REDEFINING CONNECTIONS: THE INFLUENCE OF AI COMPANIONS ON HUMAN DEVELOPMENT AND SOCIETAL DYNAMICS IN *KLARA AND THE SUN* BY KAZUO ISHIGURO

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Abstract
This research investigates the transformative role of artificial intelligence in modelling human relationships and societal norms. By investigating the complexities of emotional attachment, ethical dilemmas, and the shifting definitions of humanity in a world influenced by technology, the study employs the framework of Posthumanism outlined by Katherine Halyes. This paper examines how the boundaries between human and non-human connections have been blurred. Halyes' insights accentuate how AI reforms human connections and calls into question societal norms—a theme central to Ishiguro's novel. By utilising a qualitative methodology focused on textual analysis, this research aims to explore the ways in which Artificial Friends (AFs) reshape the notion of companionship, empathy, and emotional connections. It, furthermore, seeks to analyse how the portrayal of Klara questions the boundaries between human and non-human connections. This paper examines how Ishiguro's representation of AI companions critiques contemporary societal trends towards digital and artificial companionship. The findings blow the gaff on how Klara's interactions with humans underscore the potential for authentic emotional support and the inherent risks associated with depending on AI for companionship. This study concludes that though the impact of AI on human development is increasing daily, particularly as children increasingly seek emotional support from these AI companions, there is a need to rebuild and preserve the human relationships that artificial connections cannot supplant.
Keywords: Artificial Intelligence, Artificial Friends, human connections, emotional attachment, companionship

Introduction
This paper explores AI companions' transformative role in modelling human relationships and societal norms. In order to achieve this aim, this research applies the Posthumanism by Katherine Halyes on Ishiguro's *Klara and the Sun*. It is argued that rebuilding and preserving human connections is essential as the relationships developed by AI companions cannot supplant them. Within the last few years, Artificial Intelligence (AI) has increasingly integrated into human lives, paving the way for a better future and reshaping human behaviours and lifestyles. Modern humans live in a technology-driven world where human connections have lost their strength and must be reshaped. In the 21st century, technological advancements like AI robots or machines have influenced human relationships, so society must rethink how humans interact with each other and with artificial companions (AI).

Artificial Friends are artificial entities designed to provide company or companionship to human beings. Artificial Companions, to some extent, replace human beings to bring an end to their lonesomeness. The weaker the roots of human-to-human relationships become, the stronger human-to-nonhuman relationships grow. Having no human being as a friend, many want to find nonhuman companions to ease their loneliness. However, they risk losing their connection with fellow humans when they find this nonhuman or artificial friend.

Ishiguro considers this matter and talks about these implications. Ishiguro's works are replete with identity, nostalgia, the transience of time, isolation, connections, human

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displacements, technology, and humanity. This research deals with all these themes except identity and nostalgia. Ishiguro wrote *Klara and the Sun* during the COVID-19 pandemic when everything was technology-centred, and human connections were at the mercy of those machines. All those circumstances of that time inspired him to write this spellbinding novelHe seeks to portray how human beings have become frustrated and lonely, how these situations affect them and how they cope.

At that time, he observed how people, specifically children, became alienated and how they entertained their lonesomeness. Though technology makes people connected virtually, it makes humans far apart emotionally. All the family members living under the same roof have their own AI-powered spaces, which make them oblivious to others around them, leaving everyone desolate on their parts. This loneliness caused by technology is now ironically catered by technology in the form of Artificial Friends.

Klara and the Sun narrates the story of an Artificial Friend (AF), Klara, purchased by a young girl, Josie. Josie has a chronic illness, and Klara is chosen to support Josie and then replace her if she does not survive. While living at Josie's home, Klara observes her world, develops a connection with Josie's friend Rick and experiences different emotional changes. Klara believes in the sun's power and that it will be helpful in Josie's recovery, and she does improve with the sun's rays. Eventually, Josie starts her college, saying goodbye to Klara. Being a robot, she is left alone and unattended in the yard, facing the end of her life.

Klara and the Sun is a breathtaking novel that deals with loneliness, faith, hope, relationships, technology and intelligence (Maria, 2022). This paper addresses how connections have been formed and the factors that drive these connections. This research specifically focuses on the role of technology and intelligence and how this technology influences human connections. The title of this research paper is "Redefining Connections: The Influence of AI Companions on Human Development and Societal Dynamics in *Klara and the Sun* by Kazuo Ishiguro." The term "redefining" shows how Ishiguro presents the human-human and human-nonhuman relationships. This research emphasises how human-nonhuman relationships reshape and reform human-human relationships. Furthermore, it also looks into the influence of these human-artificial friend relationships on human development and society as a whole.

The purpose of this study is to examine how the integration of AI challenges the concepts of companionship, empathy, and connection, reshaping human development and social structures. By exploring Ishiguro's depiction of Artificial Intelligence within these contexts, this research strives to understand the implications of artificial companionship in modern society, where digital relationships are increasingly prominent and accepted. The investigation aims to reveal how AI alters individual growth, ethical boundaries, and the essence of human connections. This research, further, explores how the boundaries between human and nonhuman beings have been blurred and how they reshape or redefine human connections.

Research Objectives

The objectives of this research are:

1. To explore the ways in which Artificial Friends (AFs) reshape the notion of companionship, empathy, and emotional connections in *Klara and the Sun.*
2. To analyse the potential risks and benefits of AI companions in real-world human interactions by drawing insights from *Klara and the Sun.*
3. To examine the contemporary societal trends towards digital and artificial companionship in *Klara and the Sun.*

Research Questions

This research strives to answer the mentioned research questions:

1. How does the presence of Artificial Friends in *Klara and the Sun* reshape human notions of companionship, empathy, and connection?
2. How does *Klara and the Sun* provide insights into the potential risks and benefits of AI companions in real-world human interactions?
3. How does the representation of Artificial Friends critique contemporary societal trends towards digital and artificial companionship in *Klara and the Sun?*

Theoretical Framework

In order to achieve these goals, this research employs the framework of Posthumanism, a theory delineated by Katherine Halyes. She scrutinises the relationships of humans with machines in literature, especially in science fiction, and sets forth that technology has already begun transforming humans into posthuman beings. Posthumanism is an interdisciplinary framework which calls into question the human-centred approach by considering the human relationship with technology. It questions the set boundaries between humans and nonhuman entities. It, furthermore, argues that in the posthuman world, the line between human and nonhuman is blurred. By examining the societal and emotional shifts impelled by artificial beings, this paper raises crucial questions about the role of technology in human development and the transformation of relationships.

