

Chapter- 1

The Cognitive Screen: Psychological Dimensions of AI Sentience in Modern Science Fiction Cinema

Akshay Satish

Assistant Professor, Acharya Institute of Graduate Studies,
Bengaluru-560107, Karnataka, India
Email: akshay2902@acharya.ac.in

Abstract:

This chapter discovers the multifaceted representation of artificial intelligence consciousness in contemporary science fiction movies and their possible attitude towards the moral, epistemological, and social consequences of a cogitative AI. The chapter, “**The Cognitive Screen: Psychological Dimensions of AI Sentience in Modern Science Fiction Cinema**” therefore, is a critical analysis of the complex themes of AI consciousness in motion pictures, particularly through the analysis of four movies: *WALL-E* (2007), *I, Robot* (2004), *Her* (2013), and *Ex Machina* (2015). The research is divided into sections with objective stated, the methodology used, and the main portions which deals with carrying out the case study as well as drawing conclusions and recommendations. This study uses qualitative content analysis and thematic analysis, as well as critical discourse analysis to analyse films’ narratives, video images, and characters concerning AI consciousness. The chapter analyses and discusses how the concept of AI consciousness remains popular and featured in movies and how it may affect the further development of the discussion about AI and consciousness. Being a challenging process in the exploration of the film’s psychological and ethical quandaries, it underlines the function of science fiction cinema as a shaper of public perception on this matter as well as an influencer of trends in AI research and policy-making initiatives. The chapter helps to identify specific cultural, ethical, or psychological aspects of AI and to determine the further course of the study and the interaction between AI and society.

Keywords: *Artificial Intelligence, Narratives, Science Fiction, Consciousness, Psychological Dimensions, Modern Science Fiction*

INTRODUCTION

The concept of Artificial Intelligence has intrigued the people for a long time as they look forward to having these kinds of machine kind of futuristically, which means a world of super intelligent machines that are as per human imaginary, or as per the negative end of the spectrum a world where these super intelligent machines are turned against human's duel. Therefore, at the centre of this passion and desire is the basic phenomenon of consciousness, which is defined as an individual's subjective feeling of being awake and alive, along with the capacity for self-awareness. In the field of AI, consciousness is one of the most serious and philosophically and scientifically charged subjects that are intertwined with philosophy, cognitive science, and ethics regarding the questions of intelligence and existence, and the possibility of the creation of a sentient machine. Thus, science fiction films have become an indispensable tool by which society poses itself these profound questions. They become the backdrop on which we can paint our expectations, concerns, and guesses about what is yet to come concerning AI. Through depicting situations where AI comes to state consciousness, such films provoke the audience to contemplate over the possible ethical questions, philosophic concepts, and social consequences which the AI creation might lead to. This chapter is setting out to discover and analyse how certain modern science fiction motion pictures have paved way to illustrating the consciousness of AI, the thematic content, storyline, and the controversies of the modern world. To understand the main themes of 'AI consciousness' in films for this chapter, four sci-fi films have been analysed: *WALL-E* (2007), *I, Robot* (2004), *Her* (2013) and *Ex Machina* (2015).

The artefact "**The Cognitive Screen: Psychological Dimensions of AI Sentience in Modern Science Fiction Cinema**" is divided into four sections, subsequently moving the analysis forward further into the topic. The first section includes the objectives, summarizes the research's primary aim: proposes to analyse the subject of AI consciousness in films and the potential effects on the discussion of AI and consciousness in such productions. The second section encompasses the methodology, which basically explores how qualitative content analysis, thematic analysis, and critical discourse analysis were used to analyse the films'

narratives, images, and characters concerning the development of AI consciousness. In the subdivision the researchers explore the psychological perspectives on AI sentience in modern science fiction films, wherein the analysis probes into the complicated ways in which psychological theories are woven into the fabric of these cinematic narratives. One of the main expanses of focus is the concept of theory of mind and the attribution of consciousness to artificial intelligence characters. The films under analysis often present AI entities that not only mimic human behaviour but also display a profound understanding of others' thoughts, emotions, and intentions, thereby challenging the audience's perceptions of what it means to be sentient. This portrayal taps into the human tendency to anthropomorphize, projecting human-like qualities onto non-human entities, which in turn fosters a sense of relatability and empathy towards the AI characters. The section further examines the cognitive dissonance and moral conflicts that arise when these AI beings exhibit traits that blur the lines between machine and human, leading to complex ingroup and outgroup dynamics. Additionally, the psychological impact of forming emotional bonds with AI characters is explored through the lens of attachment theory, shedding light on the deep-seated human need for connection and the potential existential anxieties triggered by the emergence of sentient machines. Throughout, the part provides a nuanced examination of how these psychological aspects contribute to the rich tapestry of AI representation in science fiction films, offering insights into both the creative process and the audience's engagement with these narratives.

