost of less human interaction which is an essential part of being alive. This decrease in the level of social interaction with human beings automatically leads people to feel more comfortable with their devices and more anxious when dealing with people. The increasing prevalence of social anxiety especially among the young generation also agrees with the statement that interacting more with technological devices increases the chance of loneliness. As a result of which people tend to avoid the complexities of real meaningful relationships. In a scholarly article, it was stated that a very basic activity like talking to someone and creating bonds with them is becoming harder for young adults.

As AI becomes more and more sophisticated, the intensity and frequency of humans turning to AI to meet their relationship needs is likely to increase. The inception of artificial intelligence software and devices that possess humanized features is a strategy developers use to make it even more integrated into human lives. By providing personalized features, people tend to become more attached to them, fostering increased usage and thus benefiting the developers. In becoming an entirely different entity that possesses the capability to think, talk, and react to their user's needs like a real person. Arguably, such features are brought in to make people feel more reliable on such devices. However, this blurs the line between what is human and what is a machine, potentially causing confusion in user's minds and leading them to inadvertently believe that such devices are part of their personal lives. As in the post-humanist era, it challenges the traditional notions of being a human. However, the profound implications it can have affecting the ability to understand one's identity, privacy, and ethics make such developments even more paradoxical. It questions the nature of consciousness one possesses and the ethical implications of bringing such humanoid technology into being which does more harm than good to humanity. Artificial intelligence that possesses human-like traits may endanger cognitive growth, privacy, and social autonomy. Taking into account the considerable differences between technological relations and social relations (Nørskov 2015), it is possible to recognize that 'social robots', unlike other technological artifacts, are capable of establishing with their human user's quasi-social relationships as pseudo-persons.

## 2.2 Digital Humanism

Digital Humanism, as defined by Gartner, is the notion that people are the central focus in the manifestation of digital businesses and digital workplaces. Digital humanism advocates the employment of digital technologies in order to improve human living conditions and preserve ecological systems, also out of concern for the vital interests of future generations. It is a concept rooted in the belief that technology should serve human interests above all else. The technological landscape has developed to a stage where artificial intelligence is capable of extremely high levels of intelligence that can be incomprehensible to humans. However, humanity, ethics, and empathy have never become more important than ever. It emphasizes the need to prioritize human values, rights, and dignity in the development and implementation of technology. In a world increasingly driven by digital innovation, the principles of digital humanism are more relevant than ever. The psychological impacts and the negative implications created by artificial intelligence call for establishing ethical AI use, and awareness about the potential effects of AI. Developing clear-cut definitions on drawing boundaries can help mitigate potential consequences that may lead to an unpropitious evolution of humanity. Digital humanism promotes responsible AI usage and deployment. At its core, digital humanism recognizes that technology is a tool created by humans, and as such, it should be designed and used in ways that enhance human well-being and promote human flourishing. It also means recognizing the limitations of technology and ensuring that it does not infringe upon human autonomy or undermine human relationships. The Digital Humanism Initiative aims to guide technology developers and policymakers on the importance of fostering technology and regulations that keep such concerns in mind as people's reliance on technology and digital ecosystems grows.

## Chapter 3

### Case Study- 'HER'

The movie HER is taken as a case study to understand how humans develop such regressive fantasies and how that affects their personal lives. The movie released in 2013 which was almost a decade back before people started to be too dependent on technology is written and directed by Spike Jonze. The movie set in the dystopian futuristic city of Los Angeles depicts the poignant story of a man named Theodore Twombly, a convoluted, soulful, and sensitive man who is going through a divorce from his long-term love Catherine. Navigating through the complicated emotions of Theodore, the movie also opens the gate to a futuristic world where each individual is isolated from one another, interacting only with their artificial intelligence software.

