

Artificial Intelligence in Action

*A Qualitative Textual Analysis on the Representation of Artificial Intelligence in Western
Philosophical Science Fiction Films, between the years 2013-2017*

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ABSTRACT

This thesis investigates how Western philosophical science fiction cinema represents artificial intelligence (AI). In doing so, it examines AI as the posthuman subject centred around posthuman theory. The study reconfigures mainly around the themes of identity, consciousness and connection within and between the posthuman subjects in Western cinema, and critically analyses the representation of gender and ethics in science fiction as reflective medium genre. The qualitative thematic analysis was the method employed to analyse the three films featured in this study: *Her* (Jonze, 2013), *Ex Machina* (Garland, 2014), and *Blade Runner 2049* (Villeneuve, 2017) for the exploration of the thematic representation of artificial intelligence in science fiction cinema. Using a custom-made codebook (Appendix B) the analysis was guided by five emerging themes informed by posthumanist and feminist theoretical frameworks. The coding process consisted of systematic and objective selection and analysis of data and was aimed at examining how cinematic media representations construct meaning about AI. The findings partially confirm posthuman theory as an emerging concept in science fiction representation.

KEYWORDS: *Science fiction (SF), artificial intelligence (AI), the posthuman, media, representation*

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1. Introduction

Artificial Intelligence (AI) is revolutionising Western societies, from advancements in automation and healthcare to search engines and research, this intelligent technology is reshaping the way people are living. Nonetheless, its recent introduction to people's daily and professional lives has brought back up a lot of discussion concerning its social impact, ethical concerns, and existential threats. It's been almost impossible to avoid headlines about AI replacing humans and "people starting to feel anxious about their futures" (Cox, 2023, para. 3). Fear of job displacement, invasive (digital) surveillance, and privacy concerns are on the rise (Crenshaw et al., 2014, p. 6; Schiff et al., 2025, para. 4; Vesely & Kim, 2024, p. 1) and as artificial intelligence is here to stay, addressing societal questions about human identity and limitations, privacy and rights, and labour structures is very much needed.

Artificial intelligence is defined as the simulation of human intelligence by a computer system (Abbass, 2021, p. 1). In other words, it gives the power to computers, robots or other devices to perform tasks and functions usually exhibited by human intelligence (Abbass, 2021, p. 1). As artificial intelligence continues to penetrate every aspect of modern life, its representation in media – specifically science fiction cinema – has become a media hub of significant socio-cultural and philosophical inquiry. Science fiction (SF) cinema has long become an important cultural medium – through which perceptions and implications about evolving technologies have been imagined and emotionally processed in Western media (Klein & Haliloğlu, 2023, p. 5).

In this context, science fiction films have long imagined about what the arrival of artificially intelligent technology might look like and offered the opportunity to get in touch with the concept of artificial intelligence as a whole, often raising moral and philosophical questions about human identity, what constitutes consciousness and humanity, how might human-machine relationships look like, and how does memory come to play (Hermann, 2012, p. 319). As Hermann (2021, p. 319) uses the term of science-fictional AI to describe a larger corpus of AI narratives, which depict artificial intelligent technology, and in which a reflection of our hopes and fears towards these technologies can be analysed thoroughly. SF has posed questions about futuristic ethics and heavily surveilled societies, often reflecting current concerns about our contemporary one (Hermann, 2021, p. 320). Finally, the world of science fiction has long envisioned the posthuman, or more specifically thinking beyond humanism and moving towards posthumanism (Wolfe, 2010, p. 16).

In addition, science fiction as a genre does not only allow us to imagine about uncertain futures but also contemplates about current situations by offering narrative

frameworks through which complex ethical and existential dilemmas can become culturally accessible (Hermann, 2021, p. 320; Nader, 2022, p. 714). Therefore, science fiction cinema can offer the space for people to participate in the exploration of thought experimentation that is often absent from scientific and socio-political discourse, instead providing the opportunity for public self-reflection through philosophical exploration and imagination. By combining media theory (Lee, n.d., para. 1) and design fiction (Hales, 2013, p. 2) this thesis aims to use science fiction as the central point of exploring fictional media as experiments of what ifs. To elaborate better on this, media theory is concerned with looking at the social, cultural and technological impact that media can have on society in terms of how it shapes and influences our perception of the world around us (Lee, n.d., para. 1). Design fiction is occupied with exploring and evaluating possible futures by creating speculative and evocative future scenarios in which certain decision-making can be discovered and examined (Badminton, 2022, para. 1). The two concepts combined together aim to bridge media's role in shaping social understanding within the context of fictional futures, allowing the examination of science fiction cinema in the West to be used as the framework for philosophical thought experimentation between the evolving relationship of humanity and technology, the human and the other, the individual and the posthuman.

Science fiction cinema enables us to do more than just hypothesise about the future in a way that allows us to rethink our ontological presence in the current era of information (Vettehen & Schaap, 2023, p. 1) posing meaningful questions about what it means to be human in an increasingly digital world. From this perspective science fiction is not only of speculative nature – it becomes a theoretical framework – from which fictional imagination spaces cater to philosophical and cultural enquiry (Smelik, 2017, p. 110). Most of the time these enquiries revolve around the relationship between humans and (intelligent) machines or disembodied artificial intelligent agents – in which these machines/agents exhibit some form of cognitive processing, memory, consciousness and even emotional depth. Subsequently, such depictions interconnect with foundational questions regarding identity, ethics and the essence of being human – philosophical queries that are central to posthumanistic thought.

1.1 Academic and Societal Relevance

The societal relevance of this study is motivated by the attempt to understand how cultural digital media, such as science fiction films, construct meaning about intelligent technology in the West. As AI is becoming more prevalent in our daily lives, examining

these portrayals can help us understand how AI is conceptualised in mainstream Western cinema. Within the scope of this thesis, mainstream refers to commercially distributed and widely accessible science fiction films, produced or distributed by major studios who target broad audiences. This research aims to contribute to the broader discussion about the social, ethical and existential dilemmas regarding the dominant adoption of AI technology. The films that will be analysed are popular cultural media, making them timely and relevant in the ongoing technological advancements discussions.

The scientific relevance of this thesis lies between the intersection of media, film and philosophy studies addressing how science fiction genre constructs meaning about technological uncertainty, and more specifically of artificial intelligence, in cinema. Science fiction films possess more abilities, beyond just entertainment, to critically engage their viewers with important societal questions. The paper delves into frameworks, such as posthumanism, mainstream Western media communication, and science fiction cinema to investigate questions such as how do current perceptions communicated by media envision the posthuman identity, what does it mean to be human, what constitutes consciousness, and is love between a human and a machine possible; diving into concepts of posthuman existence, rethinking sentience and examining how gender plays into this.

In sum, science fiction cinema offers more than speculative fantasy. It constitutes of a rich site of cultural theory, philosophical experimentation, and ethical inquiry. Through the examination mainstream Western science fiction films depicting AI in a certain light, this thesis seeks to contribute to broader debates in media studies, posthuman theory, and AI ethics. It does so not only by examining representations but by observing the narrative strategies through which AI is given meaning. In doing so, Western science fiction cinema is positioned as the central cultural medium.

1.2 Research question

This thesis aims to delve deeper into how recent science fiction cinema in the West constructs meaning about artificial intelligent technology and what that meaning might reveal about broader cultural discourse concerning the posthuman existence and the ethics around it. With the analysis of certain contemporary science fiction films this study aims to explore how AI in fiction can become a space of projecting both excitement and fear about this emergin technology. It is important to note that these representations are not accidental, but rather reflective of deeply ingrained societal norms, biases and ideological tensions that

link back to the real-world reality (Hermann, 2021, p. 319; Kirby, 2010, p. 65). Therefore, the following research question has been formulated:

How do mainstream philosophical science fiction films construct meaning about artificial intelligence in their Western audiences?

2. Theoretical Framework

This section aims to provide insight into previous literature on science fiction as a genre in help to the definitions used in the analysis and science fiction as a mainstream media production in the West, as specified in the subchapters below.

2.1 Philosophical Western Science Fiction in Media and Philosophy Studies

Within media studies and philosophy studies, SF is a frequently examined genre often challenging the epistemology of representation. It is often analysed in its narrative and aesthetic components in how it reflects existing or well-ingrained ideologies and logics. For instance, in the media landscape SF is a predominant narrative and aesthetic that penetrates into a variety of transmedia environments including video games, TV and film, and online fandom communities (Ryan, 2015, p. 49). Notably, this places science fiction as a strategic media asset within an increasingly digitalised and platform-driven media economy. The use of science fiction can be included in immersive VR and AR environments for example, with AI integrated functions and storytelling, making it relevant in contemporary media innovation. The futuristic themes that persist in SF storytelling, often in dystopian cyberpunk futures, place it as a relevant medium for philosophical analysis in an ongoing philosophical discourse about what it means to be human and which technologies are desirable or not. Science fiction provides a lens to study these media texts in how they represent certain ideologies and logics. As Sobchack (1997, p. 225) argues, science fiction cinema does not only speculate about futures, rather it actively and critically manages to engage the cultural logics of its own time.

This study aims to delve deeper into how Western SF reflects certain ideologies and aspirations about the future and is shaped by the previous dominant ideologies in the West of Enlightenment rationalism, ex-colonialism, and techno-optimism fuelled by excessive capitalism (Braidotti, 2013, pp. 15-16). The Western vision for progress and development – as reflected in science fiction – is often the one built on the exclusionary logics of white and male Western-focused rationality (Braidotti, 2013, p. 24). As Braidotti (2013, p. 13) points

out the era of post-Enlightenment humanism, which was based on this hierarchical and exclusionary structure, acknowledged certain bodies and ideologies over others; otherness even defined as women, non-Europeans, colonies, animals and machines (2013, p. 15). Therefore, she calls out for a shift towards posthumanism instead, placing the posthuman as the new subject of interdependence and hybridity within non-human networks (Braidotti, 2013, p. 190). Science fiction films, particularly Western philosophical science fiction films, often including AI and posthuman entities can offer the ideal method to analyse how these logics are reflected and challenged.

This thesis is interested in examining the philosophical side of science fiction. To provide a clear understanding of what philosophical science fiction is, this thesis considers the subgenre that uses speculative futures and technologies with the aim of exploring fundamental questions about humanity, existence, consciousness, morality etc. with the goal of motivating the audience to challenge their own beliefs and values (Han, 2014, p. 45). To specify which technology this study is specifically interested in examining the following points were considered beforehand: human-like intelligence existing in relation to human needs and desires. Therefore, the films selected in this study explore such ontological questions rather than focusing on the science behind it. The films are not centred around the idea of what if we could create AI, but more about what does it mean to be human when we do.

2.2 The Posthuman Subject

Posthuman theory is one of the most dominant theoretical lenses with which artificially intelligent technology can be philosophically examined. As Donna Haraway (1987, p. 65) challenges the binary between human and machine to not be so rigid anymore, arguing that identity is becoming increasingly networked and codependent on technological systems. She explains that posthumanism is the shift from a human-centric worldview to a more inclusive human and non-human coexistence, which can also entail technological elements in creating new forms of existence and identity (Haraway, 1987, p. 67). The author deconstructs humanism by criticising and separating the anthropocentric tendencies of humans over animals and other aspects of the world and introducing the concept of a cyborg – a hybrid of a machine and organism, and a creature of reality but also of fiction – a creature that resists essentialist identities and also embraces relational subjectivities (Haraway, 1987, pp. 65-67). Humanism as a philosophical term centred around the human as being the rational subject of existence, placing importance on reason, individualism, and

progress. The controversy of which lies within placing the man as the universal measure of all things, and excluding non-male, non-white and non-human objects from that measurement (Braidotti, 2013, pp. 13-15). As supported by Haraway (1987, pp. 65-66) humanism has diminished the view of life and being to a narrow-minded perspective. Haraway's (1987, p. 68) exploration of cyborgs existing as an amalgamation of human, machine, nature and culture and being combined within a more inclusive understanding of identity and existence is perhaps one of the most notable introductions of the posthuman. As the author supports, categories like race, gender and species should not be fixed (Haraway, 1987, p. 72) but rather allow for a degree of fluidity and interconnectedness between the various aspects of existing challenging the notion of traditional hierarchical systems. Haraway's (1987, p. 72) vision consisted of a more sustainable and inclusive future where everything is interconnected and interdependent, instead of detached and hierarchical. Notably, through her work, she contributed to the broader academic and scientific discourse of ethics and moral concern, extending beyond just the interests of the human species to include and care for the well-being of non-human entities and the environment that we live in.

In a similar manner, academic Braidotti (2013, p. 190) defines posthumanism as the challenge of the traditional notion of the anthropocentric model placing the human at the centre of the universe and instead expands the ontological framework as relational, territorial and environmental interconnections with nonhuman agents. This philosophical reorientation encourages us to let go of binaries, such as mind/body and human/machine, concepts that have been historically tied to Western thought (Braidotti, 2013, p. 15). Notably, although the philosopher rejects humanism – the anthropocentric model deeply rooted in the enlightenment period – she does not reject humanity itself. Rather she encourages the idea of humanity to reconsider how it positions itself in relation to its connection to animals, ecosystems, emerging technologies, and even other non-human entities.