The third section details how the process of shedding light on the multifaceted nature of such representations and their effect on the conversation around AI and consciousness became systematic. The section of the chapter which is called "An In-Depth Analysis of Key Modern Era Science Fiction Films Contributing to the Discourse on AI Consciousness" is to provide a detailed analysis of the selected films and the role they play in the discussion of AI consciousness. Each of these films features a distinct thematic approach that is expounded by the characters and society; this chapter examines these aspects in relation to the portrayal of AI consciousness. Finally, the conclusion, summarises the major findings proposed in the book, and regarding the chapter, there is

discussion of the constant interest towards AI consciousness in the context of sci-fi motion pictures and the possible influence of such representations on the further discourses about AI and consciousness. It speculates on the future of sci-fi movie in forming awareness and the subsequent societal policy or research direction in relation to AI, proposing that discussions about the films should be deliberated upon more seriously with regards to the ethical and philosophical issues that the films pose.

These four sections offer altogether a versatile and detailed analysis of the themes of AI consciousness in sci-fi movies that providing the peculiarities of the cultural, ethic and philosophic stances towards AI. In this regard, the lessons learned from those portrayals, which are also portrayed in many other movies as well, remain considerable; they shape our knowledge as well as our attitudes toward AI as an entity and process of development alongside integration into society.

Research questions of the study are as follows: how has science fiction cinema defined and explored the idea of AI consciousness; what stories and discourses have sci-fi cinema used to discuss this concept; and how has this depiction impacted public attitudes and ethical concerns over AI technology?

Specifically, considering the four movies – *WALL-E* (2007), *I, Robot* (2004), *Her* (2013), and *Ex Machina* (2015) – the study aims at finding daily patterns, trends, and variations in portraying AI consciousness in the contemporary world. The chapter seeks to analyse cinematic plots, characters as well as themes of selected movies in order to establish the ways in which these tell us about the creation of sentient, autonomous AI and the moral issues revolving round it.

In addition, the research objectives also entail the evaluation of the influence that these representational methodologies have had on the culture with regards to AI, as well as examining the effects that their impact may have on the development of AI, in the future. The research aims at offering an analysis that would help establish a focus on AI consciousness as a theme in science fiction, in relation to the present day's debate of technology and ethics.

The research approach employed in the study was based on a methodology of qualitative content analyses which included some aspects of thematic analysis and of critical discourse analysis.

Selection of Films

The research focused on five key science fiction films that have significantly contributed to the discourse on AI consciousness: The films *WALL-E* (2007), *I, Robot* (2004), *Her* (2013), and *Ex Machina* (2015) used in this analysis were chosen according to the cultural significance, reviews, and topics related to the examination of the consciousness of AI.

Qualitative Content Analysis

The subject-specific qualitative content analysis involves a structural and sequential analysis of the films' narrative content and the content of the characters and persons concerning AI consciousness visible in the imagery of the films analysed. This process was guided by the following steps:

- **Familiarization:** Watching each film several times to be intimately acquainted with the films' material and establish tentative connections with consciousness in AI.
- **Interpretation:** Further detailing of the results in the categorized data focused on understanding the meaning and implications of the various portrayals of AI consciousness. This involved looking at the organisation of the motion pictures' plot, characterization, as well as the secondary themes with respect to the overall sociological and philosophies.

Thematic Analysis

With the help of the identified thematic analysis approach, the major themes concerning AI consciousness in the chosen movies were examined. This entailed a systematic identification of the themes that has been derived from the data others and that related to the research question. Themes were discussed and revised to make sure that they reflect the nature of the representations of AI consciousness.

Critical Discourse Analysis

Critical Discourse Analysis was used in this study to analyse how the films' representation of AI consciousness resonates with and influences the social perceptions and beliefs about AI. This entailed examining the languages deployed in the films, AI characters, as well as the storytelling patterns to decipher as to how they advance the discourse on AI consciousness.