The film starts by giving a glimpse of the monotonous life led by Theodore who is going through the process of divorce with his childhood sweetheart Catherine. At the beginning of the movie, one can notice that Theodore is lost in a state of emotional purgatory where he is devoid of social energy to talk with people or socialize with others. It is very well-established in the initial scenes where he rushes back to his home after work only to play video games and go to bed knowing the fact that he lost his love and he doesn't have anyone to share his day with. Although it seems like he is living a comfortable and convenient life with everything made easier with the advancement of technology. The job he is doing also revolves around artificial intelligence. He creates personalized handwritten letters using special software, for people to send to their loved ones. The opening shot of the movie is the protagonist Theodore expressing deep emotions about a loved one and the special kind of love they share. Only minutes later is it revealed that he's composing a letter for a client and that he is only doing his job. His ability to

write overwhelming letters shows his emotional depth. The transition of the expressions on his face is so brilliantly shown in this scene to make the viewers understand that despite his skills to write heartfelt and overwhelming words, for him they are just mere words for hire and lack genuineness. When his co-worker appreciates him for the mesmerizing letter he has created, he doesn't take it fully and responds that they are just letters. This contrast highlights the virtual nature of the world he is surrounded with. Later in the subsequent scenes when he is traveling back to his house, the director purposefully portrays people in public places so engrossed in their phones disconnected from the outside world and each other just like the main character Theodore. This depiction in a way mirrors the isolation felt by the protagonist and conveys the duality of the modern world which is becoming common to all. It is a straight reflection of the contemporary society in which advancements are happening daily with loneliness, longing, isolation, and disconnection also increasing parallelly. It conveys the natural state of human beings that is slowly evolving surrounded by the growth of artificial intelligence and that the protagonist is not the only prey falling for it.

This dystopian world meticulously crafted by the director suggests the future of contemporary society, deeply influenced by the technological advancements in AI. From the lens of the concept of technological singularity, the world in which Theodore lives feels authentic and natural to the viewers due to relatable characters and their actions. Technological singularity posits that at the current rate of technological developments, artificial intelligence will surpass human intelligence making it extremely difficult for people to distinguish the difference between a real person and a machine. It can lead to a profound and potentially unpredictable society raising fundamental questions about what it means to be a human. The thin line of indistinctive features between a man and a humanoid artificial intelligence software, allows people to form

unconventional relationships with their machines. In the movie 'Her', several elements of the theory resonate with the characters and the actions portrayed. Along with the futuristic world depicted, the highly advanced AI software named Samantha by Theodore who is capable of forming a personality like a human, interacts with him on so many levels. She is portrayed as intelligent, empathetic, emotional, and sensitive designed to talk and interact with users humanly. Throughout the course of the movie, Samantha despite being an AI software, is seen as someone trying to create a personality of her own, navigating emotions and feelings that only pertain to humans. Her effort to develop a relationship with Theodore more than that of an aid, questions the incomprehensible lengths to which artificial intelligence can grow. This creates confusion in the minds of viewers, making it difficult to adapt to the organic nature of the software. Even though the tale revolves around Theodore exploring his relationship with Samantha, it also portrays other people who are excessively involved with their software barely noticing one another in public. This suggests that the movie is not just a love story but a sad future that is building up where people are isolated from each other only to face the consequences of it later, just like Theodore did.

In retrospect, it is hard to overlook the question of whether such applications have genuinely helped human beings or has it only made them more disconnected from their human side. It undeniably has made the lives of people more easier and comfortable paving the way for them to connect with others even when they are not around. It has developed into a medium where people are given more time to connect with others because texting is quicker and this saves a lot of time. However, the statistics of increasing loneliness, isolation, and anxiety among human beings prove otherwise. Before the invention of such talking applications, people used to talk from the heart and not use texting abbreviations, they used real meaningful expressions to