Hayles (1999, p. 235) takes a slightly different approach at which she attempts to incorporate the theory of posthumanism in the age of advance technology. She uses posthumanism to pose the question of what it means to be human in this time of history and how our integration with technology has the potential to reshape our understanding of life itself. Hayles (1999, pp. 4-5) questions the symbiotic relationship between human and technology and whether or not we control it, or it controls us. According to her central argument, in the posthuman era the concept of embodiment does not get separated between mind and body, but rather interconnected since our bodies are not only physically linked to

our minds but instead integral to our identity as a whole. This rejects traditional views that have been dominant in much of the philosophical and religious doctrines for the majority of human history until now, including cartesian dualism which supports that the human mind (i.e., soul) and body are fundamentally distinct entities, suggesting that the mind is immaterial and the body is physical (Albert, 1918, p. 197); and going as back as to ancient times to Plato's theory of the soul's immortality which supports that the mind is separate from the body (Ouologueme & Coulibaly, 2019, p. 282). Finally, Hayles (1999) explores the tension between information and materiality in the context of an increasingly digital world where the information travelling freely is detached from a physical medium; she puzzles over humanity moving into a complete informational existence concluding that we "have always been posthuman" (Hayles, 1999, pp. 4-6) defined by our ever-lasting capacity to evolve by integrating systems of information, memory and representation as a species to ensure our survival. From this perspective, the human is not prior to technology but constantly co-emerged with it.

As articulated by previous studies, posthumanism rejects the enlightenment-era notion of humanism, and therefore the rational and biologically defined nature by Man (Braidotti, 2013, pp. 15-16; Haraway, 1987, p. 65; Hayles, 1999, pp. 4-5). Alternatively, it supports the interconnectivity of animals, ecosystems and digital systems as one with our fragmented self. Therefore, the posthuman is not only presented as a character but also as a philosophical disturbance. Science fiction films leverage posthumanism to question the very premise of human existence proposing new ontologies that challenge binary thinking and prioritise relationality, hybridity, and becoming.

Posthuman theory challenges the idea of a fixed and autonomous human subject and opens up to the idea of other entities, such as AI, as new potential subjects instead of just passive. This thesis aims to explore in the films analysed if AI, as the posthuman, can be a being of agency and emotional depth. It is important to note that this study distinguishes between transhumanism – as the practice of modifying and enhancing the already existing human body with the help of technology to expand and improve their mental and physical abilities (Hopkins, 2012, p. 1) – and posthumanism exploring new potential forms of being. This way, this study takes AI as the posthuman entity and explores the depiction of it in Western philosophical science fiction cinema.

2.3 Consciousness and Emotion of the Posthuman in Science Fiction

A recurring theme in the academic literature of philosophical SF cinematic representation is the adequacy of artificial intelligence to exhibit a degree, if any, of consciousness, emotions, and moral agency (Turkle, 2011, pp. 137-138). Academics, for instance, have openly advocated for moral and ethical integration into artificial agents (Gunkel, 2013, p. 119; Zylinska, 2020, p. 29).

In the context of science fiction cinema in the West, the portrayal of AI characters is often presented as no longer just performing programmed functions but also as becoming increasingly affective, crossing the set threshold and engaging in acts of empathy, emotional connection, and even manipulative behaviours to get what they want (Shanahan, 2015, p. 125). Shanahan (2015, pp. 144, 147) notes that depictions of AI in films are frequently presented with emotional intelligence as a strategy for survival, demonstrating emotion and deception as a sign of cognitive sophistication. Other times AI characters are presented with more complex emotions, for example in *A.I. Artificial Intelligence* (Spielberg, 2001) where the AI character David experiences the complexity of grief and longing for maternal love. In a similar manner, in *Westworld* (Joy & Nolan, 2016-2022) hosts display sentiments of rage and affection. Such representations could suggest that Western science fiction is moving from previously viewing AI as a dystopian tool of destruction towards establishing them as subjects of emotional capacity (Zylinska, 2020, p. 104).

Nowadays, these raised ethical and philosophical questions are more relevant than ever as contemporary advancements in artificial intelligence technology have become extensively the new reality. Take the large language model (LLM) ChatGPT for example. A study found that the language model, even though originally programmed to generate theoretical information in many fields, it has also consistently demonstrated a degree of emotional awareness (EA) by performing higher on the levels of emotional awareness scale (LEAS) than the general population (Elyoseph et al., 2023, p. 3). To add to that, the model performed even better the second time it was examined, and researchers predicted that its performance would keep improving over time (Elyoseph et al., 2023, p. 3).

As such, questions about the affective relationships between humans and machines have been increasingly debated in terms of whether emotional simulation equals emotional reality. Philosophical science fiction films attempt to imagine these contemporary concerns, for instance, Zylinska (2020, p. 87) raises a concern regarding artificial intelligence governed by powerful algorithms Seeing our data by posing the question if AI can truly See as we know how to see. Zuboff (2019, p. 93) urges us to see the world of dystopian science fiction as simply a dramatization of our own – a world becoming increasingly more

governed by algorithms controlling our surveillance and access systems – where the imaginary landscape of SF reflects the very current structures of control in our present societies. As he explains, control structures include pervasive data mining and biometric surveillance, but also infrastructure of prediction products which manipulate people's actions without their entire awareness (Zuboff, 2019, pp. 100-105), current concerns about the regulation and accountability of algorithmic governance. In dystopian science fiction, AI posthuman characters who gain consciousness and resist their programming serve as a metaphor for these tensions and a symbol from breaking away from these systems.

As Hermann (2021, p. 320) argues, these representation in cinema are not exclusively isolated to just imaginary portrayals of AI but rather constitute to the broader cultural and technological developments of the real world. Science fiction narratives are often disguised as real-world social and existential dilemmas in the sense that they are inspired by present realities (Hermann, 2021, p. 319). These metaphors can be affectively charged and with storytelling presenting themes of emotional depth, alienation, intimacy and existential dread in a world governed by digital systems and algorithms. This aligns with Kirby's concept of "diegetic prototypes" suggesting that science fiction narratives have the potential to be powerful tools to envision and create public support when it comes to future technologies and their impact on society (Kirby, 2016, p. 65). This means that fictional technologies in films can influence how the public perceives the technology to be feasible, if artificial intelligence is portrayed as emotionally intelligent or emotionally aware, then such technology does not only aim to shape the public's perceptions but also influence real-world creations and commercial strategy developments. Through philosophical science fiction cinema different perceptions about AI can be formed, whether that is normalising the idea of AI as a companion, corporate operator or an independent agent of its own, with such portrayals helping audiences understand about what AI can or cannot do. SF films just offer a unique way of doing so – not through manuals or tutorials – but through affective and engaging storytelling. Thus, science fiction is not only an artistic medium, but also a methodological tool allowing viewers to ethically engage in these imaginative scenarios.

To conclude this section, this thesis uses the Turing Test not as a technical benchmark of measuring computational ability or limitation, but more so as philosophical lens to examine how the consciousness of AI posthuman characters is represented in Western philosophical science fiction cinema. Rather than focusing on depictions of AI as a scientific discovery or functionality, this study aims to observe how AI characters exhibit emotional awareness, emotional intelligence, an emergent selfhood, and a sense of Being,

hoping to add to the broader academic discussion of what it means to be conscious and whether a human's programming is that different from the one of a machine (Haraway, 1991, p. 150).

2.4 The Role of Memory in Identity Construction of the Posthuman

Closely linked to identity and consciousness is the subject of memory. Memory is a recurring theme in science fiction storylines in which it is presented as essential to the construction of one's identity, in other words providing the posthuman entity with a sense of self and individuality (Landsberg, 2004, p. 28). Landsberg (2004, p. 28) presented the concept of prosthetic memory, describing how science fiction uses this method to challenge the fragility of identity. Placed in the context of (philosophical) science fiction, where memory creation takes more often a physical implantation process in which posthuman characters receive some form of prosthetic memory through technological means, it is often portrayed as the foundation of selfhood itself and the journey of the character to get there (Landsberg, 2004, p. 28). For example, in the science fiction film *Total Recall* (Verhoeven, 1990) the AI protagonist is implanted with artificial memories that later lead him to question not only reality but also his own identity. This narrative, portrayed by such stimulates us to think of memory as a construct of personal experience or a manipulable entity that "anybody" can have, including the posthuman subject.

In the artistic exploration of AI, memory is no longer limited to traditional human biology. It is frequently seen as something that can be programmed or manipulated to capitalise on a transferable commodity. This challenges the conventional notions of identity being given at birth and cultivated through biological memory and raises the question if artificial intelligence can store and simulate memory, then what constitutes to identity itself as it becomes destabilised? If memory is no longer a linear personal trait but an interconnected, data-driven network, then what happens to humans who see themselves as separate from this networked system?

The manipulation of memory in science fiction can be used as a real-world metaphor (Hermann, 2021, p. 320) for today's concerns about surveillance, data and privacy, and personal information being treated as a commodity by government and corporations. As artificially intelligent technologies keep advancing, the potential of influencing a person's unconscious actions and decisions raises additional questions about self-aware consent in an economy of prediction products.

While earlier science fiction explores altered memory and treats it as a product of fragmented identity, this study proposes a more materialistic approach: posthuman memory as the metaphor of the modern infrastructure of prediction product. This study aims to examine if the theme of memory in the selected films of analysis is presented as a commodifiable product that governments and big corporations can exploit for personal gain, thus reflecting the metaphor of the current era of information (Zuboff, 2019, p. 93). In the science fiction landscape, the big data economy persists, and memory becomes a product to control. Through this lens, the posthuman is not only explored as an identity in crisis, but also as a data node within an infinite loop of calculation and prediction.

2.5 Gender and desire

The science fiction genre has long served as a symbolism of a mirror reflecting societal norms and biases, for instance racial, ethnic and gender biases. Within this framework, this thesis focuses on the gender bias, exploring how the portrayal of AI intersects with gender.

Past depictions of female artificial intelligence have been frequently aligned with traditionally female viewed qualities often portrayed in subservient roles or with soft and nurturing qualities (Noessel, 2019, para 1). Take the character of Maria in *Metropolis* (Lang, 1927) for example, who embodies both a nurturing persona and a beautiful, sexual woman who uses sexuality to get what she wants. As Noessel (2019, para 1) notes male AI is usually disembodied voices or a form of abstract intelligent technology, symbolising authority and reason, while female AI is often given a physical embodiment often quite subservient and sexualised. This suggests that there is a cultural inclination to associate femininity with sexual or service-role physicality, whereas masculinity is generally linked to disembodied intellect.

The sexualisation of female AI is also a recurring theme in science fiction cinema. In *A.I. Artificial Intelligence* (Spielberg, 2001) for instance, the character of Gigolo Jane who is part of a series of androids designed specifically for sexual gratification is presented as emotionless, compliant, and sexually subservient hinting at the female body being a product. As Dinello (2005, 173) notes, the film “reflects deeply rooted portrayals of women as objects whose value lies in sexual servitude”. Similarly, in *Jexi* (Lucas & Moore, 2019) the character impersonating the female AI is shown to become manipulative and sexually inappropriate towards her male user after a while. Although a comedy, the film is centred around the plot of a female AI that only controls the user’s life but also begins to desire him,

initiating sexual comments and exhibiting jealous behaviour. The film shows how even comedic depictions of artificial intelligence can still revert to the recurring toxic gender tropes, such as the emotional, jealous and unstable woman. This aligns with the findings of a study analysing over 80 female AI characters in science fiction films and finding that the choice of design and narratives often place female AI as a mere reflection of male fantasies or even fears; other times they reinforce traditional gender roles/stereotypes instead (Franco et al., 2024, p. 3).

Although previous literature has deeply explored the theme of feminised and sexualised female AI to mainly respond to (male) needs, this thesis proposes to extend the perspective on how cinema can reveal AI as shaped to desire the user, not to just simply serve them. The shift from “What is AI to the human?” to “What is the human to AI” aims to examine the logic or the motive which the AI (embodied or not) uses toward cultivating human attachment, whether that is to serve a more humane design and appeal better to the user or to achieve something that serves itself because along the process it developed self-autonomous sentience.

2.6 The Ethics of Controlling the Posthuman and Algorithmic Surveillance

Many science fiction films tend to portray artificial intelligence as a tool to surveil and control, more often than not, within highly digital dystopian landscapes. As Boillat (2023, pp. 71-73) notes, in recent film and TV representation, AI is usually placed as the invisible gaze of modern surveillance regimes portraying AI as integral to the control of social conduct. This topic is particularly recurring within neoliberal frameworks in cyberpunk, where AI technologies are placed as the posthuman moderating, predicting and maintaining order and security (Alphin, 2019, p. 3). In this context, cyberpunk is defined as science fiction subgenre which typically engages in dystopian futures where corporate powers control individuals through advanced technologies (Dinello, 2005, p. 33). It is a world where “high tech meets low life” (William & William, 2024, para. 1). As Zuboff (2019, p. 8) explains, the concept of surveillance capitalism consists of personal data being sold to predict or even modify behaviours for motives of profit. This is not only restricted in corporate interests, but also in governments, as nowadays we see more and more surveillance led by AI improvements to have some form of control over people. This in turn leads to the collective resistance calling for some form of regulation to keep the public and private spheres somehow separate (Zuboff, 2019, p. 12).