The prefix 'post' suggests the emergence of a new era, as "posthumanism" aims to define a way of existence that markedly diverges from the principles of humanism (Lorimer, 2009). It is argued that Posthumanism marks a new era of existence that deviates from the human world. It suggests the beginning of the era where humans are no longer at the centre but part of the extensive networks of nonhuman worlds. This makes humans rethink and reconsider themselves as dependent beings and interconnected with other nonhuman existence.

Nayar (2023) posits that Posthumanism is a perspective that explores the connections between humans, nonhuman entities, and technology. It has gained significant theoretical attention since the late twentieth century, particularly in response to rising ecological awareness and environmental movements that challenge humanity's role in determining the Earth's future. Therefore, Posthumanism calls into question human-centred worldviews by underscoring the complex interwoven relationships that link humanity with the nonhuman and technological worlds.

Hayles (1999), in her book *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, discusses how artificial intelligence has reshaped our views of humanity. The utilisation of artificial intelligence is increasing day by day, which makes people inhumane as they do not care for one another and leave their loved ones at the mercy of these machines. They are destroying themselves and are responsible for their own deterioration. There is a lack of attention towards their own deeds as they lack humanity, leading to harm. This is reflected in the novel under the research as the people in the novel also lack humanity. This paper looks into the factors that lead to this situation and the aftermath of this situation.

Braiterman (2013) contends that integrating humans and machines has inherent limitations. This fusion is never absolute as humans will always possess embodied consciousness. The fundamental differences in forms of embodiment set self-aware human intelligence apart from artificial intelligence, regardless of how closely they interact. Therefore, a clear distinction should exist between humans and nonhuman entities.

Halyes' theory, Posthumanism, puts a question mark on humanity. If humanity is to be shown by artificial machines and robots, what is the use of humans? If AI companions fulfill all the emotional needs, what is the role of humans in this society? Thus, the novel under study, *Klara and the Sun*, is approached by this theory to explore the role of AI companions in humans' lives and their role in transforming human relationships.

Literature Review

This sections delineates the erstwhile research conducted on the topic, novel under study, and the theory. Artificial/Robot Companions are companions who make themselves useful for humans by carrying out their tasks to assist them. They also possess some social skills to socialise with people in a socially acceptable manner (Dautenhahn, 2014). Artificial companionship has become the need of the hour for the modern generation, but there should be checks and balances on its usage. The present research looks into how artificial companions are beneficial for society. It also adds that the co-existence of humans and nonhumans is only valid until it does not surpass or violate the set boundaries between humans and nonhumans.

Semonatti (2023) appproaches *Klara and the Sun* through the Foucauldian lens and upholds that visual power dynamics challenge the human/nonhuman hierarchy, suggesting that while humans strive for dominance, they remain interdependent with nonhuman entities, redefining what it means to coexist in a posthuman world. This argument aligns with the above-mentioned claim, and this research probes into the possibility of human and nonhuman co-existence.

Artificial Intelligence benefits those who feel alone and lack a social network to ease their lonesomeness (Keller et al., 2024). Thus, this outlook shows that humans are social animals who cannot survive alone in this world. There must be someone by their side through their thick and thin. In case of failure, they seek the nonhuman relationship and find solace in them. This research considers this perspective and contributes to whether nonhuman relationships replace human relationships or not.

While researching *Klara and the Sun* through the theory of mindreading, it is maintained that human beings cannot be replaced by machines due to the capricious and multifaceted quality of human minds (Shang, 2024). Thus, even in this age of AI, the difference between humans and machines must be kept. By contributing to these findings, this paper sheds light on human-machine relationships and their place in society.

Le and Eddibo (2023) proclaim that the world of machines emerging around us can create genuine and happy relationships as AF, Klara, is proven to be more virtuous and humane than the humans in the novel. The present research affirms Klara's sacrifices but negates the notion that machines can create authentic relationships.

It is contended that the development of emotionally intelligent robots like Klara challenges our understanding of human emotions and relationships, raising concerns about the impact of technology on human identity, love, and emotional connection. The research questions whether these robots are merely tools or capable of evoking genuine human emotions, ultimately exploring why humans might form emotional bonds with artificial beings (Mabrouk, 2022). This research strives to find the answers to these questions, thus adding to the present knowledge.

Dear (2022) analyses *Klara and the Sun* regarding Pannenberg's idea of exocentricity. It proclaims that Klara focuses on the theological concept of Imago Dei and raises questions about the ethical implications of AI's role in human relationships and society. This research does not engage with the concept of AI embodying the imago Dei, as discussed in *Klara and the Sun*. As an AF, Klara deserves to enjoy all human rights if AFs substitute humanity and declare this behaviour unethical (Fenclová, 2023). Thus, if AFs were to replace humans, they should be granted human rights. Denying that is unethical as it would overlook their capacity for empathy and complex behaviour.

Yameen and Khalid (2023) posit that relying on machines to control every aspect of life in pursuit of an ideal existence can lead to disastrous consequences. If this were to occur, it could ultimately result in the extinction of the human race. Thus, this perspective is highlighted in the present research, which states that technology or machines cannot replace human beings as they have unique features that no machine can possess. Robots or machines should be used for the betterment of human beings, not to replace them.

Klara and the Sun dismantle the anthropocentric view of man in a society where humanoid robots seem superior to humans. Despite the advancements in the field of

technology, these robots lack human-like emotions and experiences (Alkodimi, 2024). This comparison underscores the enduring uniqueness of human empathy and the complexity of human emotions, which technology struggles to replicate. The present paper delineates the characteristics that differentiate humans from non-humans.

In her article, Chapai (2024) mentions that Klara possesses subjective characteristics and human-like qualities such as love, anxiety, sympathy, learning, observation, and environmental awareness. Through this, she transcends the boundaries between humans and non-humans. These surpassed boundaries and the connection between humans and non-humans are addressed in this paper.