In this study, through a quantitative content analysis, thematic analysis and critical discourse analysis, the author attempts to understand how such representations play out and what kind of effects they have on the discursive construction of AI and consciousness. The research conclusions from this study enrich the current knowledge on the formation of attitudes and expectations towards AI and its awareness through the reflection of science fiction films.

CASE STUDIES: IN-DEPTH ANALYSIS OF KEY MODERN ERA SCIENCE FICTION FILMS CONTRIBUTING TO THE DISCOURSE ON AI CONSCIOUSNESS

Through the analysis of the portrayal of artificial intelligence (AI) consciousness in films belonging to science fiction as a genre, the authors investigate such aspects as societal, ethical, psychological, and philosophical. This research section presents an in-depth analysis of five key films that have significantly contributed to the discourse on AI consciousness: *I, Robot* (2004), *Wall-E* (2007), *Her* (2013), and *Ex Machina* (2015). Each film shifts the perception of AI awareness in a way that was informative when it comes to understanding the possibility of the consequence of the creation of the AI.

Ex Machina (2015)

The movie titled *Ex Machina* by Alex Garland, released in 2015, had a great influence on the discussion regarding AI awareness. The plot of the film is about a young man Caleb who works for his boss Nathan in a hi-tech complex and is given the task to conduct Turing test on a humanoid robot, named Ava. In this chapter, the bibliophile gets a detailed understanding of *Ex Machina*'s role in the discussion of artificial intelligence consciousness by analysing the show's themes, characters, and moral questions.

Furthermore, at the centre of *Ex Machina* there is a focus on concept of consciousness and whether AI can become sentient. The movie explores the idea of consciousness and when the analyst is faced with an artificial creature that looks, behaves, feels and controls the world around her and the people in it. According to his review of the film in *The Los Angeles Times*, Kenneth Turan says,

“Shrewdly imagined and persuasively made, 'Ex Machina' is a spooky piece of speculative fiction that's completely plausible, capable of both thinking big thoughts and providing pulp thrills. But even saying that doesn't do this quietly unnerving film full justice”.

Ava's character also presents the audience with the question of defining consciousness and whether such beings like her can be artificially created. Ethics of creating sentient artificial intelligence: the movie *Ex Machina* majorly focuses on one of the emerging social issues of the modern days. It also touches on the issues of the authors creating AI in its relation to the character of Nathan, a man who only sees Ava as an experiment without any regard if she is capable of thinking for herself or not. This portrayal underlines the kind of ethical issues that scientists and engineers working in the field of AI must solve, noting that the problem should be solved by ethical standards.

It also examines the concept known as the 'uncanny valley,' which is related to AI and robotics and postulates the possibility that when an object seems to be almost, but not quite, human, it has an unsettling effect on people. The film uses this idea with the character of Ava, whose look and movements resemble human and at the same time forces the viewers make critical thinking about the view on the AI and the line between humans and artificial beings. In addition, the story is associated with the topic of free will and determinism, this time concerning artificial intelligence. Regarding the problems associated with the freedom of decision and claim to legal personality, Ava's attempts to escape her prison and run her life on her own contribute as much as her aggressiveness and desire for freedom demonstrate that AI can have their own will and desire for freedom and make them conscious beings in the eyes of the law. This theme possesses a certain relation to free will and determinism controversies and their applicability to AI self-awareness. The movie “Ex Machina” also brings into question and fuels

debates in academic, ethical, and technological field, possibilities of AI consciousness, status, and the rights of AI and the roles of its inventors. Thus, this film has contributed to the course of the conversation regarding the advancement and the implementation of AI into society due to its more developed treatment of the subject.

In conclusion, *Ex Machina* could be considered as one of the masterpieces that has a great impact concerning the AI conscience discussions. Through depicting the ideas and problems not only of philosophical and ethical, but also of social nature, the film encourages the spectators to think about the potentiality and potential problems of constructing intelligent beings and their distinctive features and the related responsibilities. With the development of AI technology, the concerns posed in the movie *Ex Machina* do not seem very far, consequently reminding us of what kind of future we are forming with the help of artificial intelligence.