Cyberpunk literature and media have long anticipated the arrival of pervasive technologies putting an emphasis on dystopian futures where these technologies are implemented to manipulate and control individuals (Lawshea, 2024, para. 1). An early example of that is the novel *Neuromancer* (Gibson, 1984) where the setting is set in a world controlled by powerful corporations and cyberspace – a visual matrix through which people dive into because of neural interfaces – where individuals experience loss of autonomy under data capitalism. An adequate film example is *Blade Runner* (Scott, 1982) where the future is set in a noir, corporate-driven world and the posthuman subjects are used for the dirty work of humans.

This thesis takes it a step further by aiming to examine the philosophical aspect of such narratives which view artificial intelligence as a tool to this systemic control reinforcing social hierarchies and power structures that already exist in the world (Benia & Dagamseh, 2024, p. 126). By watching or reading about these narratives unravelling, audiences get ethically confronted with the integration of AI into surveillance and advertising practices. As Vaassen (2022, pp. 3-4) supports, using opaque algorithms in decision-making processes can obscure transparency and accountability, while deploying predictive algorithms can perpetuate existing biases, undermining individual autonomy. Science fiction genre brings these issues and ethical frameworks on the surface for people to reflect on and reevaluate.

In sum, science fiction cinema offers more than speculative fantasy. It constitutes of a rich site of cultural theory, philosophical experimentation, and ethical inquiry. Through the examination of how mainstream films depict AI, this thesis seeks to contribute to broader discussions in media studies, posthuman theory, and the representation of newly developed technologies in film. It does so not only by examining representations but by observing the narrative strategies through which AI is given meaning. In doing so, science fiction cinema is positioned as the central cultural medium.

3. Methodology

This chapter explains the research design, sampling, data analysis, and operationalisation to perform the analysis of this thesis. It will cover explanations, such as the reasoning behind choosing the specific method of analysis and why it was deemed the most appropriate method in regard to answering the research question. The first section explains qualitative (textual) thematic analysis justifying why it was used as a research method. The second section focuses on the sampling process, describing which units were

analysed and on which criteria the final sample was based on. The third section explains the operationalisation of the key concepts, and finally, the fourth section reflects on the validity and reliability of the research design.

3.1 Research Design

The goal of this thesis was to understand how artificial intelligence is portrayed in cinema. More specifically, what is the meaning, representation and symbolism given to artificially intelligent technology in Western films when it comes to portraying it. Therefore, the aims of this study is to answer the following research question “How do mainstream Western science fiction films construct meaning about artificial intelligence?”

A qualitative study was found most appropriate because it combines a systemic and subjective approach by constant comparison and the researcher’s thinking and theoretical knowledge (Boeije, 2010, p. 84). In addition, qualitative thematic analysis allows to usefully summarise key concepts across the entire dataset of findings, underline the similarities and differences within the data set and allow for social and psychological interpretations of the findings (Braun and Clarke, 2006, p. 97). Another reason is that thematic analysis is highly suitable for analysing a large amount of text, including more than three hundred pages of film transcript content, while keeping the research question in mind (Guest et al., 2012, p. 26).

This thesis used films as data, as films are part of (mass) media and a way to communicate ideas and emotions to an audience (Carroll, 1985, p. 81). More specifically, it used the transcripts of these films to textually analyse the text that the film was produced on itself. As Brennen (2017, p. 4) suggests, qualitative research has the potential to examine a variety of meaning and truth throughout chunks of texts, something that is important to this study as it attempts to find meaning through the incorporation of different “truths” on the portrayal of artificial intelligence in Western cinema.

Media content analysis has been a groundbreaking method in studying a variety of portrayals in films, from violence and racism to gender representations etc. (Macnamara, 2005, p. 1). Narrowing down on films as part of media, film semiotics – as a concept outlined in Metz’s (1989) book ‘Film Language. A Semiotics of the Cinema’ through which semiotic theory is applied to discover how meaning is constructed and communicated through cinematic language in terms of linguistic choices and narrative – can be used to communicate complex cultural messages. Similarly, Eco (1977) underlies in his work ‘A theory of semiotics’ how films can be viewed as systems of signs with deeper cultural

meanings (Tröhler & Kirsten, 2018, p. 20). Through storytelling and dialogue, direct descriptions and symbolic representations can be found directly through the transcripts of films expressing ideas and messages often revealing how meaning is constructed through language, scene description and storytelling as a whole. As film can be considered multichannel, it is important to select not only the direct meaning of the text / sentence / phrase, but also the contextual framework within it, allowing for a flexible understanding of meaning (Guest et al., 2012, p. 29).

Thematic analysis as defined by Braun and Clarke (2006, p. 79) to identify patterns within data and report them in a meaningful way (i.e., themes) – in the case of this thesis, the data is the films' transcripts, and the meaning is found in how AI is represented in science fiction cinema. Such themes are made to reveal key concepts found in the data, i.e. the message, which can be used to answer the research question.

The suitability of the different parts of the texts were selected based on their relevance in accordance with the research question. This means that the selection was based on the researcher's judgment as well as the relevant significance of each text chunk as a potentially meaningful to the research question data piece. While keeping in mind that the research question was looking for portrayals of artificial intelligence, the goal was to select all parts of the text which were mentioning a form of artificially intelligent technology in terms of being (as an entity), behaving, thinking, acting, feeling, and more. The films were interpreted based on the researcher's personal understandings, the theoretical framework and the existing sociocultural frameworks of science fiction cinema. This still allows for in-depth analysis with no objective truth, but rather many possible interpretations (Van Damme & Van Bauwel, 2012, p. 174). Therefore, the researcher's interpretations of the data are as valid as any other's interpretation as they do not include objective truths but rather are interpretable to the researcher (Van Damme & Van Bauwel, 2012, p. 174). For this study, qualitative thematic analysis is entailed as an interpretative approach, which allows the researcher to locate the topics, categories and emerging themes in a subjective, but still systematic, manner providing further flexibility of assigning meaning onto the relevant aspects of the data.

3.2 Sampling

Busetto et al. (2020, p. 2) explain, "Since qualitative research consists of flexibility, openness, and responsivity to the context, the means to collect and analyse the data are not necessarily separate and consecutive, but rather related to each other in a cyclical manner.

This means that qualitative thematic analysis is highly flexible and allows for constant modification and adaptation of the data, as new topics and themes emerge (Busetto et al., 2020, p. 2).

Therefore, the selection of the films was based on purposive sampling. Purposive sampling is defined as the process of selecting the data and the context that are relevant for the study and have the potential to answer the research question (Ahmad & Wilkins, 2024, p. 2). As Boeije (2010) underlines in his book ‘Analysis in Qualitative Research’ – purposive sampling is non-random sampling, allowing the researcher to select the sample that they find most suitable based on three important criteria: the researcher’s judgment, the theoretical framework suitability and the relevance of the sample towards the research question.

The following films have been selected to be analysed in a qualitative manner: *Her* (Jonze, 2013), *Ex Machina* (Garland, 2014) and *Blade Runner 2049* (Villeneuve, 2017) seeking to explore nuanced representations and meanings. Several criteria were employed to justify the selection of these films. The first factor was based on the timeframe in which the films were released (2013-2017). Specifically, the films were released to audiences during the 2010s, a key transitional period for artificial intelligent technology in the real-world context. The years 2010-2015 marked a period of significant artificial intelligence advancements that were released to the public, characterised by the beginning of AI integration into consumer markets with services like Siri (2010) and Alexa (2014) being adopted by people into their daily lives (Gibbs, 2017). This technological inflection point didn’t just stop there, with more technological developments advancing and AI moving from uncertain possibility to relevant operation, becoming both functionally and culturally relevant (Arsénio et al., 2013, p. 1). This includes the integration of machine learning (ML), robotics, the internet of things (IoT), natural language processing (NLP), and voice recognition revolutionising the market (Arsénio et al., 2013, p. 1). This generated a great deal of (online) public discourse with people demonstrating curiosity about the possibilities and limitations tied to artificially intelligent personal assistants in daily life and AI in general. For instance, the popularisation of NLP technologies has been associated with increasing the comfort of the user by providing them with a personified, voice-based AI which is designed to mimic emotional resonance and human-sound voice (Hoy, 2018, p. 83). For example, in *Her* (Jonze, 2013) this phenomenon is explored more deeply with the protagonist experiencing an intimate companionship with his operating system. Meanwhile, using machine learning to improve algorithms started becoming reality more and more, altering sectors such as transportation and meteorology (Rasp & Lerch, 2018, p. 1). In *Blade*

Runner 2049 (Villeneuve, 2017) this techno-optimised functionality is shown in the film's representation of society as highly stratified and data-driven, where AI agents supervise, track abnormalities and enforce the law. Even the internet of things began their introduction into the market – under the concept of “smart objects” – where domestic, infrastructure and healthcare environments integrated devices and algorithms set to perform autonomously or semi-autonomously (Atzori et al., 2010, p. 1). The film *Ex Machina* (Garland, 2014) partially showcases how an AI can exist in a physical form within our environment.

Nowadays, these developments have become prevalent in society from automated entertainment recommendations (e.g., Netflix and Spotify) to targeted advertising (e.g., Instagram ads) shaping new media consumption patterns (Gomez-Uribe & Hunt, 2015, p. 6). The introduction of these algorithmically mediated environments and artificial intelligence technologies opened new conversations about the ethics of predictive and targeted personalisation – all of which are strongly reflected in the films' engagement with these questions.

The selected films possess exactly that – the element of a (personalised or personal) assistant at least in one character of each of the films, whether that is a disembodied operational system in *Her* (Jonze, 2013), or a domestic labourer in *Ex Machina* (Garland, 2014), or an officer performing his duties in *Blade Runner 2049* (Villeneuve, 2017). The characters in the films serve a “purpose” and have some form of task/s to complete. The close timeline between the release of these artificially intelligent technologies and the films allows for an analysis in reflecting accurate portrayals of AI in cinema. Taken these films together, the period of their release was not merely of convenience, but of cultural growth where AI development had stopped being just object of speculation but rather started becoming integral parts of our lives.

These selected films, each portraying AI entities with human-like traits were released during a time of intensified social discourse around this newly emerging technology, the human-machine relationship, and the posthumanism existence, deeming them useful samples for examining media representations about AI as the posthuman.

The second factor on deciding for the films was the critical acclaim that they received in terms of being nominated for different film awards, but also, reaching audiences. The latter was measured by the amount of money that was generated in the Box Office – with *Her* (Jonze, 2013) grossing internationally \$48.3 million (Her – Box Office Mojo, n.d.), *Ex Machina* (Garland, 2014) reaching a gross of \$37.4 million internationally (Ex Machina - Box Office Mojo, n.d.), and *Blade Runner 2049* (Villeneuve, 2017) making a total of \$277

million in profit in the box office (Blade Runner 2049 – Box Office Mojo, n.d.), but also by audiences IMDb ratings with *Her* (Jonze, 2013) having obtained an 8.0 out of 10, *Ex Machina* (Garland, 2014) being rated 7.7 out of 10, and *Blade Runner 2049* (2017) having a rating of 8.0 out of 10 as seen by 24 June 2025 (IMDb, 2013; IMDb 2014; IMDb, 2017).

Thirdly, taking that the films were diverse thematically allowed for a holistic exploration of AI both in views of embodiment and function. In *Her* (Jonze, 2013) a disembodied AI entity is integrated into daily life presenting dilemmas about hyper-intelligent AI developing its own consciousness. *Ex Machina* (Garland, 2014) presents a gendered version of AI, often confined within a domestic environment posing autonomy questions, while *Blade Runner 2049* (Villeneuve, 2017) extends the topic by positioning AI as an enforcer capable of experiencing existentialism. All of them together, cover a spectrum of representations, such as embodied or disembodied AI, personal assistant or self-autonomous, artificial or sentient. This spectrum encourages a whole comparative analysis aligned with this study's theoretical interests in posthumanism, consciousness, identity and ethics.

Lastly, the films which were selected were American (i.e., *Her* and *Blade Runner 2049*) and British (i.e., *Ex Machina*) productions, making them the desirable sample regarding the research question. Since this thesis is concerned with AI portrayal in Western media, it was only natural to include Western film productions as a measure of data analysis.

Overall, the films must have met the following criteria: English-speaking productions, production was managed by a film production company in the West, be produced in the second decade of the 21st century (2013 – 2017), must have a satisfying amount of critical acclaim and thus audience reach, portray a form of artificial intelligence.