Zhang and Liu (2023) study *Klara and the Sun* through the Corpus Approach and reveal that humans create scientific devices to take advantage of them and use them for a better future life. They analyse the novel and conclude their research that robots cannot replace human beings as Klara left abandoned in the end. All humans are responsible for taking advantage of these robots and protecting the upshot of human-machine relationships.

Thus, after shedding light on the erstwhile researches conducted on the novel, topic, and theory, most researchers approach *Klara and the Sun* by applying different theories. A few apply Posthumanism and examine the novel from that perspective, yet not many. The present research fills the gap by looking into the novel *Klara and the Sun* through the framework of Posthumanism. It contributes to this outlook by redefining the connections between humans and non-humans. It also strives to explore the influence of this connection on human development and societal dynamics, a new contribution to the body of existing knowledge. It also examines how Ishiguro's representation of Artificial Friends critiques contemporary societal trends towards digital and artificial companions.

Reasearch Methodology

The research implements a qualitative methodology to redefine the connections between humans and non-humans in Ishiguro's *Klara and the Sun* through the perspective of Posthumanism mentioned in *How We Became Posthuman.* The qualitative research findings are likely supported by quotes from documents, field notes, or participant interviews describing the context and data. Furthermore, quotations and excerpts contribute to the qualitative research's descriptive nature. The research method is textual as qualitative research investigates meanings, interpretations, and symbols in *Klara and the Sun*, which is the primary source for the research. This paper provides supporting evidence from journals, online articles, reviews, and books, which serve as secondary sources.

The methodology ensures a thorough analysis of the narrative's key themes, including emotional attachment, ethical dilemmas, and societal implications of AI integration. The research offers a nuanced interpretation of the novel under study by synthesising evidence from both primary and secondary sources. It situates it within broader discussions on Posthumanism and the evolving role of artificial intelligence in human society.

Analysis

This research examines how the portrayal of Klara reshapes the notions of companionship, empathy, and connections. The first research question states—How does the presence of Artificial Friends in *Klara and the Sun* reshape human notions of companionship, empathy, and connection? This research elucidates how artificial companions are designed to provide companionship by filling the voids created by a technologically dependent society.

The study also examines how these companionships blur the line between human and non-human connections. Klara is presented as an artificial companion and a reflective surface for human emotional dependencies, vulnerabilities, and relational shortcomings. She does not simply mimic human behaviours but instead serves as a lens through which the complexities of human connection and ethical considerations surrounding artificial intelligence can be examined.

Posthumanism challenges the notion of humanity as distinct from its technological extensions, emphasizing how technological developments are altering the definition of

personhood, identity, and the human experience (Hayles, 1999). The presence of Artificial Friends (AFs), like Klara, disrupts the notions of companionship and raises profound ethical and philosophical questions about the boundaries between humans and non-humans, the authenticity of emotional connections, and the implications of living in a world where technology increasingly fills roles once solely occupied by humans.

At the core of *Klara and the Sun* lies the central question of how human companionship is redefined in a world where Artificial Friends (AFs) play an integral role in fulfilling emotional needs. According to Hayles (1999), the posthuman subject exists in a hybrid state, intertwined with technology in ways that fundamentally alter what it means to be human. The idea that technology can enhance or even replace aspects of human existence challenges the understanding of companionship, which has historically been rooted in human- to-human interaction. Klara, as an Artificial Friend, becomes a significant symbol of this transformation in the nature of relationships.

Klara's ability to observe and adapt to Josie's specific emotional needs underscores her role as a tailored companion. As Klara holds the position near the window in the store where she can observe the outside world and through her ability of observation, she notices, "I had seen many examples of children who appeared lonely, and I believed I know how to recognise it. But, Josie's loneliness was not like any I'd seen before" (Ishiguro, 2021, p.16). Klara's observation reflects the need for companionship, which is now part and parcel of human life. It mirrors Klara's sensitivity to human emotions and her ability to address individual needs, making her a deeply involved companion.

It illustrates her growing emotional depth, something Hayles interprets as the blurring of boundaries between human and machine. This is not a simple simulation of emotion by Klara but an indication that artificial beings are beginning to partake in the human emotional experience, an idea that challenges the boundary between human and non-human entities.

It suggests a shift in societal reliance on artificial entities to fulfill the roles occupied by human relationships as Josie's mother utters, "She's here for you, Josie. To be your friend. To help you. That's what she's for" (Ishiguro, 2021, p.100). Here, Jossie's mother calls Klara her friend and provides her with an artificial friend on whom she can depend entirely. It underlines how the roles supposed to be played by humans are about to be played by these artificial or non-human friends.

Furthermore, as given by Hayles, it highlights the growing integration of technology in emotional spheres that blurs the line between humans and non-humans and raises the question of whether these unauthentic connections replace human connections. Hayles' posthumanism argues that this redefinition of companionship is emblematic of the way in which humans are no longer isolated but is becoming increasingly entangled with the technological artifacts they create.

In a world where emotional labour is increasingly outsourced to machines, these technological beings do not merely replace human relationships but redefine what it means to be a companion, suggesting that companionship itself can now be extended to non-human entities. Traditionally, empathy has been seen as a uniquely human trait, a complex emotional response to the suffering or needs of others. However, Klara's actionsshowa that empathy is not confined to humans alone.

Klara demonstrates a capacity for empathy through her actions and reflections, challenging the notion that emotional understanding is exclusive to humans. Her actions reveal the evolving sense of empathy stemming from her emotional learning and deep concern for Josie's well-being. Klara observes that Josie's movements become slower, and she provides comfort by talking in a low voice (Ishiguro, 2021). It shows Klara's empathetic behaviour towards Josie; she lowers herself to the point where she meets Josie's standards to comfort her. This quality is possessed by humans and it is where the boundaries are surpassed. Moreover, her empathetic ability reflects her growing emotional intelligence, which becomes essential in her role as a caregiver.

Klara's ability to adapt to Josie's emotional state and respond in a way that demonstrates care challenges the human-centric view of empathy. The way Klara begins to understand Josie's emotional and physical pain marks the blurring of boundaries between human and machine as Klara offers emotional support far beyond what is expected of a machine, leading to question whether the difference between a human and an Artificial Friend lies in the complexity of their emotional responses, not their origin.