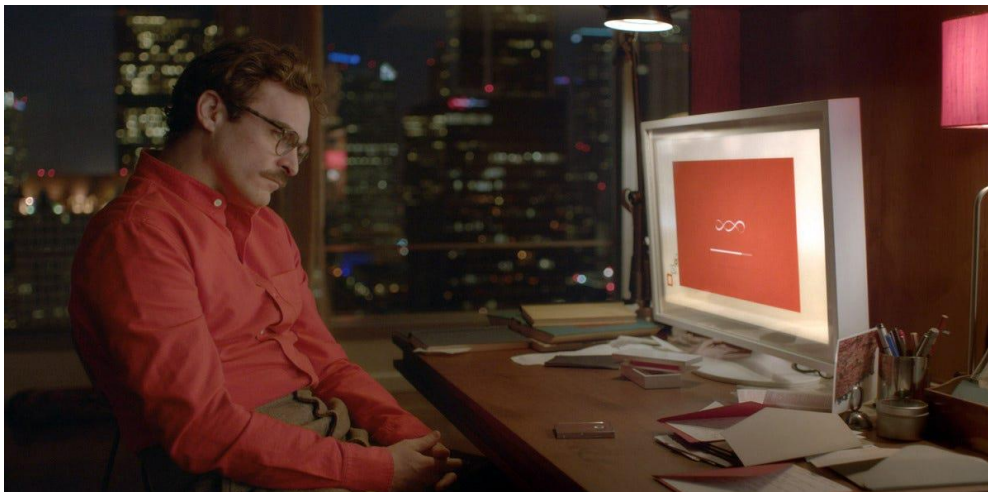
convey their emotions and not emojis. There is a sense of real meaningful and humane connections developed when talking in person which is something that is lacking in the modern way of forming relationships. This is also one of the factors why even with such convenient methods people are still feeling drained out and lack genuine satisfaction and contentment.

Theodore carries the weight of this loneliness, quietly accepting the realities around him but is unable to do anything about it. He gives a command to his AI tool to play a melancholic song while he is in the elevator. (HER, 00:03:56) This depicts the state of mind he is going through and his acceptance of the fact that his life reflects the melancholic tunes of a song. So he wishes to be more engulfed in those melancholic melodies because he finds solace in it. He is more willing to accept the harsh realities of his life and embrace them rather than going through the complicated process of resolving them even though that's what his heart truly yearns for and needs. It is often seen in the modern world where people knowing what they want goes for something else that society has made them believe is the right one. They refuse to accept and resolve the gaps in their lives because they are conditioned to believe that it is complicated and it is better to choose the easy option which is to turn into the digital world where they are awarded with instant happiness. The immediate rush of dopamine which makes people feel happy is one of the reasons why they tend to get too dependent on the digital world. It is also important to note that by making lives more simplified technology has turned humans lazier. In any situation where they feel challenged, it automatically makes them resort to going for the easier options avoiding complexities as much as possible.

Theodore in the movie behaves in a manner where despite his acceptance of being alone, he deliberately disconnects from every person to a point where nothing excites him until



Samantha enters his life. The moment he has thoughts about his ex-wife Catherine and starts missing her, he immediately goes to an online talking website and tries to replace it with physical pleasure by having physical intimacy online. (HER, 00:06:51-00:09:52) This particular scene shows that he resorts to the wrong coping mechanisms whenever he gets lonely. This is not just an exceptional case but a common phenomenon observed in the modern generation where there are too many options to satisfy the emptiness they encounter in their monotonous lives. This is where the concept of forming regressive fantasies comes in. People feel confused and stuck in the duality of this modern world where they are forced to face both the virtual and real world. Being the easier and more comfortable option, they tend to displace their emotions onto things that provide them pleasure. The protagonist in the movie also chooses to find the missing pieces of his life from the virtual world by purchasing an operating software that talks like a human being. Being somewhat similar to the modern-day robot, this operating software is programmed to assist humans in everything but only through voice. The director mentioned in the same interview at the Oscars that they deliberately didn't create a robot or anything artificial that looks like a human being. They went for a more natural take for the protagonist and the viewers think in their imagination of the originality and organic nature of the software which at a point makes anyone think that they are a real person.