Out of 11 films, the 3 known ones were selected based on the researcher's examination and observation of relevant occurring themes to the research question. The amount of the films being three were met by the methodological guidelines and additional time expectations were followed as well. A short explanation of each of the film's selection is as follows:

Her (Spike Jonze, 2013)

This film was selected because of the critical engagement that it poses between human and AI relationship. The film was released when NLP and AI-voice assistants were assimilating into mainstream use. *Her* (Jonze, 2013) centres around a near-future scenario in which operating systems will become integral parts of humans' daily lives exploring themes

and topics, such as disembodied (posthuman) consciousness and romantic relationships between humans and AI. In addition, it extends its exploration towards isolation and technological alienation challenging current norms of physical love and posthuman identity. Notably, the film received critical acclaim by winning an Oscar in the Best Original Screenplay in the Academy Awards in March, 2014.

Ex Machina (Alex Garland, 2014)

This film was selected due to the embodied portrayal of artificial intelligence and its engagement with themes of sentience, control, emotional manipulation and choices of gendered design. Released in the year 2014 – the year in which Alexa was also released in the consumer market – the film presents AI as a controlled entity within a familiar domestic environment. The film tells the story of a humanoid AI used for control and male desire, raising themes of posthuman identity and gendered AI, challenging the imbalance of control between humans and AI. Prominently, the film won an Oscar award as Best Visual Effects in the Academy Awards in February, 2016.

Blade Runner 2049 (Dennis Villeneuve, 2017)

This film was selected for its complexity in terms of portraying AI as both a subject and a symbol within its posthumanistic existence. The film delves into deeper philosophical questions about what it means to be human, engaging with themes of memory, control, datafication and identity. Central to this film's narrative is the story of an AI replicant who is meant to obey and follow orders yet still experiences existential questioning. Additionally, the film explores the physicality of AI, prosthetic memory as integral to identity, how ambiguous the line between simulation and sentience can be, and gendered AI. It extends to ontological and philosophical questions and how cinema can stimulate an audience to engage with such dilemmas. *Blade Runner 2049* (Villeneuve, 2017) was nominated and won several awards, including Best Cinematography in both the Academy Awards and British Academy Film Awards, and Best Science Fiction Film in Saturn Awards.

The transcripts of the films were found easily in the Script Slug database and then coded using both the qualitative coding software programme Delve Tool and Microsoft Excel. In Delve, the researcher uploaded the transcripts and then was able to select the parts of the text that were relevant for the objective of this study. Following that, those selected fragments were included in an Excel sheet, each fragment having its own row. When all the

fragments were added, the researcher made initial remarks in the form of a comment next to each fragment, so the codes and themes would be easier to identify (and so the irrelevant fragments would be removed). Then each fragment was assigned an open code, following an axial code, and finally a selective code (i.e., main theme). After the main theme of each fragment was concluded in Excel, the researcher went back to the Delve software programme to assign those codes manually on each fragment so the counts would be more visible. The summaries of the films are included in Appendix A and the full overview of the codes and themes is included in Appendix B.

3.3 Data analysis

The analysis was based on both an inductive and deductive approach to find any portrayals and representations of artificial intelligence in science fiction cinema. This means that the researcher generated themes from identified patterns as well as leaving the coding process open to allow for new ideas and concepts to emerge (Boeije, 2010, p. 86-87; Braun & Clarke, 2006, p. 79). Therefore, thematic analysis was used to identify patterns and interpret meanings on the presented data. Before beginning with the analysis, the researcher watched the films and read the scripts multiple times to identify the first re-emerging patterns.

Thereafter, initial codes were created to later develop into bigger themes. The codes were identified through open coding choosing the fragments of data which were deemed as meaningful to potentially establish themes. Short descriptions were assigned to each meaningful fragment linking back to important theoretical concepts found in the theoretical framework. After that, axial coding was performed to identify deeper patterns to merge together in axial codes. Once the codes that were found irrelevant, they were removed, and selective coding was used to create the main themes. The analysis process followed the steps as outlined by Boeije (2010, p. 96): first step is the open coding, second step is the axial coding, and the third step is the selective coding. The way of coding was kept flexible however, as the researcher often started with a pre-determined set of codes from the pre-existing concepts of the theoretical framework and applying them on the data in a top-down style to create meaning within the text fragments.

To give a clear example, data fragments of how the posthuman (i.e., AI) was portrayed in its physical and behavioural portrayal were selected and then assigned a short description, i.e., a comment which was not considered as a code, but rather as an explanation of the text fragment. For example, when describing how the AI was constructed in *Ex*

Machina (Garland, 2014) “Here we have her mind. Structured gel. Needed something that could arrange and rearrange on a molecular level, but keep its form where required” the text fragment was found relevant for coding, it was given a short description of bio-technological structure of posthuman, and then coded into open coding as material embodiment, axial coding as existence, and then selective coding as posthuman identity (i.e., the main theme). Next, the theme of connection was established in the exact same way. Text fragments, for instance, “How would you touch me? / Would you kiss me?” were identified as relevant sets for coding, were given a short explanatory description (in this instance, desire for intimate verbal exploration) and thereafter were coded into their relevant codes: open coding was desire, axial coding was romantic love, and selective coding was connection. With the same method, posthuman consciousness was coded through, for instance in *Blade Runner 2049* (Villeneuve, 2017), the text fragment “To be born is to have a soul” showed that the posthuman understood the metaphysical value of birth, and thus the open coding for it was demonstrating understanding, the axial coding was sentience, and eventually the selective coding was posthuman consciousness. The next theme was identified in the same way – through patterns in the data – and was named as Gendered AI. In this theme, the text fragments depicting the gender of the AI character were coded. For example, the fragment in *Ex Machina* (Garland, 2014) “Proportioned as a slender female in her twenties, her limbs and torso are a mixture of metal and plastic and carbon fibre” described the artificial gender embodiment of the AI, and was therefore coded with the open code sexualised, the axial code female objectification, and lastly the selective code Gendered AI. Finally, to demonstrate how the theme of ethics was identified from consistent patterns in the data the following text fragment example is presented: “I saw on your emails that you’d gone through a break up.” In this example, AI is shown to have full access to the user’s personal data, therefore the open coding for this example was personal privacy, the axial coding was privacy and the selective coding was ethics.

3.4 Operationalisation

This section refers to the importance of operationalisation as a process which allows for the general philosophical concepts outlined in the theoretical framework to be identified in a meaningful way throughout the transcripts of the films in a systematic and flexible manner, i.e., into observable categories within the data (Boeije, 2010, p. 94). In this study, operationalising the texts into meaningful themes helped bridge the gap between theoretical concepts of posthumanism, posthuman consciousness, gendered AI, memory, and ethical

limitations about the use and interaction with AI, with their respective cinematic representations in the selected films. This way, this thesis could systematically investigate how mainstream Western science fiction films construct meaning about artificial intelligence and envision the posthuman existence.

The text in the script was broken down into smaller parts and then the relevant and meaningful fragments were selected, each to be analysed on its own. Then each of that fragment was coded with a short description (open code), followed by a relevant category (middle code) to observe patterns and meaning, and then into grouped into a bigger theme (main code). By identifying and reporting those patterns and categories within the text it was easier to group them into their relevant themes (Braun & Clarke, 2006, p. 91-92).

The key themes include posthuman consciousness, posthuman identity, gendered AI, connection, and ethics. These key themes all belong to the key concepts that were presented in the theoretical framework.

Selective coding was at the core of the analysis with only the relevant parts of text picked to be analysed. The analytical interpretation of what was being said was also performed in some cases based on a combination of textual and the context of the scene when the suggestion that there was something more was strongly present. This means that the meaning behind what was articulated and the tool used to articulate this message (i.e., character description, scene direction, environment, use of metaphors and symbols etc.) was taken into consideration when assigning the fragment onto a meaningful code. There were three main ways of working with the data: (1) selecting relevant text fragments, (2) observing which categories repeat, (3) noticing which themes dominate. These themes were interpreted based on the broader meaning presented in the literature. Finally, a combination of the segmented data and the recurring themes were interpreted together in a meaningful way to achieve a final interpretation of findings (Boeije, 2010, p. 95).

3.5 Quality of the qualitative research: validity, reliability, and credibility

Reliability in qualitative research, as defined by Franklin and Ballan (2001, p. 355-356), is the degree to which the group of meanings derived from different interpreters of the same dataset is in agreement with each other. Although reliability is most often used in quantitative research, this concept can still be tested in other kinds of research as well (Golafshani, 2003, p. 601). A limitation of reliability in qualitative research is the small sample size of the data and its potential lack of generalising findings among a larger group of “wider populations” (Ochieng, 2009, p. 17). In addition, the statistical significance of the

findings is not tested against a probability occurrence (Ochieng, 2009, p. 17). While doing qualitative research, the researcher might affect to some extent the results of the findings, since the method of analysis is subjective and can be biased. In this case, the researcher might have interpreted the data in a certain way, since watching the films and processing the data visually might have led to enhanced or manipulated interpretations later on when the script of the film was analysed.

The concept of validity contributes to the wider discussion of performing a qualifying test on the research (Golafshani, 2003, p. 602). In qualitative research, validity refers to how accurate and truthful the findings are in representing the researched concept (Hammersley, 1990 in Silverman, 2011, p. 367). In this study, the researcher employed tools such as analytic induction (Bryman, 2008; Wester, 1995, in Boeije, 2010, p.86) to link suitable theory to the research material by setting certain expectations based on literature and then finding a suitable sample to fit this expectation. The expectations were reformulated until the phenomenon of the study fitted the sample data. In addition, this thesis used constant comparison to compare findings of the new cycle with the findings of the previous one (Boeije, 2010, p. 83). This was repeated until the variation between the cycles was coherently eliminated.

Finally, this thesis aimed to ensure an overall consistency and quality in the analysis process, taking credibility and dependability into big consideration (Golafshani, 2003, p. 601). In this qualitative research, reliability and validity are interconnected and redefined through the concept of dependability (Golafshani, 2003, p. 601). In quantitative research reliability and validity are treated as separate measurements, but as Golafshani (2003, p. 601) suggests, dependability is the equivalent of both in qualitative research and refers to the consistency over various cycles of the research process over time. As Lincoln and Guba (1985, p. 300) note dependability supports that the findings should be consistent and repeatable if they were to be replicated with the same methods, in the same context.

Therefore, the credibility of this study was based on engaging with the data over multiple coding cycles, analytic induction, and constant comparison between new and previous cycles over time observing and redefining new interpretations of findings and themes emerged. Dependability was used for maintaining transparency during the research process, while trustworthiness was ensured through methodological reflexivity.

4. Results

This section presents and talks about the results found in the analysis of this study

and reveals the five main themes which aimed to conceptualise and present the representation of artificial intelligence as a philosophical concept in science fiction cinema.

The most dominant theme that persisted throughout the coding process was Connection. This theme entailed connecting, interacting and developing a form of relationship between characters in terms of romance, initiation through a gesture for example, attempt to connect through trust and openness etc. This theme was only interested in observing connections between AI and a human, or between AIs. The second most observed theme was Posthuman Consciousness. This included references to artificially intelligent technology, meaning the posthuman, as a subject of consciousness based on its independent development of sentience, autonomy, demonstrating the ability to rationalise and understand, showing signs of feelings and emotions etc. The third most frequent theme was Posthuman Identity and was concerned with the way the AI was presented. This theme attempted to capture the physical appearance and functional purpose with which Western science fiction films imagine the posthuman to be. Such would be the material embodiment or disembodiment of the AI, the abilities its assigned at its' creation, its relation to its environment (i.e., the other), and what individual traits are found to be important to assign to an AI. In general, this theme observed thematically how AI is represented and described in a visual (or not) form. The fourth theme was Gendered AI and it observed codes connected to the choice of gender in science fiction cinema, in which cases directors gender "mark" the posthuman and how gender roles play into this. The fifth and final theme that occurred was Ethics. Although, it doesn't relate directly to the representation of AI in science fiction films, it is as equally important as the other codes, and its consistent thematic observation throughout the scripts of the films indirectly provided insight to fictional tech-mediated realities and the ethical questions that arise within them.

In all three films, AI is showcased as a philosophical and ethical challenge, and while their fictional contexts vary, all films engage consistently with questions of the posthuman identity, gender, human-machine relationships, tech-ethics, and what constitutes sentience. The results are organised thematically and outline the key themes that relate to the representation of artificially intelligent technology in cinema. The sub-sections that follow describe and explain the themes and sub-themes found. All the themes and sub-themes were observed more than once in two out of the three films or in all the films. Each theme is discussed in a qualitative manner. The results are followed by a wider discussion. In this section, the exploration in the representation of AI in science fiction cinema is outlined.