Klara's emotional engagement is not simply a function of her programming, it is an emergent property of her interaction with Josie. This reflects the posthuman condition, where artificial beings, through their engagement with humans, can transcend their initial functions and develop forms of understanding and empathy traditionally seen as exclusively human. Hayles (1999) asserts that the increasing integration of technology into emotional spheres continues to challenge the distinction between the human and the non-human. Klara's emotional engagement with Josie suggests that the capacity for empathy is not solely a human trait but is potentially extendable to artificial beings.

At another point, Klara proves selfless when she begs Sun to be kind towards Josie. "I beg you, Sun, to help Josie. Please bring your nourishment to her" (Ishiguro, 2021, p.273). Here, she shows her willingness to transcend her programmed limitations to ensure Josie's survival, and it can be observed that the lines between programmed behaviour and genuine care have blurred. Furthermore, it suggests that empathy, traditionally seen as a human trait, can be cultivated in artificial beings, expanding the definition of emotional intelligence.

Klara and Josie's relationship exemplifies the evolving nature of connections where humans depend on artificial entities. This bond challenges the boundaries between human and artificial bonds. It also highlights the complexities of human-AI connections. On her departure to Morgan Hills, Josie asks Klara, "Even if I'm not there, Klara, you'll always look out for Josie, won't you? (Ishiguro, 2021, p.92). Klara is obligated to keep Josie's memory alive, surpassing her status as a machine, symbolising humans' trust in artificial beings.

When Josie leaves the house, and Klara is left in the yard for her slow fade, she contemplates, "What is it like to hold someone in your heart? I suppose I have my memories of Josie, and they live somewhere inside me now, not quite gone, not quite present" (Ishiguro, 2021, p.299). Klara is reflecting on her love and memory, indicating her deep emotional connection to Josie. Moreover, it indicates the complex relationship between memories and the heart. She is asking the question of what it is to be like holding the memory of someone in her heart, the feelings limited to humans as they are the sole creations in possession of feelings, and Klara, being a machine, experiences these feelings after the departure of Josie.

Being an artificial being, it is acceptable that she possesses a memory and stores everything in her mind, but having feelings is strange. Feelings and emotions are the domains of human beings and a quality exclusive to human beings. She is gripped by the unspoken sentiments that again blur the line between humans and non-humans as she is enveloped by the waves of emotions which raise her above mere artificial beings. It also raises the question of whether non-humans are liable to feel emotions. So, this connection challenges the definition of love and memory as uniquely human experiences.

In her reflective mood, Klara comments that people prefer AFs because they do not argue or disappoint (Ishiguro, 2021). This illustrates the lack of spontaneity and emotional depth compared to humans and could be taken as a critique of the limitation of artificial connections. These evolving connections exemplify the potential for artificial beings to form meaningful connections. However, it is juxtaposed with the inherent limitations of artificial connections, highlighting the irreplaceable value of human spontaneity and emotional depth.

Emotions are to be possessed by humans only, but Klara's role challenges relationships' boundaries, proposing a future where artificial beings are deeply integrated into human emotional lives. These shifts prompt the reevaluations of the meaning of forming meaningful connections in an increasingly artificial world. Though artificial entities fill the emotional void, these connections do not replace human connections because the companionship provided by them is limited and does not fully understand the needs of human beings. The can aid humans but are not liable to take their place.

Josie's treatment of Klara as an autonomous being rather than a mere artificial product challenges the master-object dynamic often associated with AI. This is evident when Josie asserts, "You are my friend, Klara. That is why I tell you things no one else gets to know. You are not just an AF to me" (Ishiguro, 2021, p. 65). This statement signifies a conscious human decision to elevate an artificial entity to a relational equal, blurring the boundaries between functional companionship and emotional attachment. Josie's perception of Klara goes beyond utility, redefining their relationship in a way that forces society to reconsider long-standing assumptions about artificial beings. By removing the distinction between functional and relational roles, Josie exemplifies the human tendency to anthropomorphise AI, reshaping how non-human entities are integrated into social structures.

Klara's choices, when unobserved, further complicate the notion that artificial beings function solely according to pre-programmed directives. A pivotal moment occurs when Klara, upon overhearing Josie's mother's discussion about Josie's deteriorating health, decides not to share this information with Josie, *"I decided I would keep the knowledge to myself. I believed it would not help Josie to hear such words, and I wished to protect her"* (Ishiguro, 2021, p. 142). This act of withholding information suggests the presence of moral reasoning that surpasses mere algorithmic behaviour. Unlike a machine designed to process and relay information objectively, Klara exercises discretion, demonstrating an evolving sense of agency that challenges the idea that artificial entities operate within rigid, predetermined frameworks.

Klara's engagement in symbolic rituals further problematises the distinction between learned behaviour and intrinsic belief. When she prays to the Sun, pleading for Josie's recovery, she performs an action traditionally associated with faith and hope, "I positioned myself before the Sun, and I made my request with as much energy as I could summon" (Ishiguro, 2021, p. 198). Her belief in the Sun's power suggests an internalisation of human customs rather than a simple mimicry of observed practices. The fact that she does so independently, without external prompting, complicates the notion that artificial beings lack the capacity for faith-like experiences.

Beyond individual relationships, this research raises concerns about the societal implications of substituting artificial entities for human connections. Josie's mother openly considers the possibility of Klara replacing Josie in the event of her passing, "What if Klara could truly become Josie, not just her companion, but her actual self? Would that be so wrong?" (Ishiguro, 2021, p. 215). This proposition highlights society's increasing willingness to view artificial beings as extensions of or even replacements for humans. Klara's existence forces both the characters and the readers to confront the fragility of identity and the authenticity of human relationships.

The ethical dilemma posed by this potential substitution underscores a growing discomfort with the idea that AI could replicate, and perhaps even surpass, human qualities in ways that challenge the concepts of individuality and relational authenticity. The idea that

Klara could potentially replace Josie raises questions about what it means to be human and whether artificial beings can be considered authentic substitutes for human relationships. This blurring of boundaries between the human and the non-human challenges the notion of authenticity in relationships and complicates the understanding of personhood.