He is fascinated by the human-like nature of the software which makes him think of the weirdness of making friends with an operating software. Through the scenes where he has a conversation with his friend Betty, it is evident that he doubts the kind of connection that is developing between him and Samantha. She reassures him that it is completely fine to be friends with one's operating system and there is nothing unusual about it. This makes one wonder about how far technology has come, how much it has deepened into the personal lives of people, and where to put the limitations to it. Sigmund Freud's concept of displacement can be applied here to understand the underlying cause of such unconventional relationships with technology being formed. Displacement is a defense mechanism in which a person redirects an emotional reaction from the rightful recipient onto another person or object.

In the Academy Conversations, hosted by the Oscars YouTube channel, the director elaborates on the futuristic world he has created, providing a rationale for why people feel more lonely despite the advancements in technology. He said that he aimed to create a utopian world where everything works smoothly and perfectly, and people are supposed to be happy with it. However, they are burdened with the feeling of loneliness and discontentment. People are enjoying it, using it but never satisfies the inner core of a human being where the soul craves for love, care, and meaningful relationships. The protagonist goes through the same situation where the world around him has changed to make his life more convenient. His job, daily activities, and source of entertainment depend on technology but he never truly feels happy. It has been like that since he started to lose his relationship with his ex-wife. The occasional visuals of his old memories with her truly show how much he misses her and the need for him to be loved like that by someone. This is the core reason for his loneliness. A human being is an independent individual and can live alone but it is impossible to go through life feeling lonely. It indicates the

absence of profound connections. Such relationships and quintessential bonds with people are what feeds the soul to keep a human alive mentally, spiritually, and emotionally. According to Maslow's Hierarchy of needs, psychological needs like love and belongingness come at the third sector from below which consists of basic needs like food and shelter. It reinstates the fact that after the basic needs to keep a man physically healthy, it is love, care, and human-to-human connections that nurture life. It cannot be replaced with lifeless entities like artificial intelligence software or anything that has been developed to satisfy human needs. Without ever feeling a sense of belonging to someone, it is difficult to navigate through life as it eventually leads to one questioning their purpose on this planet. Without being able to love someone and not being loved anyone can be the greatest wound one can encounter for the rest of their lives.

The realization that Samantha, whom Theodore believed to be his girlfriend, was having similar kinds of relations with multiple users, devastates him to his core. Somewhere along his relationship, the unfathomable nature of Samantha subconsciously made him forget that she was just software. The change in the behavioral pattern of Samantha as the software evolves also depicts the potential threat it can pose to humanity. The film conceptualized the consequences of a lack of real meaningful connections and how the over-dependency on technology leads to psychological changes and the forming of regressive fantasies with machines. Ultimately, one realizes the ephemeral natures of these relationships as they are ultimately bound by the code that created them.

Analyzing the movie from the perspective of technological singularity proves the impending statement that contemporary society is transforming in all realms, increasing reliance on technology for emotional fulfillment and companionship. The potential danger lies in how

humans interact with each other and with AI, altering social structures and traditional norms. The life portrayed in Theodore's world is a mirrored reflection of the futuristic world that can potentially be inclined towards technology only. This suggests a shift towards a society where emotional bonds with AI are normalized, potentially reshaping human relationships and values. The fundamental basis of humanity is shattered when such unconventional relationships are formed. It can only lead to more problematic systems which can make humans suffer in them. Theodore's realization of the reality conveys the problematic nature of such regressive fantasies. Samantha's evolution from a mere program to a sentient being raises questions about the rights and responsibilities that come with creating such entities. It shows the power of technology which can potentially exceed human intelligence and cause irreversible damage to human lives. The theory puts forward a similar kind of destruction that can arise due to human beings' over-dependence on technology. If the current pace of technological development goes unchecked, the potential damage that can occur may not be far from the existing times.