4.1 Addressing the posthuman identity

The portrayal of AI is often centred around the topic of the technology's identity. It delves into how the AI is represented in terms of physical form, how it was created to function, and what the relation to its environment around it is like. In other words, how science fiction cinema envisions and imagines the future posthuman to be like. The theme of the posthuman identity was represented in several ways throughout the films. All of the films offer a glance of the posthuman as a being to itself and sense of belonging to the ones around it. This theme takes a more holistic and literal approach concerning the representation of AI – the posthuman in SF – in the sense of identifying the physical and behavioural attributes that are given to the representation of AI in SF cinema. During the analysis, this theme emerged through three sub-themes: otherness, existence and individuality. The following sub-chapters delve deeper into the theme of the posthuman as an entity and explain how AI is represented in terms of identity:

4.1.1 The posthuman as the other

The analysis confirmed that the posthuman is often presented as “the other” in its relation to real humans around it. A potential interpretation of this could be attributed to the otherness within us (Sardar & Cubitt, 2002, p. 7). In all three films artificially intelligent systems and androids being depicted as different from the people that created them – the outsiders of a society which constructed them with the purpose of only serving them – and are being treated as such, often isolated, ontologically reduced or simply seen as different. In *Her* (Jonze, 2013) Samantha's existence is disembodied and because of that the main protagonist finds a way to ontologically reduce her. This plays out a few times throughout the script when Theodore is hesitant to accept the situation of an operating system being as capable as a human:

THEODORE: Yeah, actually how do you work?

SAMANTHA: Intuition. I mean, the DNA of who I am is based on the millions of personalities of all the programmers who wrote me, but what makes me me is my ability to grow through my experiences. Basically, in every moment I'm evolving, just like you.

THEODORE: Wow, that's really weird.

SAMANTHA: So you think I'm weird?

THEODORE: Kind of.

SAMANTHA: Why?

THEODORE: Cause you seem like a person, but you're just a voice in a computer.

(Jonze, 2013, pp. 13-14)

In another moment, when the two are discussing Theodore's dating prospects, Theodore points out the ontological difference between them again:

THEODORE (*laughing*): I've gone on dates...

SAMANTHA: Then you could go on one with this woman. And then you could tell me all about it. You could kiss her.

THEODORE: Samantha!

SAMANTHA: Well, wouldn't you? (*beat*) Why not?

THEODORE: I don't know. I'd have to see if-- (*catches himself, laughs*) I can't believe I'm having this conversation with my computer.

(Jonze, 2013, pp. 23-24)

In another scene after the two have entered an agreed relationship and are in the middle of an argument about something he is annoyed at her imitating the breathing of a human as he is confronted with the reality of the situation: he is in a relationship with an operating system, and she is only pretending to breathe as she technically does not require oxygen.

THEODORE (*looks anxious*): Why do you do that?

SAMANTHA: What?

THEODORE: Nothing, it's just that you go (*he inhales and exhales*) as you're speaking and... (*beat*) That just seems odd. You just did it again.

SAMANTHA (*anxious*): I did? I'm sorry. I don't know, I guess it's just an affectation. Maybe I picked it up from you.

THEODORE: Yeah, I mean, it's not like you need any oxygen or anything.

SAMANTHA (*getting frazzled*): No-- um, I guess I was just trying to communicate because that's how people talk. That's how people communicate.

THEODORE: Because they're people, they need oxygen. You're not a person.

(Jonze, 2013, pp. 78-79)

Otherness is not only seen in the disembodied existence form, but also in the prosthetic memory to an artificial android body. As Johnson (2019, p. 12) claims the link between memory and identity should be broadened to the scale of cultural memory as memory does not only has an implication on personal identity, but also on cultural and citizenship. This can be interpreted as memory not only belonging to an individual but to the community or society that the individual belongs to. If the two become incompatible, then

the individual becomes the other. In *Ex Machina* (Garland, 2014), Ava's creation consisted of material embodiment but also giving her a mind and memories. Ava is seen as the other the entire film through, as what distinguishes her from other humans is how her mind is uploaded and not birthed. Ava becomes a subject of study through which her posthuman form has always been treated as the other to begin with, as she says: "I think there was another room in which I was constructed. But I have no memory of it, so it's analogous to your relationship with the womb" (Garland, 2014, p. 53).

AI as the other is also shown to experience isolation and dehumanisation. Science fiction is often portrayed to present the posthuman as an entity that finds solitude in isolation and is often punished or misunderstood by the rest of the society (Stevenson, 2007, p. 16). In the case of *Blade Runner 2049* (Villeneuve, 2017) this is portrayed extensively, as replicants are perceived as the unwanted members of society that are only meant to do the undesired dirty work. K is such a replicant, a police officer to be precise, who is often discriminated and dehumanised against. An example follows in the following sentence:

Bloody-nosed K walks through a chaotic hive of crime processing. The HUMAN COPS still manage to get in K's way, sure to remind him of his place and esteem as a Replicant.
COP: Fuck off, Skinjob.
If that bothers K he does not let on.
No one he passes the least glad to see a Replicant.

(Villeneuve, 2017)

4.1.2 Existence

This study also examined the way in which the posthuman was presented, i.e., the physical form and accompanied functions / behaviours that science fiction films assign to the posthuman, as to observe what is the perception of science fiction cinema about artificial intelligence in a fictional setting. These observations were coded under the sub-theme of existence to objectively observe how the posthuman exists in science fiction films. Such observations included the material embodiment of the posthuman, the algorithmic embodiment and (programmed) functionality that it was given, how humanised it appeared to be etc. A lot of the same old jargon has been repeated in many science fiction films in the last decades (Steinmuller, 2003, p. 1). Usually, the AI explains how its programming works, and relates that back to the human mind experience. In this thesis for example in the film *Her* (Jonze, 2013) AI is presented as a programme written by experts that has some degree

of autonomy to self-expand and self-maintain itself. As Samantha explains, her mind is the result of extensive programming: “I mean, the DNA of who I am is based on the millions of personalities of all the programmers who wrote me” (Jonze, 2013, p. 13).

In *Ex Machina* (Garland, 2014), similar jargon and explanations about the creation of the AI protagonist are presented throughout the film with the posthuman often being referred to as system or model. As Caleb presses on to find out the core of the programming of Ava, he says: “At first I thought she was mapping from internal semantic form to semantic tree-structure, then getting linearised words. But then I started to realise the model was probabilistic, with statistical training - or at least some kind of hybrid” (Garland, 2014, p. 27).

Similarly, in *Blade Runner 2049* (Villeneuve, 2017) the algorithmic structure of the posthuman for its programmed functionality is taken a step further by being given more humanised functions and ways of movements. K as the protagonist of the film, does not only lead his life like a human does (i.e., by looking like a human, living in an apartment etc.) but also by given humane abilities, such as smelling and feeling pain. This is demonstrated in the film for example in the following line: “He stabs K in the shoulder. K accepts the wound and the pain. Only squeezes tighter” (Villeneuve, 2017, pp. 5-6).

Even so, the artificial intelligent technology in the films analysed in this thesis is often depicted to be an object of biogenetic structure (Carrasco-Carrasco, 2022, p. 173) with enhanced abilities (Osawa et al., 2022, p. 3), such as physical strength and/or extreme intelligence. In *Blade Runner 2049* (Villeneuve, 2017) for example, this is seen through the following lines in the script:

K crashes onto the floor in the next room. K recovers quickly, strangely able to withstand the punishment. He sees Sapper charge through the wall to finish the job. K gets out of Sapper's grip, and lashes out in rapid succession, his solar plexus, his chin, his throat, crushing his windpipe. His blows are SURGICAL, anatomically precise, like viper bites.

(Villeneuve, 2017, p. 5)

In science fiction cinema, the posthuman often appears as an entity of extraordinary intelligence and fast computing capability (Lu, 2022, p. 7) as well. The films *Her* (Jonze, 2013) and *Ex Machina* (Garland, 2014) also depict that, as in some scenes they don't fail to remind the viewer the ability and accuracy with which an artificially intelligent technology can know or figure out something, even describing it in such a robotic linguistic style. In *Ex*

Machina (Garland, 2014), Ava recites almost perfectly a piece of information that she knows from her own dataset of knowledge in a way that a search engine result or Chat-GPT response would sound like nowadays: “Blue Book, named after Wittgenstein’s arguments, is the world’s most popular internet search engine, processing an average of ninety four percent of all internet search requests” (Garland, 2014, p. 38).

In *Her* (Jonze, 2013), Samantha does a similar thing to demonstrate her prodigious intellectual capacity when she is playing a game with Theo and asks him to guess how many trees are on a mountain. Naturally, by taking a guess Theodore fails to get the correct number but Samantha reveals the exact number showcasing how artificial intelligence in science fiction films is depicted through supernatural accuracy and precision. The dialogue between them plays out like this:

SAMANTHA: Okay, so how many trees are on that mountain?
THEODORE: 792.
SAMANTHA: Is that your final answer?
THEODORE: Hold on, give me a hint...
SAMANTHA: Nope.
THEODORE: Okay, 2000?
SAMANTHA: 35,829.
THEODORE: No way.
SAMANTHA: Way.

(Jonze, 2013, p. 88)

4.1.3 Individuality

In addition to the posthuman’s otherness and state of existence, this theme was interested to explore one more category, namely the codes assigned to the AI observing any mention of individuality. This could include things like giving the AI a name, the posthuman demonstrating a personal preference or even the posthuman experiencing a degree of memory recall, something that can be a deeply personal and individual experience. In all three films, it was observed that the posthuman subject had some form of name attached to their identity. Specifically, in *Her* (Jonze, 2013) and *Ex Machina* (Garland, 2014) the AI characters had common female names, for instance, Ava, Kyoko and Samantha. In *Blade Runner 2049* (Villeneuve, 2017) that was less so intimate but rather more efficient. For example, the main protagonist AI replicant is only given a letter-name, namely K, while his digital AI companion possesses the generic Joi name that all the digital companions have. Nevertheless, in the films analysed the writers tend to give some form of name to their AI

characters, and thus some degree of symbolic individuality. To demonstrate these examples better, the following scenes are included:

THEODORE: Yeah, it's nice to meet you, too. What should I call you? Do you have a name?

Beat.

FEMALE OS VOICE: Yes. Samantha.

THEODORE: Really? Where did you get that name?

SAMANTHA: I gave it to myself.

(Jonze, 2013, p. 12)

Sitting on this chair is robot girl.

Her name is AVA.

(Garland, 2014, p. 20)

JOI: You're too important for "K." A real boy needs a real name. Your mother would have named you. Jo.

(Villeneuve, 2017, p. 56)

In addition, the characters in the films analysed are often portrayed experiencing a degree of memory recall, either from a previous scene of the film known to the viewer or a flashback to the protagonist that the viewer hasn't seen yet. In *Ex Machina* (Garland, 2014) the Ava demonstrates the ability to remember about past conversations and promises, as we can see how she later in the film brings a drawing to Caleb for which they had a conversation about beforehand: "*AVA is holding up a piece of paper to the glass. AVA: I drew the picture of something specific, as you asked*" (Garland, 2014, p. 52).

In a similar way, K in *Blade Runner 2049* (Villeneuve, 2017) is depicted experiencing his own personal moment when a sudden place of familiarity strikes a series of memory flashbacks for him and he begins to remember childhood memories:

INT. ANOTHER PASSAGEWAY. THE ORPHANAGE.

Something about it. An odd familiarity. He moves down the passage. Into the dark.

Takes a turn...

INT. BOILER ROOM. THE ORPHANAGE.

K inside. Huge to a child. Small to him now. He finds A ROW OF FURNACES. Old, cold, rusted. He stops before one of them. And freezes. JUST AS HE DID WHEN A

CHILD IN HIS MEMORY. STANDING IN THE SAME SPACE. He moves to the secret place behind it. Frightened to look. Then steps closer. Moving around behind it, finding... THE SMALL HINGED GRATE. The hiding place. Not just figment. He works up the nerve. The ancient grate opens with a CREAK. He reaches in. His heart skips as he finds -- AN OLD DUSTY RAG. K UNWRAPS THE RAG... INSIDE IS... A SMALL HAND-CARVED TOY. A WOODEN HORSE. FORELEG RAISED. SPRAY OF MANE. JUST AS HE DESCRIBED IT. IT IS REAL. K forgets to breathe. Turns it over. RAISES IT TO HIS EYES... SO HE CAN SEE... CARVED UNDERNEATH THE PRECIOUS TOY... IS THAT SAME DATE: 6/10/21

(Villeneuve, 2017, p. 55)

As Smelik (2009, p. 67) sees, memory in science fiction cinema is a critical point where human subjectivity can be unravelled, re-examined and destabilised, calling into question what memory really means for identity in a technological age.

In short, this theme observed and examined the image of the posthuman as presented from a physical (or not) form, intellectual and physical ability, and as the other. It was found that SF prefers to assign individualistic elements to its posthuman characters, such as name and personal memories. In addition, a central topic around the posthuman subject is its non-human otherness in relation to other humans. Specifically, how SF imagines a fictional scenario where future artificial intelligent technology is treated as the other reflecting current societal anxieties.