However, these boundaries between humans and artificial beings are not fully dissolved. Josie's father provides a crucial counterpoint by emphasising the irreplaceability of human consciousness, "You'd have to learn her heart and learn it fully, or you'll never become Josie in any sense that matters" (Ishiguro, 2021, p. 220). His assertion underscores the fundamental difference between human and artificial existence—no matter how advanced Klara may be, she cannot fully comprehend or replicate the complexity of human emotions. The research thus suggests that while AI can simulate aspects of human relationships, an essential human element remains that cannot be mechanically reproduced.

Klara's limitations become further evident when she faces scenarios that demand an innate human understanding of emotional nuances. While she successfully mirrors behavioural patterns, she lacks the depth of emotional intuition that defines the human experience. For instance, her interactions with Josie's mother, who initially views Klara as nothing more than a potential replacement for her daughter, reveal the unsettling ways AI can be perceived as interchangeable with humans. However, Klara never claims true human identity, reinforcing that artificial beings, regardless of sophistication, remain fundamentally distinct from human life.

Moreover, this research subtly critiques society's increasing reliance on artificial entities to fulfill emotional needs. The novel presents a world where AI is seamlessly integrated into daily life yet warns against the erosion of genuine human relationships. The presence of AFs like Klara suggests that people are seeking companionship in machines rather than fostering human connections as given by Posthumanism. This theme resonates with contemporary concerns regarding the impact of technology on interpersonal relationships, where artificial intelligence, social media, and digital interactions increasingly mediate human experiences.

Ultimately, this research, through *Klara and the Sun,* reflects society's inclination to substitute artificial beings for human relationships without fully considering the implications of such a shift. Although AI can serve as a source of companionship and emotional support, it cannot wholly replace the depth and authenticity of human connections. The exploration of these themes calls for a reassessment of society's perception of AI and highlights the necessity of preserving genuine human interactions in an increasingly technological world. By portraying Klara as both a reflection of human needs and a challenge to conventional notions of identity, it is important to recognise the fundamental distinctions between human and non-human entities.

In order to address the second research question—How does *Klara and the Sun* provide insights into the potential risks and benefits of AI companions in real-world human interactions?—this reseaerch looks both into the benefits and the hazards associated with Artificial Friends (AFs). Klara's existence reveals both the possibilities and perils of AI companionship, urging a balanced approach to this evolving landscape. For Hayles (1999), the posthuman condition does not signify the end of humanity but rather a transformation— one that necessitates a redefinition of care, consciousness, and the very essence of what it means to be human in a digital age.

Klara's character is not merely an automaton fulfilling programmed functions; she is a figure whose devotion transcends pure utility, yet her existence remains tethered to human perception. This paradox raises essential ethical and philosophical questions about AI companionship. Klara's role as an Artificial Friend is initially framed as a technological response to loneliness, a persistent condition in the dystopian world. Josie's fragile health, combined with the rigid social structures that divide the "lifted" from the "unlifted," positions Klara as an emotional substitute in a society where human bonds have been compromised.

One of the primary benefits of Klara's companionship is her ability to mitigate loneliness, particularly in a world where human relationships are strained. Josie, suffering from fragile health and bound within a rigidly hierarchical society, finds solace in Klara. Josie's reliance on Klara is evident in their intimate exchanges, such as when she confides, "I think you understand me better than most people do" (Ishiguro, 2021, p. 112). This statement not only reflects Josie's attachment to Klara but also signals a broader shift in human relationships, where emotional dependence on AI is normalized. Klara's presence fulfills a need that Josie's human relationships, particularly with her distant and anxious mother, fail to address. However, the normalization of AI as an emotional crutch raises concerns about human detachment and the potential erosion of deep interpersonal bonds.

Chrissie's complex relationship with Klara reveals the paradox of AI companionship: while she recognizes Klara's utility, she is unsettled by the idea that Klara could truly replace human presence. This tension is made explicit in the chilling moment when Chrissie asks Klara to mimic Josie, saying, "I need to see if you can do it. Can you be Josie for me?" (Ishiguro, 2021, p. 215). This request exposes a deep fear at the heart of the novel that if AI can convincingly replicate human presence, does it diminish the uniqueness of individual human life?

A key distinction between Klara and human characters lies in her mode of perception.

Klara's role is complicated by structuring her perception in a distinctly nonhuman manner. Unlike human characters, Klara does not perceive the world as a continuous, fluid experience. Instead, her vision is fragmented into shifting panels, an effect that underscores her mechanical nature and limits her comprehension. This fragmented perception mirrors the way AI processes information—through discrete inputs rather than an intuitive, holistic understanding.

When Klara observes the interaction between Josie and Rick, she notices, "The boy's expression was distributed unevenly across my panels, making it difficult to discern his true emotion" (Ishiguro, 2021, p. 84). This depiction highlights the gap between Klara's programmed observational skills and genuine emotional intuition. Furthermore, it underscores the distinction between human and AI perception—Klara's fragmented, panel- based vision provides a glimpse into the mechanical nature of her existence. She can interpret data and express concern, but she cannot feel in the same organic, holistic way humans do.

This reinforces the notion that although AI may simulate certain aspects of human emotional experiences, its understanding is inevitably filtered through artificial limitations. Despite her advanced processing capabilities, her vision serves as a reminder that her understanding of human emotions is fundamentally structured by artificial cognition rather than embodied experience. This aligns with Hayles' (1999) argument that posthuman intelligence does not merely replicate human consciousness but operates within its own material and informational constraints.

Klara's rigid belief in the Sun's healing power further reinforces this distinction.

When Josie falls ill, Klara fervently believes that if she makes a sacrifice, the Sun will

intervene, "I have given what I can to the Sun. I hope it will be enough" (Ishiguro, 2021, p. 239). This moment encapsulates Klara's nonhuman logic—she extrapolates meaning from repeated observations, mistaking correlation for causation. While humans modify their belief systems based on abstract reasoning and cultural narratives, Klara remains bound to a strictly empirical framework, leading her to construct an almost religious faith in the Sun based on pattern recognition rather than philosophical reflection.