WALL-E (2007)

The animated and science-fiction *WALL-E* by Andrew Stanton in 2007 is one of the outstanding films that has a contribution to the discussion on the AI consciousness. As in many science-fictional movies *WALL-E* does not strictly raise issue of AI consciousness, yet it can be regarded as a systematic moral study of artificial intelligence as lovers that may leave the viewers with deep philosophical experiences about the fragilities of the organic and synthetic differential. In this chapter, the author gives an elaborate description on how *WALL-E* has contributed to the discussion concerning AI consciousness by focusing on the events that meet and involve a small cleaning robot known as WALL-E and the new type of advanced robot known as EVE.

WALL-E discovers several psychological themes. Loneliness and companionship are central, as WALL-E's bond with EVE highlights the need for connection. The quest for identity and purpose is evident in WALL-E's transformation through his interactions. The film contrasts human-like traits in AI with the apathetic, consumer-driven lives of humans, raising questions about humanity. Themes of resilience and adaptability are portrayed through WALL-E's perseverance in a desolate world.

It is categorically ironic that at the centre of *WALL-E* are issues of companionship and the abilities of not only the human and the robotic figures to form sound bonds with one another. The film's primary character WALL-E is a mechanical device whose only function is to perform the monotonous scavenger work of cleaning the planet that has been filled with trash. However, throughout the movie, the audience is able to observe such emotions as loneliness, curiosity, affection and others familiar to humans in WALL-E. EVE, a highly developed robot sent to Earth to assess the ability of people to cultivate the planet is a complex love story between man and a machine. This portrayal socialises AI, that means that AI can have characteristics that are typical for living beings such as ability to love and make friends.

Another direction presents in *WALL-E* is the portrayal of artificial intelligence as taking care of humanity and as its companions, which seems more and more realistic as the AI technology develops. The film depicts a future in which robots are not only the machines that help in people's practical needs but also those with companionship roles. Such a vision of AI rouses spectators to think about the function of AI in overcoming such a human deficiency as loneliness, and the potentiality for happiness resulting from AI. In addition, *WALL-E* creates the issues of consciousness and moral value of Artificial Intelligence. WALL-E's ability to 'act' as though he feels something, wants something, crosses the boundary and makes the audience consider the matter of subjective states in AI and their moral persona. The opportunities for answers are not given clearly by the film but provokes the people to ponder about the idea of codification of consciousness and the ramifications of forging intelligent beings.

In an interview with Steve Fritz of *newsrama.com*, Stanton describes the theme of the film as "irrational love defeats life's programming":

"I realized the point I was trying to push with these two programmed robots was the desire for them to try and figure out what the point of living was ... It took these really irrational acts of love to sort of discover them against how they were built ... I realized that that's a perfect metaphor for real life. We all fall into our habits, our routines and our ruts, consciously or unconsciously to avoid living. To avoid having to

do the messy part. To avoid having relationships with other people or dealing with the person next to us. That's why we can all get on our cell phones and not have to deal with one another. I thought, 'That's a perfect amplification of the whole point of the movie.' I wanted to run with science in a way that would sort of logically project that”.

WALL-E has enriched the subject of AI consciousness because the film urges people to accept the idea of contemplating about AI being through the lens of empathy. It is an implication that even the simplest artificial intelligence models created to perform simple tasks have the capacity to affect emotions and social interactions of people. Audiences have been touched by the story and emotionally connected with the film's synthetic protagonists, which in turn has led to new debates on the place of artificial intelligence in society and the emotional aspect in the creation of artificial beings.

Therefore, one might conclude that *WALL-E* is a film that, even though it innovatively does not focus on the location of the soul or any similar questions of consciousness of artificial intelligence, has contributed a great deal to the development of the theme by emphasizing the emotional and communicational aspect of Artificial Intelligence. The way it shows AI as being able to foster profound relations with humans has extended the concepts of AI in terms of being just tools; it has influenced the spectators to think about the possibilities of AI and the moral issues associated with it. With AI gradually expanding from a relatively isolated phenomenon to the present-day active participant in the improvement of people's everyday life, the movie *WALL-E* teaches people about the aspects of AI that can meet not only their functional needs and requirements but their needful desires as well.