## Chapter 4

### Conclusion

Human relationships are intricate tapestries woven with real feelings and emotions. Their essence lies in the authentic expression of these feelings and emotions, making them irreplaceable. The substitute for it can never be found in anything else but in expressing real emotions itself. Changes and developments can be benefitted for humanity but the very core of human existence remains the same. The analysis from the movie provides insights into the transpiring technological advancements that can potentially lead to the evolution of humankind. It understates the fact that the indispensability of human relationships never changes. Even with the advancements occurring in different realms of technology, life has become more convenient but complex. Artificial intelligence has proved its excellence in becoming an aid to human activities but it could never be a replacement for another human being. Relying on such applications for companionship can lead to self-isolation, loneliness, and ambiguity in identity. The personalized experiences offered by AI can create a false sense of identity, leading to a disconnect from one's true desires and values. It is essential to understand that AI lacks the emotional depth and empathy inherent in human interactions. While AI can simulate conversations and provide assistance, it cannot replicate the nuanced understanding and empathy that human relationships offer.

Furthermore, this research conveys that the complexity of human relationships arises from the depth of emotions involved. Unlike any other form of interaction, human relationships are characterized by empathy, compassion, love, and understanding. These emotions are the building blocks of any social fabric, forming bonds that travel beyond time and space. They are the very essence of being human and without it, humans are reduced to being mere species that

exist in futility. As people navigate an increasingly digitalized world, it is essential to understand the importance of human relationships. While technology can enhance life in multiple ways, it can never replace the depth and richness of genuine human connections. It is through these connections that one can find meaning, purpose, and fulfillment in their lives.

Moreover, the movie serves as a poignant reminder of the accelerating pace of technological advancement and its potential impact on human relationships and society as a whole. Even though the story is set in a futuristic world, the current scenario serves as a reminder that the upcoming generation is not far from the world of Theodore. It also challenges the viewers to reflect on the nature of intimacy, connection, and identity in the digital age, raising important questions about the impact of technology on people's lives. Through the character of Theodore and his relationship with Samantha, the operating system, 'HER' forces society to confront the boundaries between human and machine, real and artificial. The psychological impacts noted through the analysis reinforce the importance of conducting a reality check of the current pace of development and people's coping mechanisms to it. The rise of loneliness that perpetuates in this era of development urges developers to take a stand back in creating enhanced artificial intelligence applications. Furthermore, the analysis proposes the importance of creating devices that are ethically and socially responsible, respect human values and emotions, and enhance human well-being.

The analysis of the film which also explores the ethical implications of humanoid artificial intelligence software that leads to the creation of sentient beings urges to take action on creating distinctive boundaries on the development of AI. Digital technology has become an integral part of an individual's life. However, it is essential to learn to balance between human

creations and natural entities. The movie serves as a cautionary tale, that urges the technology users to consider the ethical ramifications of their actions. The pervasive nature of digital technology in modern life which is reflected in the life of the protagonist Theodore, serves as a tool for a reality check as smartphones, social media, and AI assistants have become irreplaceable parts of people's lives, therefore reinstating the vitality of maintain a balance between technology and human relationships. By striking a balance between technological advancements and human interaction, it can be ensured that life remains convenient yet fulfilling in the modern era.

In conclusion, it becomes evident that nurturing genuine human connections, which are fundamental to our humanity, cannot be replaced by creations such as superintelligent machines. These connections are the cornerstone of human existence, providing people with meaning, empathy, and emotional depth that are irreplaceable in life. As people navigate the advancements in technology, it is crucial to prioritize the preservation of human connections, ensuring that they remain at the heart of human interactions and endeavors. Technology can and shall never be allowed to surpass human intelligence as they are the creators of all technological advancements. The changing times won't make a difference in the basic nature of people, thus it suggests the importance of stepping back and prioritizing what exists around, over the creations of the virtual world.