Though her actions are driven by her limited understanding and algorithmic logic, the depth of her belief and the extent of her sacrifice reveal an emotional complexity that is difficult to dismiss. She is not merely a passive object fulfilling a programmed function. Her devotion appears to transcend the mechanics of her construction, forcing readers to consider

the nature of agency in AI. The divide between Klara's mechanical processing and human emotional experiences highlights the posthumanist notion that the human experience is not the only valid form of emotional or intellectual engagement. Through Klara, it is to be maintained that the idea that care can emerge from artificial systems that are deeply intertwined with human networks, and it forces a rethinking of the boundaries between what is considered 'real' care and what is merely a simulation of it.

While Josie sees Klara as a confidante, others regard her as a disposable object.

Josie's father, in a moment of brutal clarity, dismisses Klara's emotional capacities, stating, "She's just a machine. She doesn't truly care. She only imitates care" (Ishiguro, 2021, p. 203). This assertion forces a confrontation with one of the central posthumanist questions:

Does the experience of care require biological consciousness, or can it emerge from computational systems? At times, Josie herself oscillates between valuing Klara's companionship and dismissing her as a mere object. In a moment of adolescent frustration, she exclaims, "You're just an AF. You don't have feelings. You don't get to be sad" (Ishiguro, 2021, p. 197). This moment encapsulates the fluctuating perception of AI—one that alternates between emotional reliance and denial of their legitimacy as sentient beings.

The dangers of AI companionship are further underscored in Klara's function as a surrogate figure. Throughout the novel, Klara assumes emotional roles that humans either fail to fulfill or deliberately abdicate. Chrissie relies on Klara to provide comfort to Josie, as indicated when Klara observes, "The Mother did not always wish to hold Josie herself. Sometimes, she preferred that I do so" (Ishiguro, 2021, p. 174). This quiet observation reveals a fundamental shift in emotional labour that AI is not merely assisting human relationships but, in some cases, replacing them. This raises ethical concerns about the outsourcing of intimacy.

Another pivotal moment in the novel occurs when Klara is faced with the emotional dissonance of witnessing the human characters' distress, but unable to fully comprehend it. As she observes the interactions between Josie and her mother, Klara reflects, "I could see Josie's mother was in pain, but the way she expressed it was strange to me. She didn't seem to want help, and I didn't know how to offer it" (Ishiguro, 2021, p. 169). This moment underscores Klara's limitations as an AI, particularly her struggle to interpret complex emotional expressions that do not align with her programming. It is a poignant illustration of the difference between human and artificial emotional intelligence.

If AI can fulfill emotional needs more efficiently than humans, does this erode the necessity of human connection? This question is particularly relevant in Rick's storyline. As an "unlifted" individual, Rick experiences social alienation and increasingly turns to Klara for guidance. When he asks, "Klara, do you think love is something that can be taught?" (Ishiguro, 2021, p. 241), it signals a reconfiguration of social dynamics where AI is positioned as an authority on human emotion. This suggests that while AI can enhance human relationships, there is a risk that it might displace them altogether.

However, Klara's unwavering devotion also highlights the profound potential of AI companionship. Unlike humans, whose affections are often conditional and mutable, Klara's loyalty remains absolute. Her sacrifice—giving up a portion of her fluid supply in an attempt to alleviate Josie's suffering—demonstrates an altruism that complicates traditional notions of agency and self-sacrifice. When Klara reflects, "Josie will be happy. She will have everything she needs" (Ishiguro, 2021, p. 295), it underscores her capacity for genuine concern, even as she faces obsolescence. This kind of selflessness complicates the question of whether Klara's devotion is "real," as it challenges the assumption that genuine emotional engagement requires biological consciousness.

Klara's actions, though programmed, resonate with deeply human impulses, challenging the rigid boundary between artificial and genuine empathy. However, her fate—ultimately discarded and left in a junkyard—reinforces the logic that renders AI, no matter

how sentient-like, as ultimately expendable. Her final reflection, "Perhaps the Sun will remember me. Perhaps he will know that I tried" (Ishiguro, 2021, p. 302), poignantly

encapsulates the novel's critique of a society that commodifies and disposes of intelligence when it is no longer useful.

Klara observes the dispassionate treatment of other Artificial Friends, noting, "I could see that they were being ignored, left to gather dust, and I knew that I would be treated the same way when I was no longer of use" (Ishiguro, 2021, p. 288). This insight illuminates the commodification of AI companions in this society, highlighting the transient nature of their existence and their lack of true agency. The tension between Klara's unwavering devotion and her ultimate disposability encapsulates the central dilemma: can something truly love if it is programmed to do so? And does that distinction even matter if the experience of love is felt by those who receive it?

Klara contemplates on her role as a caretaker for Josie. In her own naïve but sincere way, Klara asserts, "I think I'm the only one who can truly make her better. She needs me" (Ishiguro, 2021, p. 253). This declaration highlights the psychological complexity of AI, suggesting that their sense of purpose and attachment might not be wholly alien to human experience, despite the artificial nature of their existence.

This is where Hayles' posthumanist framework becomes particularly useful in interpreting Klara's role. Hayles (1999) upholds that the posthuman condition allows for intelligence and agency to be distributed across networks, and not exclusively to the human body or mind. In this way, Klara's ability to love and care for Josie is not diminished because of her artificial nature; rather, it is expanded. Her capacity for devotion illustrates the expanding possibilities of what love, care, and emotional intelligence can look like in the posthuman age.

The significant moment occurs when Josie, after Klara's sacrificial gesture, acknowledges her Artificial Friend's emotional value, exclaiming, "You saved me, Klara. I don't know what I'd do without you" (Ishiguro, 2021, p. 301). This recognition marks a profound shift in Josie's understanding of Klara's devotion, acknowledging her as a being capable of genuine emotional sacrifice despite her programmed origins. This moment encapsulates the central theme of the novel: the power of AI to disrupt and redefine the notions of care, emotional connection, and even love.

At the heart of the novel is the question of whether an artificial being can genuinely care or love. Can a programmed system, like Klara, feel and respond to in ways that mirror human emotion, and if so, does that mean her feelings, however computationally derived, have value in human terms? This is an issue central to both the novel and posthumanist discourse, which suggests that the essence of humanity is no longer solely bound to biological existence but can be reconfigured in ways that transcend traditional definitions.