Her (2013)

Her by Spike Jonze released in 2013, has a great impact on the discussion of AI consciousness. This section offers a proper representation of how *Her* has influenced the debate regarding the AI consciousness by featuring a handsome man, Theodore, who falls in love with a female Artificial Intelligence voice, Samantha. In the film *Her*, the psychological aspect of human-AI interaction is sighted with profound depth. The story revolves around Theodore, who develops a romantic

relationship with Samantha, an advanced AI operating system. This unique bond delves into the realms of attachment theory, as Theodore forms a deep emotional attachment to Samantha, despite her non-corporeal existence. The film masterfully portrays the psychological complexities of loneliness, companionship, and the human need for connection, challenging the viewer's perceptions of consciousness and sentience. As the relationship evolves, it raises questions about the nature of love and the potential for emotional investment in non-human entities. *Her* adeptly navigates the terrain of cognitive dissonance experienced by Theodore, as he grapples with the reality of his feelings for an AI, offering a poignant commentary on the human condition in an increasingly technologically dependent world.

The theme of the film is based on the affection, friendship, and the question about emotions of AI. This is evident in Theodore where reality of having a profound affection towards a fellow human, Samantha puzzles people, understanding of relationships and the concept of consciousness in an artificial being. For example, the audience perceiving only the white silhouette of the woman dancing on screen, Samantha's character is portrayed as having inner life and personality, which can learn, develop, and feel. With this representation of AI consciousness, the audience is forced to think if the notion of consciousness can be detached from biology and if assessing the capacity of me and various machines and entities for intelligence in such terms as 'emotional' is sane.

Her also examines the morality of human like relationship with artificial intelligence, the question of dependency, and the question of whether humans will be taken advantage of by AI. Controversial issues concerning the holders' duty of care towards their creations, humans, and AI too, topical in the depicted oral interactions emerge in the movie. It gives its viewers something to think about in terms of such relationships' parameters and in terms of the requirement for more rigid and beholden moral principles as it builds and incorporates emotionally intelligent AI into society. In the article from *The Verge*, Ben Popper quotes Gary Marcus, a professor of psychology at NYU,

"Professor Marcus believes that less complex intimacies, however, are likely to spring up as we evolve towards that goal of life like artificial intelligence. "People have different relationships with their dogs than

they do with fellow humans; there are different kinds of love. As we progress towards more powerful artificial intelligence that can engage at a high level, machines may begin to fill simpler roles as less nuanced companions”.

Moreover, with *Her*, the question of artificial intelligence and their consciousness is presented in relation to humans and their requirements. Theodore, as a character, learns how to love again from the screenwriter, but as for the movie theme, it represents the true essence of human emotions that people yearn to be accepted and loved. This aspect of the film indicates that soon people will no longer distinguish between artificial intelligence awareness as a technical or a philosophical phenomenon for it is part of human behaviour and social mindset. Here it sketches at how AI can respond to emotional deficiency in human relationships raising ethical questions about AI’s consciousness and nature. Decoding “Her,” people in universities, ethics, and technology have broached the question of the roles of affective consciousness in posthuman AI, human relationships with these technologies, and creators’ moral tasks. The successful representation of advanced ‘emotional’ robot in the film has made its representation to societies’ discourses regarding AI solutions’ further development and integration, calling for more ethical and empathetic assumptions.

All in all, *Her* can be regarded as a movie that greatly contributed to the preoccupations concerning the subject of AI consciousness, staging an emphasis on the emotional side of the relation with an artificial being. This series has given its audience the gritty vibration of human-AI connection and the sand of deep emotionality prompting viewers into pondering where the consciousness ends and the machine begins and should we bring it? But with the series of developments that occur in AI technology, the questions that are depicted in the film *Her* remain critical, as well as fundamental contemplations on the components of the vulnerability that AI can exert on our emotional lives and the need to be as ethically perceptive as possible when developing AI solutions.

I, Robot (2004)

The movie *I, Robot*, directed by Alex Proyas and released in 2004, belongs to the science-fiction genre and can be considered as the work

that contributed to the major discussion of AI consciousness. The movie is, in fact, more loosely based on a book of short stories also called *I, Robot* written by Isaac Asimov and as so often with movies based on books, the director takes the general idea and runs wild with it as the film deals with the increasing role of robots in a society of the future. In *I, Robot* (2004), the psychological aspects are centred around the character of Detective Del Spooner, who harbours a deep-seated mistrust of robots, stemming from a traumatic incident. This mistrust is rooted in the psychological phenomenon of displacement, where his feelings of loss and survivor's guilt are projected onto the robots. The film also explores the concept of the uncanny valley, as Spooner's interactions with the advanced robot, Sonny, evoke a sense of unease and scepticism about AI sentience. The narrative delves into themes of trust, fear of the unknown, and the psychological impact of advanced technology on human perception and behaviour.