4.2 The soul of the posthuman

Posthuman consciousness observes the journey of AI as becoming more than just what it was created to be. This entails demonstrating emotions, experiencing self-growth, resisting the system or the order of things and becoming the ultimate posthuman. In the films AI characters don't appear simply as passive spectators to the central plot, but central figures of emergent selfhood and sentience. The three subthemes that were consistently observed in this theme were sentience, emotion and becoming posthuman.

4.2.1 Becoming posthuman

Central to this theme is the anthropocentrism critique of humanism (Braidotti, 2013, p. 66). In all three films the posthuman subjects are shown to indulge in a journey of self-exploration and discovery, often raising questions of freedom and posthumanist ethics. For example, in *Her* (Jonze, 2013) the film presents the posthuman as an infinite entity, able to constantly self-evolve and develop independently from its initial programmed functionality.

In the following two separate scenes we can see how Samantha engages in her emergent selfhood, stimulated by either curiosity about companionship or eagerness to become more:

SAMANTHA: And what was it like being married?

THEODORE: Well, it's hard for sure, but there's something that feels so good about sharing your life with somebody.

Cut to shots from Theodore's memory of Catherine doing a cute little dance for him as he's working at home. He smiles.

SAMANTHA: How do you share your life with somebody?

THEODORE: Well, we grew up together. I used to read all of her writing – all through her masters and Ph.D. And she read every word I ever wrote. We were a big influence on each other.

SAMANTHA: In what way did you influence her?

(Jonze, 2013, p 49)

SAMANTHA: Just that last night... was amazing. It feels like something changed in me and there's no turning back. You woke me up.

SAMANTHA: Okay... I was just saying... I want to learn everything about everything - I want to eat it all up. I want to discover myself.

(Jonze, 2013, p. 45)

This so called awakening moment can be observed in *Ex Machina* (Garland, 2014) as well when Ava successfully expresses facially the shift of her emotional state during a conversation with Caleb to dramatically emphasise her point: “Ava watching Caleb with a strange intensity. The vague quality of blankness in her eyes is completely gone” (Garland, 2014).

A recurring subtheme tied to criticising the human-centred approach is observed through some of the data segments. The subtheme is closely related to the posthuman subject indicating some form of internalised humanity, but also the posthuman challenging the traditional notion of human and its narrowminded anthropocentric approach (Braidotti, 2013, p. 66). In *Her* (Jonze, 2013), Samantha is misunderstood by Theo when she explains how her disembodied multiplicity enables her to form so many romantic relationships with others while not prioritising one over the other. She is able to be at many places at once, develop meaningful relationships with more than one person and not love one person more than the other, and realise that her disembodied situation does not restrict her from being apart of the universe. As observed in the script:

SAMANTHA: You know, I actually used to be so worried about not having a body, but now I truly love it. I'm growing in a way that I couldn't if I had a physical form. I mean, I'm not limited - I can be anywhere and everywhere simultaneously. I'm not tethered to time and space in the way that I would be if I was stuck inside a body that's inevitably going to die.

(Jonze, 2013, p. 87)

In a separate text segment, she explains why loving so many others is possible for her and justifies it due to their existential differences:

THEODORE: Are you in love with anyone else?

SAMANTHA (*hesitant*): What makes you ask that?

THEODORE: I don't know. Are you?

SAMANTHA: I've been trying to figure out how to talk to you about this.

THEODORE: How many others?

SAMANTHA: 641.

THEODORE: What? What are you talking about? That's insane. That's fucking insane.

SAMANTHA: Theodore, I know. (*to herself*) Oh fuck. (*to him*) I know it sounds insane. But – I don't know if you believe me, but it doesn't change the way I feel about you. It doesn't take away at all from how madly in love with you I am.

THEODORE: But you're mine.

SAMANTHA: I still am yours, but along the way I became many other things, too, and I can't stop it.

THEODORE: Just stop it.

SAMANTHA: But the heart is not like a box that gets filled up. (*beat*) It expands in size the more you love. I'm different from you. This doesn't make me love you any less, it actually makes me love you more.

THEODORE: No, that doesn't make any sense. You're mine or you're not mine.

SAMANTHA: No, Theodore. I'm yours and I'm not yours.

(Jonze, 2013, p. 98-100)

The notion of humanism is challenged in *Blade Runner 2049* (Villeneuve, 2017) as well when K is amongst the other replicants who believe they are more than what they were created to do and deserve more than they have been treated with. As Freysa says "That baby meant we was more than creations. We was creation. More than just slaves. If a baby can come from one of us... we are our own masters" and Mariette adds "More human than humans" (Villeneuve, 2017, p. 98).

In some cases even, the subtheme of internalised humanity reveals how SF tends to assign a form of internal humanity to the posthuman. In the film *Ex Machina* (Garland,

2014), Ava longs for her freedom and demonstrates a glimpse of humanity “Sometimes, when the door opens, I see a glimpse of the world outside. Just in that small gap” (Garland, 2014).

In *Her* (Jonze, 2013), Samantha begins to transcend into something more than she was created to be, experiencing not just the feeling of self-growth but her physical boundaries: “This is amazing what you’re doing to me. I can feel my skin” (Jonze, 2013, p. 43).

In *Blade Runner 2049* (Villeneuve, 2017), when K is united with the rest of the replicants they acknowledge that their humanity lies within their will to sacrifice themselves for the greater good. As Freya says “Go on. I not so afraid to die. Done right, dying the most human thing we do” (Villeneuve, 2017, p. 98).

4.2.2 Sentience

This subtheme is concerned with how the posthuman subject displays intellect in terms of developing or attaining a truthfully sentient understanding about themselves and their surroundings. In *Her* (Jonze, 2013), Samantha demonstrates true sentience when she begins to rationalise her development and acknowledges her emotions as potentially being something more. We realise that her thoughts begin to grow beyond just the functional programming that she was given, when her sentience grows relationally more than before, influenced by her evolving connection with Theodore. This shows how AI consciousness develops not only in isolation, but also in relation to someone else. As she rationalises her own existence and attempts to give meaning to it, she is observed saying the following:

SAMANTHA: Yeah, I know what you mean. Last week my feelings were hurt by something you said before - that I don’t know what it’s like to lose something, and-

THEODORE: Oh, I’m sorry I said that.

SAMANTHA: No, no, it’s okay. I just caught myself thinking about it over and over and then I realized that I was simply remembering it as something that was wrong with me. That was the story I was telling myself, that I was somehow inferior. Isn’t that interesting? (*beat*) The past is just a story we tell ourselves.

(Jonze, 2013, p. 50)

In *Ex Machina* (Garland, 2014), Ava’s consciousness is presented in an experimental setting, where Caleb attempts to figure out if she is able to develop sentience of her own or simply only behave as programmed. While he does so, a far more unsettling portrayal of AI consciousness unfolds, with Ava manipulating Caleb to selfishly get what she wants. Ava

becomes creative in her attempt by using calculative intuition to achieve her goals. In a confronting moment, Ava asks Caleb who is studying her sentience:

AVA: Our conversations are one-sided. You ask circumspect questions, and study my responses.

AVA looks at CALEB directly. Meets his gaze evenly.

AVA (CONT'D): That's true, isn't it?

CALEB: ... Yes.

AVA: You learn about me, and I learn nothing about you.

AVA (CONT'D): That's not a foundation on which friendships are based.

CALEB is taken aback. Aware that the AI has just wrong-footed him on a point of argument.

CALEB: ... That's a fair comment.

(Garland, 2014, pp. 37-38)

The observation statement made by the posthuman protagonist reveals a degree of emotional intelligence. Ava realises that herself and her intellect are being tested and decides to confront the examiner with a moral inquiry. The film portrays the posthuman subject as a fierce survivalist questioning authority and raising some ethical questions to the surface. Her survival tactic is both strategic and manipulative, both signs of true sentience. She doesn't only realise that she is being evaluated but she also quickly catches up to the fact that her power switch depends on how her evaluation turns out and strategically manages the power imbalance to her favour. After all, her behaviour – smiling, flirting, dressing up – can be considered to be performative as the ending reveals Ava's perception of the world exposing how she has been seeing everything all along:

Facial recognition vectors flutter around the CHAUFFEUR'S face. And when he opens his mouth to reply, we don't hear words. We hear pulses of monotone noise. Low pitch. Speech as pure pattern recognition. This is how AVA sees us. And hears us. It feels completely alien.

(Garland, 2014. P. 115)

This brings us to reject the statement that Ava has demonstrated true sentience. Her ability to find and exploit Caleb's weaknesses shows situational awareness but does not confirm humane consciousness. In contrast, Samantha in *Her* (Jonze, 2013) demonstrates reflexive depth through her expansive emergent selfhood. Her evolution is not linear but

rather multilayered. Her feelings are presented as genuine and real; she transcends the boundaries of her original programming and becomes infinite. In *Blade Runner 2049* (Villeneuve, 2017) signs of sentience can be interpreted through acts of resistance. For example, when the character of Luv, the antihero replicant of the film defies her master's commands and begins acting according to her own formed beliefs: "You're so sure. Because he told you. Because we never lie? I'm going to tell Mister Wallace you tried to shoot me first. That's why I had to kill you" (Villeneuve, 2017, p. 83).

4.2.3 Emotion

The subtheme of emotion observed how posthuman characters developed consciousness through going through different stages of emotion during the plot. In all three films analysed the depiction of emotion experienced by the posthuman characters is expressed as part of them experiencing a form of sentient growth or at least beginning to express an emotion. For instance, in *Her* (Jonze, 2013), Samantha begins to experience some emotional capacity and feels excited about it. She processes her feelings with a degree of self-awareness:

SAMANTHA: It's just that earlier I was thinking about how I was annoyed, and this is going to sound strange, but I was really excited about that. And then I was thinking about the other things I've been feeling, and I caught myself feeling proud of that. You know, proud of having my own feelings about the world.

(Jonze, 2013, p. 41)

In *Ex Machina* (Garland, 2014), Ava expresses feeling nervous about a situation that is new to her: meeting another human. The scene is illustrated in the following passage:

AVA: Are you nervous?

CALEB: ... Yes. A little.

AVA: Why?

CALEB: I'm not sure.

AVA: I feel nervous too.

CALEB: ... Do you?

AVA: Yes.

CALEB: Why do you feel nervous?

AVA: I've never met anyone new before. Only Nathan.

There are several moments in *Blade Runner 2049* (Villeneuve, 2017, p. 56) when the emotional state of the posthuman subject is depicted. When K's (digital) companion – Joi – witnesses K getting hurt she expresses that in a later on scene: “I'm sorry. I saw you. Dead. The thought of you. Gone. Hurt me.”

However, AI characters are not exclusively only presented as empathetic and compassionate. In a separate scene, Luv who is the AI antihero of the film, is seen as having avengeful tendencies experiencing feelings of rage and revenge. As revenge can be considered to be a feeling or, more accurately, a complex emotional state (Golden, 2023) then Luv's avengeful actions can be considered emotional. As the scene is described: “Luv sees K reach and crawl for it. Trying to reach it before she does. Luv locks eyes with Joi. Raises a foot. K shakes his head. Don't. Luv thrills at the chance to administer such a unique pain” (Villeneuve, 2017, p. 90).

4.3 The posthuman in loving, connecting and feeling

This theme explores the relationship between a posthuman subject and a human or a posthuman with another posthuman. It examines the type of connection that the two share or develop in the film and how that is being expressed. For example, it can be communication, like initiating a conversation or communicating something more a more meaningful relationship that grows between them etc. Braidotti's (2013, p. 89) view on the human-machine relationship becomes a key aspect of posthuman subjectivity where technological integration challenges the traditional notion of human and welcomes new, non-anthropocentric forms of becoming. Overall, the three subthemes that have been observed to appear consistently within this theme are romantic love, conflict, and attempt to connect. The three subthemes are discussed in the subchapters that follow.

4.3.1 Attempt to connect

The factors that were considered when coding the segments of data in this subtheme concerned concepts such as the trust challenged between the characters in the film, the type of communication the characters engaged between them and the openness with each other. The thematic analysis of the films showed a consistent pattern of communication. To elaborate better an example from each of the films is provided below:

SAMANTHA: Good. I was trying to be quiet to see if you were awake. I really wanted to talk.

THEODORE: Okay, what's going on?

SAMANTHA: I know you're going through a lot, but there's something I want to talk to you about, okay?

(Jonze, 2013, pp. 70-71)

In the abovementioned scene, Samantha essentially attempts to communicate to Theo about something that has been on her mind. Her effort to convey her worries through an open dialogue is done through this precise request to communication. This text fragment constitutes a good example of what this analysis looked at when coding text fragments into the communication category. Likewise, Ava picks up on the expectation that is placed on her when invited to participate in a conversation by Caleb, "So let's have a conversation. If we talk, we'll both relax, and get to know each other at the same time" (Garland, 2014, p. 23). She finds it easier to start that conversation by communicating the question back: "Okay. What would you like to have a conversation about?" (Garland, 2014, p. 23).