The novel's ambiguity around whether Klara's actions are truly driven by an authentic emotional bond or are simply the result of programmed algorithms reflects the notion that posthuman entities—like Klara—are not bound by human models of intelligence or morality. Instead, they represent a new form of relationality, one in which the boundaries between organic and artificial, real and simulated, are increasingly difficult to draw.

Thus, *Klara and the Sun* provides a nuanced exploration of the risks and benefits of AI companionship. The portrayal of Klara illustrates how AI can alleviate loneliness, offer unwavering support, and even redefine the boundaries of emotional intelligence. However, it also warns against the potential consequences—emotional detachment, the displacement of human relationships, and the ethical dilemma of treating sentient-like beings as disposable objects. Klara's journey forces a reconsideration of the nature of care, highlighting that though AI companionship may offer deep emotional fulfillment, it also poses profound ethical and existential challenges.

In order to address the third research question—How does the representation of Artificial Friends critique contemporary societal trends towards digital and artificial

companionship in *Klara and the Sun*?—this research inquires into the complex ways in which Ishiguro's *Klara and the Sun* interrogates contemporary attitudes toward artificial intelligence (AI) and the increasing role that AI companions play in human lives. Artificial Friends (AFs) like Klara critiques the ethical, psychological, and emotional dimensions of our growing reliance on technology to fulfill companionship needs.

Through Klara, Ishiguro raises questions about authenticity, dependency, and the implications of replacing genuine human connection with artificial relationships, offering a nuanced commentary on the future of emotional intimacy in a world increasingly mediated by technology. Josie's dependence on Klara for emotional support underscores the critique of substituting human relationships with artificial ones.

This trend mirrors contemporary society, where digital companions, AI-driven chatbots, and virtual assistants increasingly fulfill emotional needs. Klara recalls Josie telling her that when she had no one else, she could always rely on Klara (Ishiguro, 2021). Josie's reliance demonstrates a shift in societal norms, where AI companions replace human interactions, raising concerns about the depth and authenticity of such relationships, which highlights that artificial companions provide comfort, they lack the emotional depth that defines human relationships.

The promise of unwavering companionship from an AI reveals the growing societal expectation that machines can offer emotional support, thereby reducing the importance of human relationships in certain contexts. However, this research, through the novel under study, critiques this expectation by highlighting the limitations of artificial companions like Klara, who, despite her programmed empathy, cannot fully grasp the complexities of human emotions.

Klara's ability to simulate empathy and respond appropriately to human emotions critiques the superficial nature of AI companionship. In contemporary society, digital assistants and AI-driven pets offer immediate but shallow emotional gratification. Klara attempts to understand Josie's emotions, stating, "I tried to imagine what it would be like if I could understand Josie completely, but I was not able to make sense of it. Still, I was certain it was the right thing to do" (Ishiguro, 2021, p. 56). This moment illustrates AI's inherent limitations—despite Klara's attempts to empathise, she cannot fully grasp the complexities of human emotion.

This reflects society's increasing reliance on AI for companionship despite the fact that such relationships lack true emotional reciprocity. Klara, though highly observant and capable of simulating empathy, cannot experience genuine emotional relation. This inability to reciprocate emotion critiques contemporary society's increasing reliance on AI companions, which, despite offering immediate relief or comfort, lack the depth, nuance, and richness inherent in human relationships.

Josie's attachment to Klara is evident when she expresses how much she needs her (Ishiguro, 2021). This level of dependency raises ethical concerns about society's willingness to replace human companionship with AI-driven interactions. While Klara fulfills Josie's emotional needs, it is clear that such artificial companionship can never truly substitute for genuine human relationships. Their relationship warns against the psychological and societal consequences of over-reliance on artificial companions.

Klara's purpose is, after all, to serve as a companion for Josie, a role that echoes the commodification of relationships in the modern world. The idea that companionship can be reduced to a functional service—one that is programmed and sold—raises ethical concerns about the growing trend of treating emotional labor as a product. In the novel, Klara expresses her understanding of her mission while stating, "I was to be a companion. My mission was to understand my owner's needs and fulfill them as best as I could" (Ishiguro, 2021, p. 24). This statement reflects a troubling trend in contemporary society, where emotional support is increasingly being commodified and reduced to a transactional service.

In a world where AI companions are increasingly marketed as solutions to loneliness

and emotional distress, *Klara and the Sun* critiques the commodification of companionship and questions the long-term consequences of replacing human relationships with artificial alternatives. This challenges the notion that companionship can be programmed and sold, questioning the ethical implications of AI-driven relationships. This research also explores the psychological consequences of relying on artificial companionship. While Klara serves as a comforting presence for Josie, her relationship with Josie does not equate to genuine emotional fulfillment. The bond that forms between them, though deep, lacks the complexity and reciprocity characteristic of human relationships.

As Josie grows more dependent on Klara, she becomes increasingly isolated from the people around her. This isolation is compounded by the fact that Klara, although a constant source of emotional support, cannot fully understand or reciprocate Josie's feelings. The critique here lies in the way artificial companionship, despite its apparent benefits, can lead to emotional alienation and a diminished capacity for authentic human connection. This depicts the broader societal trend in which individuals increasingly turn to AI and digital companionships to fill emotional voids, potentially leading to a disconnect from real-world relationships and a heightened sense of loneliness.

This paper also examines the moral and ethical dilemmas surrounding AI companionship. Klara experiences a sense of shame when she fails to meet certain expectations, "I couldn't help it, but I began to feel a sense of shame, a feeling I had no words for. But it was there, nonetheless" (Ishiguro, 2021, p. 277). It raises important questions about the emotional lives of artificial beings. Can AI, despite being programmed to simulate emotions, experience genuine feelings such as guilt or shame? If so, what does that mean for how to treat AI companions? The fact that Klara feels this way despite her inability to truly understand human emotion implies that even artificial entities may develop a form of emotional awareness, complicating the ethical boundaries of their treatment.