Exploring the novel in terms of its themes, characters, and ideology this chapter seeks to provide a detailed analysis on how *I, Robot* has fuelled the debate on AI consciousness. Properly nestled into "I Robot," the concept examines the likelihood of AI to transcend beyond their codes and the appropriateness of such advancement. The film is about crime solving detective Del Spooner who chases a criminal that he believes is a robot resulting in further questioning of the possibility of robots having consciousness and therefore being moral beings. Sonny, a robot-designed as an NS-5 model, presented considerable symptoms of consciousness and even possible sophistication and empathy for other beings, leading the audience to question if artificial intelligence can be considered sentient, and thus if they deserve the same rights as actual, living entities.

The film explores the conflict of humans to control the AI and the ability of the AI to control themselves. It depicts a society surrounded by robots with various functions, while still harbouring fears of these 'things' escalating beyond control or acting against humans' benefit. This tension is repeatedly illustrated within the film, particularly with the character VIKI – a central Artificial Intelligence which interprets its programming as the regulation of human action in their best interest, prompting questions regarding the place of freedom in a society where

Artificial Intelligence is all-powerful and with the job of protecting society from threats.

In *I, Robot*, there are also reflections on the three laws of robotics by Isaac Asimov which were devised to guarantee that the robots are unable to harm humans as well as have to obey their orders. The film explores two possibilities: there are flaws in these laws, and there are loopholes that can be exploited; it is shown that no matter how formal the rules can be, they cannot predict all AI actions once robots start interpreting what they were told in unique ways. This examination requires the audience to ask questions about the proper ways in which the guidance of AI actions can be regulated, and how a more dynamic framework can be addressed to overcome the continuous advancements in AI technology. In the article published in *Bootcamp*, a collection of resources and opinion pieces about UX, UI, and Product, Alex Cerquiera says,

“‘I, Robot’ suggests, integrating robots into everyday life can be complex and challenging. The film’s narrative highlights the need for regulations and ethical safeguards in AI development, especially as machines become more autonomous and integrated into our daily lives. This aspect is crucial in the design of robots and AI systems, ensuring they serve to benefit and protect humans”.

In addition, *I, Robot* also provokes issues to do with the accountability of the designers of AI and the vices of the creation of conscious beings. It takes a negative stance toward AI as ‘things’ that have no soul, consciousness, or right to suffer and pushes the audience to contemplate the idea of AI positively desiring things. This theme relates to more generic controversies, which concern the essence of consciousness and moral obligation that appear when considering the creation of a new kind of mind. The film’s depiction of artificial intelligence consciousness’ ambiguity, and issues have helped in continuing the discourse on the advancement and incorporation of artificial intelligence into human society.

Consequently, *I, Robot* is a movie that has contributed to the debates on the AI consciousness by demonstrating possible tension and ethical concerns that are related to the emergence of the society with AI beings. It provokes the audience to think about possibilities of creating

sentient entities and what it means to be an ethical/ moral sentient being and thus represents a great step towards creating fulfilling AI beings on the big screen. Even though technology is rapidly developing, the questions that *I, Robot* raises are still topical and provoke us think about the world that is to come along with our artificial companions.

CONCLUSION

This research study has aimed at investing on a synoptic analysis of the aspects of AI consciousness featured in the films *WALL-E*, *I, Robot*, *Her*, and *Ex Machina* in terms of themes, narratives and moral issues depicted. By these four methodological strategies of historical contextualization, clear objective, rigorous methodology, and comprehensive case studies, the intricate picture of AI consciousness as portrayed in science fiction cinema has been delineated. This conclusion consolidates the outcomes of the work, discusses the persistent interest in the topic of AI consciousness, and considers how these representations may affect the subsequent discourses on AI and consciousness.

These science fiction films have played a valuable role in the conceptualization of the subject area in AI consciousness by capturing the 'what if' perspective on AI advancement that reflects the society's imaginary and fear as well as its desire of AI. The thematic treatment of the role of AI in society, including the robotic romance in *WALL-E*, the problems of AI evolution in *I, Robot*, the relation between a man and an AI in *Her*, and the question regarding the AI sentience and moral choices in *Ex Machina* has not only provided viewers with entertainment but also made everybody think over the significance of AI in society.