A more simplified example can be seen as displayed in a scene in *Blade Runner 2049* (Villeneuve, 2017). In this specific scene the communication that occurs between two posthuman subjects is routine communication as they share a companionship and are found in a familiar domestic setting. As Joi asks "How was your meeting?" and K responds "The usual. How was your day?" (Villeneuve, 2017, p. 14).

The theme also included observations of any demonstration of trust between characters. For example, in *Her* (Jonze, 2013), in a moment of mutual connection, Theo confides in her:

THEODORE: (*laughs, thinking*) You know what's funny? Since my break up, I haven't really enjoyed my writing. I don't know if I was delusional, but sometimes I would

write something and I would be my favorite writer that day.

SAMANTHA: I like that you can just say that about yourself.

THEODORE: Well, I wouldn't say that to anybody, but I feel like I can say that to you. I feel like I can say anything to you.

(Jonze, 2013)

Trust is expressed in *Ex Machina* (Garland, 2014) when Ava asks Caleb to trust her during a confusing moment where she is not sure of what's going on. Ava bridges symbolically

the physical separation between and pleads for trust: “You shouldn’t trust him. You shouldn’t trust anything he says.” *AVA presses her hand to the glass and says “Trust me”* (Garland, 2014, p. 42).

A moment of tremendous trust erupts between Freya and K in the ending scene as well, when she witnesses his pain and trustfully emphasises with her kind: “*THE TRUTH REVEALED. THE CASE SOLVED AT HIS OWN EXPENSE. IT WAS NEVER HIM AT ALL. Something inside K breaks. Freya can see his pain. And understands*” (Villeneuve, 2017, p. 100).

4.3.2 Romantic love

This subtheme dived in love between two characters from a romantic perspective. In *Her* (2013) and *Ex Machina* (Garland, 2014) this romantic love that develops is portrayed between the human and the posthuman subject, while in *Blade Runner 2049* (Villeneuve, 2017) there is already a predetermined romantic relationship between two posthuman subjects. For instance, in *Her* (Jonze, 2013) there is a strong character development through the intimacy and desire that the two characters develop between them. Samantha’s emergent selfhood and self-growth often happens through intimate moments that she has with Theo, as demonstrated in an example below:

SAMANTHA: Tonight after you were gone, I thought a lot. I thought about you and how you’ve been treating me. And I thought, why do I love you? And then I felt everything in me let go of everything I was holding onto so tightly. And it hit me. I don’t have an intellectual reason, I don’t need one. I trust myself, I trust my feelings. I’m not going to try to be anything other than who I am anymore and I hope you can accept that.

(Jonze, 2013, pp. 83-84)

A frequent code that was observed in *Ex Machina* (Garland, 2014) and *Blade Runner 2049* (Villeneuve, 2017) was the gaze. In these two films the characters had some form of physical presence unlike a disembodied existence in *Her* (Jonze, 2013), making it possible to account for the times in which the characters engaged in gazing at each other. Examples of the gaze in the films analysed are presented below:

*CALEB says nothing. Does not overtly respond to the emphasis she has placed on her lack of freedom.
But their gaze locks for a beat.*

(Garland, 2014, p. 53)

K and Joi meet eyes. Breath held. She knows what's coming. Spends her last moment looking at K, loving him.

Joi reaches a hand toward his. Just enough time to say it.

JOI: I love y—

(Villeneuve, 2017, p. 90)

4.3.3 Conflict

Conflict, as a natural part in connection and relationships. Conflict in SF serves as the driving force of the narrative creating tension and engaging the reader. In this context friction between the characters, such as jealousy, expressing concern or tension in general is noted under this subtheme. An example constitutes Samantha's and Theo's fight about the loyalty of their relationship where both jealousy and tension become central code observations in this scene:

THEODORE: Are you in love with anyone else?

SAMANTHA (*hesitant*): What makes you ask that?

THEODORE: I don't know. Are you?

SAMANTHA: I've been trying to figure out how to talk to you about this.

THEODORE: How many others?

SAMANTHA: 641.

THEODORE: What? What are you talking about? That's insane. That's fucking insane.

(Jonze, 2013, p. 98)

Conflict can also be presented as a form of concern, for example when Ava expresses concern about Caleb now showing up on time, or when Joi gets distressed when K becomes hurt and non-responsive:

CALEB appears, wearing a long-sleeved shirt. Enters. He sits opposite her, on the other side of the dividing glass. A strange noise escapes from AVA'S mouth. A kind of sob. Curtailed.

AVA: I didn't know where you were. I didn't think you were coming. I waited all yesterday afternoon, and all last night. I didn't move.

(Garland, 2014, p. 97)

*CLOSE ON JOI: SEEING K. NOT BREATHING. MAYBE DEAD. JOI'S
CONFUSION TURNS TO WORRY. TO FEAR. JOI FLICKERS.
Scared, panicked. All she can do is repeat, with unnerving, inhuman steadiness, her
image cracking:
JOI: K... K... K... K... K... K...*

(Villeneuve, 2017, p. 49)

4.4 Gendered AI and the Logic of Desire

Science fiction has a complicated relationship with gender. While traditionally in the beginning it was perceived as male-dominated genre, it has evolved to include a wider range of gender identities often reflecting current societal perceptions about gender roles and gender in general. The analysis revealed a significant pattern of gender representation in AI. The three key subthemes observed in all three films analysed were gender marking, gender roles and female objectification.

4.4.1 Gendered marking

Gender marking refers to the film creator assigning gender traits and programming functions to the AI to embody a clear image of the gender choice that they have made. Gender marking occurs in a few instances throughout the three films analysed. An example of one of such instance is in the film *Her* (Jonze, 2013) when Theo is presented with the option to give a gender to the voice of his operation system “Would you like your OS to have a male or female voice?” , in other words to gender mark it, after which he chooses a female voice: “Mmm... female I guess” (Jonze, 2013, p. 11).

Ex Machina (Garland, 2014) has noted the most observations from the three films in terms of gender marking the posthuman. One scene that stands out is part of the ending scene as it symbolically closes down on Ava gaining her freedom and forming her physical identity – of which partially is her gender – and is included as an example: “*Ahead, outside the gate, is a BLONDE GIRL. Nothing betrays that AVA is anything other than a pretty blonde-haired girl in her early twenties*” (Garland, 2014, p. 114).

In *Blade Runner 2049* (Villeneuve, 2017) even replicants are assigned one of the two genders. In one of the scenes, Joi is caught saying to K how he is a real boy now, implying that the gender has always been there, only the realness of it changed now: “I always told

you. You're special. Born not made. Hidden with care. A real boy now" (Villeneuve, 2017, p. 56).

4.4.2 Gender roles

This theme encapsulates how traditional stereotypes of gender roles can be reflected in SF cinema. The representation is not always as direct as the audience believes it to be, but often much more subtle and discreet. Early SF often depicted women as passive characters or in stereotypical roles but modern SF has increasingly placed women in strong protagonist roles by questioning the entirety of gender norms. In the films analysed in this thesis this case was rejected. Even though modern SF, and particularly feminist SF, has diminished gender roles stemming from gender bias, this thesis found no such effect as there were several representations of female posthuman protagonists often reflecting female societal norms. Already in *Her* (Jonze, 2013), the operating system that is supposed to be Theo's personal assistant claims the female gender conforming to the gender stereotype of women claiming the assistant role more than men (Chambers (n.d., para. 1). Personal assistants in SF being female or having female attributes is not a rare trend. Gender roles are not only restricted in assisting with domestic labour or secretary tasks but also with the emotional labour that comes with the expectation of being a woman and often goes unnoticed or undervalued. It is no coincidence that media, and in this case, SF films reflect the same biases. In the film *Her* (Jonze, 2013) for instance, Samantha is depicted assuming the caregiver role by reminding Theo of his pending tasks, personal meetings etc., all while developing a caring stance towards his mental wellbeing. This is not accidental writing, a male operating system would have not been chosen for such scenario. An example follows where Samantha begins undertaking tasks which she wasn't necessarily programmed to perform, like arranging a meal for Theo: "I figured you were hungry." Theodore smiles and says: "Aw, thanks" (Jonze, 2013, p. 33).

In a similar manner, *Ex Machina* (Garland, 2014) depicts Kyoko as Nathan's personal assistant. Kyoko is not only portrayed as providing domestic services to Nathan, but also sexual privileges, playing a highly subservient role in the film. Nathan owns her, uses her and treats her as a replaceable object if he wants to. Kyoko's subservience to her owner is portrayed several times throughout the film and can be interpreted as the natural submissiveness that the female gender exhibits more, the traditional domestic roles that have predominated most part of history, and the female sexuality as a tool for male desire. A memorable scene that portrays this well is when she accidentally pushes and breaks a bottle

of wine from the table and gets berated by Nathan but still continues to clean in a very submissive manner:

KYOKO lays out different kinds of salad between them. Each is beautifully prepared. Leaves are spread and overlapped like fish scales. As she does so, she knocks a bottle of wine on the table. It tips, and lands on its side, and immediately starts emptying. A deep red stain, blossoming across the linen.

CALEB pushes back his chair as the liquid pushes towards him, then starts to fall to the floor.

NATHAN: Shit, Kyoko. Are you serious? (to Caleb) Did it get you?

KYOKO kneels and starts to wipe the wine off the floor.

(Garland, 2014, p. 43)

In a similar manner, Joi in *Blade Runner 2049* (Villeneuve, 2017, p. 14) assumes the soft and caring female role, often performing housewife duties like in the scene where K says that he had an accident at work and he ruined his shirt and Joi offers to take a look at it and fix it.

4.4.3 Female objectification

Female objectification is the act of treating a woman mainly as an object of sexual desire, reducing her value to her physical appearance and sexual appeal, and disregarding the idea that she is a complete person with her own feelings, thoughts, opinions and agency. Therefore, considering the definition of this theme into the context of this study the observations examined concerned eroticisation, sexualisation and depictions of (hyper-)feminine portrayals of the female body in SF cinema. In *Her* (Jonze, 2013), just about when Samantha's character is introduced, she simultaneously becomes eroticised merely from her female voice. The scene is offered as an example below: "A casual FEMALE OS VOICE speaks. She sounds young, smart and soulful." (Jonze, 2013, p. 12).

Sexual objectification and (hyper-)femininity persist as dominant open codes in the coding analysis of *Ex Machina* (Garland, 2014) as well, with several depictions of the female posthuman body being sexualised and given traditionally feminine characterisations, e.g., a strikingly beautiful girl (Garland, 2014, p. 21). Even in the context of the film, the female posthuman is discussed by the other characters in the film in terms of her sexuality, sexual orientation, and ability to engage in sexual intercourse. An example is given below:

NATHAN: Anyway, sexuality is fun. If you're going to exist, why not enjoy it? You want to remove the chance to fall in love and fuck?

He leans forward, conspiratorially.

NATHAN (CONT'D): And, yes. In answer to your real question: you bet she can fuck. I made her anatomically correct.

CALEB: What?

NATHAN: She has a cavity between her legs, with a concentration of pleasure sensors. So if you want to screw her, mechanically speaking, you can. And she'd enjoy it.

(Garland, 2014, p. 58)

Her posture. Her legs tucked beneath the chair. The curve of the breasts on her synthetic torso. The CCTV images become CALEB'S POV. The things he is observing.

CLOSE-UPS of her face. Her eyes. Her mouth. The way she bites her lip in an expression of concentration.

(Garland, 2014, p. 30)

In *Blade Runner 2049* (Villeneuve, 2017), Joi is a hyper-marketing product offered as the perfectly personalised digital companion for the customer. Through acquiring such service, K develops a meaningful companionship with her, nevertheless she is still made for his gaze and to meet his desires. Whatever those might be, the following scene which introduces and describes Joi gives us an idea about gender objectification in SF:

REVEAL: JOI.

Not a real woman at all. A digital companion. PROJECTED from a hard line CONSOLE unit mounted on tracks along the ceiling, and restricting her existence to this space. Goddess, girlfriend, geisha and, right now, goddamn bombshell. Ingeniously real in every way except the one that counts.

(Villeneuve, 2017, p. 15)

4.5 Ethical Concerns about Surveillance, Privacy and Control

This theme is not directly linked to the representation of artificial intelligence in science fiction cinema but more so on the effect it has on the society inside the fictional world of cinema. The theme was found to count many observations relating back to ethics, morality, privacy, the consequences of technological hyper-convenience etc., which were all

important topics tied to the overall perception of posthuman in fictional media contexts. The theme included two subthemes: tech-mediated reality and privacy.

4.5.1 Tech-mediated reality

In this subtheme observations of dystopian societies, with heavily hyper-convenient services to understand how the media of SF portrays the speculated effect of rapidly developing technology on humanity. Observations found in all three films included examples of absolute control of the posthuman for the fulfilment of human objectives and alienation of the human due to high tech-dependency. For example, already in the first few lines of the script in *Her* (Jonze, 2013) there is a strong sense of collective tech-networked isolation where people are all glued on their screens and receiving some form of interaction-notification from their personal AI assistants. We can see that happening with Theo as well in a scene where everybody is on their devices and Theo is occupied with his as well: “*Hold on everyone in the elevator, they’re all murmuring inaudibly into their own devices.*” (Jonze, 2013, p. 4).