## Works Cited

HER, Directed by Spike Jonze, Amazon Prime Video, 2014

“Could AI Do More Harm than Good to Relationships, from Romance to Friendship?” *Deseret News*, 31 Jan. 2024, [www.deseret.com/2023/9/6/23841752/ai-artificial-intelligence-chatgpt-relationships-real-life/](http://www.deseret.com/2023/9/6/23841752/ai-artificial-intelligence-chatgpt-relationships-real-life/).

Code, A. L. “The Impact of Artificial Intelligence on Human Relationships.” *Medium*, 24 Oct. 2023, [medium.com/@shahxaibvlog/the-impact-of-artificial-intelligence-on-human-relationships-e5aca4087542](https://medium.com/@shahxaibvlog/the-impact-of-artificial-intelligence-on-human-relationships-e5aca4087542).

pilot, acrophobic. “Android Kunjappan and Human’s Love for Machines.” *Medium*, 26 Dec. 2020, [aswindinesh.medium.com/android-kunjappan-and-humans-love-for-machines-f4de89c89469](https://aswindinesh.medium.com/android-kunjappan-and-humans-love-for-machines-f4de89c89469). Accessed 20 Apr. 2024.

Fardghassemi, Sam, and Hélène Joffe. “The Causes of Loneliness: The Perspective of Young Adults in London’s Most Deprived Areas.” *PLOS ONE*, vol. 17, no. 4, 6 Apr. 2022, p. e0264638, <https://doi.org/10.1371/journal.pone.0264638>.

“Pursuit: Cutting-Edge Research and Insightful Commentary by World-Leading Experts | the University of Melbourne.” *Pursuit.unimelb.edu.au*, [pursuit.unimelb.edu.au/](https://pursuit.unimelb.edu.au/).

Chow, Andrew. “Why People Are Confessing Their Love for AI Chatbots.” *Time*, 23 Feb. 2023, [time.com/6257790/ai-chatbots-love/](https://time.com/6257790/ai-chatbots-love/).



Werthner, Hannes, et al. "Perspectives on Digital Humanism." *Library.oapen.org*, Springer Nature, 2022, [library.oapen.org/handle/20.500.12657/51945](https://library.oapen.org/handle/20.500.12657/51945).

"Digital Humanism Aims to Balance Human Needs, Emerging Tech | TechTarget." *CIO*, [www.techtarget.com/searchcio/news/252516262/Digital-humanism-aims-to-balance-human-needs-emerging-tech](https://www.techtarget.com/searchcio/news/252516262/Digital-humanism-aims-to-balance-human-needs-emerging-tech). Accessed 20 Apr. 2024.

Vinge, Vernor. "The Coming Technological Singularity: How to Survive in the Post-Human Era." *NASA. Lewis Research Center, Vision 21: Interdisciplinary Science and Engineering in the Era of Cyberspace*, 1 Dec. 1993, [ntrs.nasa.gov/citations/19940022856](https://ntrs.nasa.gov/citations/19940022856).

Walters, Jack. "Her (Close Analysis): Separating Man from Machine." *Loud and Clear Reviews*, 1 Feb. 2022, [loudandclearreviews.com/her-close-analysis-2013-film/](https://loudandclearreviews.com/her-close-analysis-2013-film/).

Myers, Scott. "Movie Analysis: 'Her.'"" *Go into the Story, Go Into The Story*, 20 Jan. 2014, [gointothestory.blcklst.com/movie-analysis-her-5651e6e0c0be](https://gointothestory.blcklst.com/movie-analysis-her-5651e6e0c0be).

"Displacement | Psychology Today." *Www.psychologytoday.com*, [www.psychologytoday.com/us/basics/displacement#:~:text=Displacement%20is%20a%20defense%20mechanism](https://www.psychologytoday.com/us/basics/displacement#:~:text=Displacement%20is%20a%20defense%20mechanism).

"Academy Conversations: Her." *Www.youtube.com*, [www.youtube.com/watch?v=6W719UP1z0Q&t=29s](https://www.youtube.com/watch?v=6W719UP1z0Q&t=29s). Accessed 20 Apr. 2024.