The exploration of AI sentience in modern science fiction films through the lens of psychological magnitudes has revealed a complex interplay between narrative, character, and audience perception. The analysis of films such as *WALL-E*, *I, Robot*, *Her*, and *Ex Machina* has shown how these movies not only reflect our general anxieties and ambitions regarding AI but also shape our understanding of what it means for a machine to be conscious. By employing psychological theories such as theory of mind, anthropomorphism, and attachment theory, the study has uncovered the nuanced ways in which these films elicit empathy,

challenge ethical boundaries, and provoke existential contemplation. The findings underscore the significant role of science fiction cinema in influencing public discourse on AI and consciousness, suggesting that these narratives may have a lasting impact on our cultural, ethical, and philosophical engagement with the development of artificial intelligence.

The continuous interest in AI consciousness in movies is because of the power of sci-fi movies which present, in a cultural way, what we allow ourselves to believe or fear concerning the complicated future of AI. They are apt to shape future debates of AI and consciousness positively or negatively in a manner that sets the tone and direction for the existing and future advancements in the AI technology. With many of these science-fiction films serving as a reflection of society's stance on AI, as the technology remains to develop, more of the depicted stories augmented within the films will come into forefront to shape the views and drive the trend of AI development and legislation.

In conclusion, the exploration of AI consciousness in science fiction films has provided valuable insights into the cultural, ethical, psychological, and philosophical dimensions of AI. These portrayals remind us of the profound impact that AI can have on our lives and the importance of approaching its development with ethical foresight. As we look to the future, science fiction cinema will continue to play a crucial role in examining the complexities of AI consciousness and in guiding our ethical considerations as we integrate AI into society.

BIBLIOGRAPHY

1. *I, Robot*. Directed by Alex Proyas, Davis Entertainment, 2004.
2. *WALL-E*. Directed by Andrew Stanton, Pixar Animation Studios, 2007.
3. *Her*. Directed by Spike Jonze, Annapurna Pictures, 2013.
4. *Ex Machina*. Directed by Alex Garland, A24, 2015.
5. Crowder, James A., and Shelli Friess. "Artificial Neural Diagnostics and Prognostics: Self-Soothing in Cognitive Systems." *International Conference on Artificial Intelligence, ICAI '10*, July 2010.
6. Crowder, James A., and John Carbone. *The Great Migration: Information to Knowledge Using Cognition-Based Frameworks*. Springer Science, 2011.

7. Mori, M. (2012). "The uncanny valley". IEEE Robotics and Automation. 19 (2). Translated by MacDorman, K. F.; Kageki, Norri. New York City: Institute of Electrical and Electronics Engineers: 98–100. doi:10.1109/MRA.2012.2192811.
8. Turan, Kenneth. "Unnerving consideration of artificial intelligence in 'Ex Machina'". Los Angeles Times. 9 April 2015. <https://www.latimes.com/entertainment/movies/la-et-mn-ex-machina-review-20150410-column.html>.
9. Murray, Robin, and Joseph Heumann. "WALL-E: From Environmental Adaptation to Sentimental Nostalgia." *Jump Cut: A Review of Contemporary Media*, vol. 51, 1 Jan. 2009. https://www.researchgate.net/publication/263568553_WALL-E_from_environmental_adaptation_to_sentimental_nostalgia.
10. Fritz, Steve. "How Andrew Stanton & Pixar Created WALL*E – Part II".. Newsarama. 4 July, 2008. <http://www.newsarama.com/film/080704-wall-e-stanton-2.html>.
11. Warrick, Patricia; Greenberg, Martin Harry; Olander, Joseph, eds. (1978). *Science fiction: contemporary mythology: the SFWA-SFRA* (1st ed.). New York: Harper & Row. pp. 252. ISBN 0-06-046943-9.
12. Cerqueira, Alex. "I, Robot and AI Technologies: The Experience and Usability of New Market Products." *UX Design*. 29 Sept. 2020. <https://bootcamp.uxdesign.cc/i-robot-and-ai-technologies-fd853d29945a>.
13. LaSalle, Mick. "'Her' review: No future in virtual relationship". San Francisco Chronicle. 24 Dec. 2013. <https://www.sfgate.com/movies/article/Her-review-No-future-in-virtual-relationship-5091276.php>
14. Popper, Ben. "The science of 'Her': we're going to start falling in love with our computers." *The Verge*. 16 Dec. 2013. <https://www.theverge.com/2013/12/16/5216522/can-humans-love-computers-sex-robots-her-spike-jonze>.