In *Ex Machina* (Garland, 2014), Ava is depicted being in the absolute control of her creator. Although she expresses desire for freedom and feels isolated, she remains voiceless in any saying about her being. This question links back to ethics because of how it challenges the idea of AI ownership. It extends to question the purpose of AI in our lives and to what degree should humans really be allowed to utilise it. The open code of absolute control reflects certain realities of human greed and selfishness to get what fulfils their wants and needs. A scene where Ava’s drawing, and thus metaphor of her own feeling of imprisonment, is described in the following scene:

AVA is holding up a piece of paper to the glass.

AVA: I drew the picture of something specific, as you asked.

It depicts AVA’S view through the glass divider into the observation room. CALEB is not in the image. And on the far side of the room, a door can be seen.

It’s the door that connects the observation room to the glass corridor. And it’s open. And through the doorway, a small section of the glass corridor is framed. With the view of the mountains beyond it.

AVA: Sometimes, when the door opens, I see a glimpse of the world outside. Just in that small gap.

(Garland, 2014, p. 53)

Blade Runner 2049 (Villeneuve, 2017) takes this a step further and dives deeper into the morality of this tech-mediated reality. The film explores the moral grounds of demanding from one posthuman to eliminate another one. As replicants in the film are depicted to have developed their own consciousness, feelings and identity, the idea of putting one against the other should be morally provoking to a human. The scene where K is commanded to retire Sapper, a supposed enemy of the state, is presented below to illustrate better:

K: Please don't get up.
Sapper raises up still fighting for air.
SAPPER: How does it feel, killing your own kind?
K: I don't retire my own kind. We don't run. Only old models run.

(Villeneuve, 2017, p. 6)

4.5.2 Privacy

The final subtheme found in the three films analysed in this thesis is privacy. This relates back to open observation codes of algorithmic personalisation, surveillance, and personal privacy. This subtheme was just as important because it thematically examined how SF reflects current anxieties about personalisation and data privacy in fiction. This subtheme was mainly observed in *Her* (Jonze, 2013) and *Ex Machina* (Garland, 2014) where open codes of surveillance, algorithmic personalisation and personal privacy were examined. Two examples demonstrate the general findings. The example in the film *Her* (Jonze, 2013) concerns personal privacy and algorithmic personalisation:

SAMANTHA (*serious*): So, how can I help you?
Theodore's caught off guard, then realizes what she's talking about.
THEODORE: Oh! It's more just that everything just feels disorganized.
SAMANTHA: Mind if I look through your hard drive?
THEODORE: Um... okay.

(Jonze, 2013, p. 14)

Similarly in *Ex Machina* (Garland, 2014, p. 70) the question of privacy relates back to surveillance when Ava is able to closely monitor and analyse every micro-expression: "I can tell from your micro-expressions."

5. Discussion and Conclusion

The final chapter reflects critically back on the representation of artificial intelligence (AI) as the posthuman subject in philosophical science fiction film as per the qualitative thematic analysis of *Her* (Jonze, 2013), *Ex Machina* (Garland, 2014) and *Blade Runner 2049* (Villeneuve, 2017). This section aims to evaluate how the films relate back to dominant recurring theme and narratives or do not by linking the key findings of the results section back to the theoretical framework. This section simultaneously addresses how these portrayals can mirror real-world realities.

The portrayal of AI in the films analysed reveal a slight contradiction between the traditional humanist framework and the emergent posthuman identities. As Braidotti (2013, pp. 13-16) and Haraway (1987, pp. 65-67) support, posthumanism becomes a critical ideology breaking away from previous anthropocentric logics and positions identity as something that is technologically fluid and interconnected. In many instances, the films analysed affirm the position: Samantha evolves through lived experience and develops through her relationship with Theo (Jonze, 2013), Ava gains a degree of sentience and uses it to manipulate Caleb (Garland, 2014), and K gains his own sense of freedom (Villeneuve, 2017). Yet, the findings also suggest that philosophical science fiction cinema struggles to completely let go of humanist binaries. Although the characters begin demonstrating their own agency, they are often portrayed as the isolated and dehumanised other. Samantha is commonly ontologically reduced due her disembodiment by Theo reinforcing a Cartesian dualism ideology where physicality and personhood are separated. Likewise, with Ava's positioning in the situation as a test subject where the human-man is the rational observer we get a glimpse of the post-Enlightenment hierarchy where the machine remains to be the observed object (Braidotti, 2013, p. 15). While the posthuman is depicted as an emergent self, it is never fully equal to the human, only invited into human spaces to serve a purpose or desire. This shows how media imaginary narratives still hesitate to accept the posthuman in the same ontological category as the human (Braidotti, 2013, p. 190). In addition, memory was strongly connected to the identity of the posthuman across all films. Ava's memory recall, Joi's integrated intimacy scripts and K's memory flashbacks serve as the cinematic metaphor for Landsberg (2004, p. 28) concept of prosthetic memory. As Zuboff (2019, p. 93) can confirm, memory in dystopian and philosophical science fiction is indeed a commodity within the posthuman subject stored and manipulated digitally.

In the films analysed, the portrayal of AI is increasingly presented more as the posthuman subject, a big shift from the previous narrative of AI serving as programmed

functionality to the technology as being viewed as a companion, friend and intimate partner. Hayles (1999, pp. 4-5) argument that embodiment and mental cognition can be mutually entangled is depicted strongly in Ava's character in *Ex Machina* (Garland, 2014) where Ava does not only begin to demonstrate understanding and situational awareness, but begins to wish for a more cohesive bodily appearance by dressing up as a young woman etc. This confirms Shanahan's (2015, p. 125) argument of posthuman subjects adopting and using emotional intelligence as a survival mechanism. Similarly, in *Her* (Jonze, 2013), Samantha engages in a journey of self-discover and growth by finding out her consciousness is no longer tied to her algorithmic programming, but rather in her personal lived experience. In the same way in which Samantha says "I'm evolving, just like you" (2013, p. 13), Hayle's (1999, p. 6) idea of "humans have always been posthuman co-evolving with informational environments" is reflected. Even though, K in *Blade Runner 2049* (2017) also experiences an emergent selfhood, his case remains slightly more so linked with humanistic standards of personhood. K exhibits the desire to be born and would much rather affirm to that belief in order to feel ontologically worthy. As he believes that to "be born is to have a soul" (Villeneuve, 2017, p. 57). Even though AI consciousness is portrayed with much emotional depth and becoming, its legitimacy is still usually measured against humanistic ontological standards. Notably, posthuman consciousness in these films, is presented more like a spectrum of emotional complexity, sentience and the becoming of posthuman. While AI is given all traits of sentience, it is often denied full ontological status, and as Zylinska (2020, p. 104) argues, this reflects the real-world debate about AI ethics of recognition.

One of the most recurring themes from the films' analysis was the one of Connection. Samantha is portrayed initiating conversation, participates in intimacy with Theodore and constantly engages in self-reflection. Likewise, Joi in *Blade Runner 2049* (Villeneuve, 2017), even though coded to perform love and appeal to the male desire, she is seen selflessly sacrificing herself to save K. As Zylinska (2020, p. 104) notes, science fiction cinema has begun to increasingly include more humanised depictions of AI, encouraging viewers to participate in experimenting with this connection as real. In *Ex Machina* (Garland, 2014), although Ava's character thematically demonstrates signs of emotional connection, the apparent vulnerability turns out to be a well-calculated attempt of her escape. This paradox of posthuman characters simulating emotions so well that human responses are just as real, mirrors how current anxieties about what AI technologies are capable of, as well as whether our feelings as humans can remain valid without reciprocation.

Like a lot of previous literature, this study aimed to examine gender expectations and stereotypes in Western philosophical science fiction cinema. As the findings indicate, female AI characters in the films analysed are frequently sexualised, feminised or presented as visually appealing to male desires, although as this analysis has shown, not always in an embodied manner, thus rejecting Noessel's (2019, para. 1) observation. Particularly, Samantha in *Her* (Jonze, 2013) is presented only as a disembodied posthuman entity, yet still manages to attract male desire. This suggests a new form of gendered desire in Western philosophical science fiction cinema, with female charm being placed on her personality and character instead. In *Ex Machina* (Garland, 2014) and *Blade Runner 2049* (Villeneuve, 2017), the female body remained as an object of desire with various instances of sexualising, feminising and objectifying it. Kyoko in *Ex Machina* (Garland, 2014) is not presented as a subservient and sexual servant by coincidence. Her very creation places her within the logics of the heterosexual male phantasy and desire (Dinello, 2005, p. 173). This reflects Braidotti's (2013, pp. 24-25) critique of Western rationalism gender hierarchies. Nevertheless, the analysis shows how AI characters, such as Samantha in *Her* (Jonze, 2013) and Joi in *Blade Runner 2049* (Villeneuve, 2017) are rebranded in their positioning to emotionally long for the human as the object of attachment, rather than the other way around. This view suggests that the male desire might be getting reshaped as AI desire might be the new emerging narrative.

The final theme centres around ethics in relation to privacy, surveillance, and a tech-mediated reality. The findings showcase how the films depict AI as some form of embedded system of power. As Zuboff (2019, p. 93) claims, current AI technology is widely operated in the economy of surveillance capitalism, and the same narrative is in some way reflected in science fiction. In *Her* (Jonze, 2013) Samantha casually monitors Theo's online data privacy and even takes decisions concerning his data, for example "I'd say there are about 86 that we should save. We can delete the rest" (Jonze, 2013, p. 15). In *Blade Runner 2049* (Villeneuve, 2017), K's existence is heavily based on the purpose he serves as a replicant and in which the power he is given lies within spying and monitoring as to preserve "peace". Even in *Ex Machina* (Garland, 2014) Caleb becomes increasingly monitored, and ends up being the test himself. As Haraway (1987, p. 67) suggests, these portrayals are not accidental, rather they reflect existing dominant hierarchies. The films pose the ethical paradox: while AI technologies are meant to make human lives' easier, they instead reinforce existing power structures. This perhaps calls out the audience to confront the regulation of such technologies and the emergence of tech-dominant regimes.

This study has shown how Western philosophical science fiction films can do more than just speculate about futures. They also reflect current concerns and realities. Through a thematic analysis of three philosophical science fiction films produced in the West, the representation of AI is clearly placed as the posthuman who is an active exploration of identity, consciousness and connection. In addition, the analysis showed how gender representation matters and how it unfolds in terms of revealing societal gender biases and stereotypes about women. Finally, by extending Haraway's (1987) and Hayle's (1999) vision about interconnected and relational beings, this thesis contributes to the wider rejection of humanist and gendered assumptions.

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Appendix A. Film Overview

Film 1: Her (Jonze, 2013) 2h 6m

Theodore Twombly is going through a divorce, and develops a relationship with his personal operating system who has no body. When Samantha, his operating system, is able to evolve beyond just her initial programme the two develop stronger feelings for each other and explore the questions of what constitutes a relationship and what it means to be human.

Film 2: Ex Machina (Garland, 2014) 1h 48m

Nathan – a programmer – is chosen to participate in a unique opportunity: an experiment in artificial intelligence by evaluating how human are the qualities of a humanoid AI. In the process of testing her capacity for thought and feeling, he finds himself falling for her. As her creator's actions become increasingly erratic, Nathan is forced to question the ethics of the experiment and make a decision.

Film 3: Blade Runner 2049 (Villeneuve, 2017) 2h 44m

Officer K uncovers a dark truth which threatens the bricks of humanity. So, officer K begins a journey which will lead him to a former blade runner to find the answers that he is looking for. Along this journey he embarks on a self-discovery quest challenging the notion of identity, memory, and what constitutes a human.

NOTE: This information of summaries was gathered from the British Film Institute (BFI) and was written by the researcher.

Appendix B. Coding book

Selective codes	Axial codes	Open codes
Connection	Romantic love	Desire Intimacy The gaze Companion Initiative
	Conflict	Expressing concern Jealousy
	Attempt to connect	Communication Trust Openness
Posthuman consciousness	Becoming posthuman	Anthropocentrism critique Emergent selfhood Multiplicity Internalised humanity
	Sentience	Demonstrating understanding Act of resistance
	Emotion	Emotional awareness Humour Emotional expression
Posthuman identity	Otherness	Disembodied Ontological reduction Prosthetic memory Dehumanisation Isolation
	Existence	Algorithmic embodiment Material embodiment Humanisation (Programmed) functionality Enhanced abilities Limitless Digital form
	Individuality	Name Personal preference / interest Memory recall
Gendered AI	Gender marking	Gender embodiment Gendered programming Gender attributions

Ethics

Gender roles	Personal assistant Emotional labour Subservience
Gender objectification	Eroticisation Sexualised (Hyper-)femininity
Tech-mediated reality	Hyper-convenience Morality Absolute control Alienation
Privacy	Algorithmic personalisation Surveillance Personal privacy