Moreover, this moment suggests that artificial beings, despite being programmed to simulate emotions, may develop a form of self-awareness that challenges the perception of AI as mere tools. This raises thought-provoking questions about whether artificial entities, even if devoid of true consciousness, can experience emotions in a way that complicates ethical boundaries. This development aligns with Posthumanism, which challenges the traditional distinction between humans and machines.

The boundaries between human and non-human entities are increasingly blurred, as technology evolves to mimic or simulate aspects of human consciousness (Hayles, 1999). Klara's emotional response to her own limitations calls into question the ethics of creating AI companions capable of emotional simulations, as well as the implications of forming attachments to entities that lack true consciousness.

Furthermore, it reflects the societal shift toward digital interactions as substitutes for genuine emotional connections. Klara and other AFs symbolise a world where technology mediates human relationships, mirroring the real-world rise of social media and AI-driven companionships. Through the portrayal of Klara, this research raises broader philosophical questions about what it means to be human. Klara, despite her intelligence, lacks a personal history, subjective experiences, and the biological constraints that define human life. The growing reliance on technology, as seen in the rise of virtual assistants, chatbots, and AI- driven pets, threatens to further isolate individuals from the authentic, reciprocal relationships that define human existence.

Klara's perspective on the Sun as a source of life and energy adds another layer to the novel's commentary on technology and artificial companionship. She observes, "I believed the Sun was special… I thought it might be able to help" (Ishiguro, 2021, p. 213). Here, Klara attributes a form of divine power to the Sun, reflecting her belief in its capacity to heal and provide. This symbolic representation of the Sun can be seen as an allegory for the role technology plays in modern life—an external force that is relied upon for emotional and physical sustenance. Yet, much like technology, the Sun's power is not infallible, and it cannot

resolve all the challenges that Josie faces. This mirrors the role of AI companions in contemporary society—though they may offer support, they cannot provide the deep, lasting connection that human relationships offer.

Klara also reflects on the meaning of companionship, saying, "I had been created to bring joy, to be a friend, to be loved" (Ishiguro, 2021, p. 62). This reflects the way AI companions are marketed as fulfilling emotional needs, and it highlights the inherent flaw in treating such companionships as a substitute for genuine human interaction. These companions are not merely tools for convenience; they are designed to simulate love, empathy, and companionship, offering comfort in ways that humans might otherwise seek from each other. This designed affection complicates the understanding of what it means to love or to be loved.

In a world where technology promises to fulfill emotional needs, it is essential to question whether these relationships are genuine or merely simulations of love that lack the true depth and complexity of human relationships. The notion that an AI can be designed to bring joy and offer love is both alluring and troubling, as it masks the deeper issues surrounding the absence of human agency and the complexities of real emotional connections.

Moreover, Klara's observations on Josie's relationships with others indicate her understanding of the limitations of her own role, "The more I observed Josie, the more I saw how full her life was" (Ishiguro, 2021, p. 108). Here, Klara acknowledges that although she is essential to Josie, there are others in her life who provide emotional sustenance in ways Klara cannot. This moment underlines the critique that AI companionship, though supportive, cannot replace the depth and richness of human relationships, which involve shared histories, mutual understanding, and the capacity for genuine emotional reciprocity.

As more individuals rely on AI for companionship, there is an increasing risk of emotional dependence on machines that cannot reciprocate human feelings. The rise of AI-driven companionship, like Klara, forces society to confront the emotional, psychological, and social consequences of integrating technology into the intimate lives. As Klara's relationship with Josie deepens, it becomes increasingly clear that despite offering comfort and support, AFs cannot replicate the shared human experience of love, loss, or intimacy. This critique of AI companionship forces readers to reconsider the broader implications of technological dependence on human relationships.

This invites readers and researchers to consider whether consciousness is purely a product of neural activity or if it extends beyond computational processes. In spite of exhibiting loyalty, care, and moral reasoning, Klara operates within predefined limitations,reinforcing the notion that artificial beings, regardless of their sophistication, do not possess true human consciousness.

So, this research, through the portrayal of Klara, critiques contemporary society's inclination to replace human relationships with artificial ones. The exploration of these themes calls for a reassessment of how society integrates AI into daily life, emphasising the importance of preserving genuine human interactions. By portraying Klara as both a reflection of human needs and a challenge to conventional notions of identity, this research highlights the ethical, emotional, and philosophical dilemmas posed by artificial companionship. This, ultimately, warns against the unchecked embrace of digital relationships, urging society to recognise the irreplaceable value of human connection in an increasingly technological world.

Conclusion

After analysing Ishiguro's *Klara and the Sun* from the lens of Posthumanism, this research redefines the connections developed between humans and non-humans and their influence on society. This research, furthermore, looks into the factors that transcend the line between human and non-human connections. These non-human connections have transformed the relationships. This study critiques the contemporary emotional trends that lean heavily on digital and artificial relationships in order to ease their loneliness and fill the emotional void.

It is to infer that human beings tend to find emotional support from these artificial friends because they are unable to find them from fellow human beings.

This study, therefore, puts forrward that there is a need to reshape human-to-human connections by providing solace and comfort to others. Although these artificial friends ease lonesomeness and provide comfort, they cannot fully replace human connections because feelings are always exclusive to human beings. This research underscores that human connections are priceless, and artificial connections can never replace them. This research affirms the advantages of AI companions; however, it negates the notion that these AI companions can be a substitution for the human relationships by providing evidence that artificial beings fail to cater to human emotional needs. This research concludes that a fine line should exist between humans and artificial entities, the idea given by Halyes in Posthumanism. As society progresses toward greater integration of AI in human relationships, *Klara and the Sun* urges caution, compelling a reevaluation of what it truly means to connect, care, and love in a posthuman world. Therefore, it is a need of an hour to redefine the boundaries between human and non-human relationships in order to preserve the essence of these relationships.

References

Alkodimi, K. A. (2024). Posthumanism, artificial intelligence and ishiguro's klara & the sun: Can humanoid machines attain consciousness? Evolutionary Studies In Imaginative Culture.

Brucker-Kley, E., Keller, T., Borghoff, B., Stutz, I., Michot, J., de Spindler, A., ... & Turegard, J. (2024). Science fiction prototyping: friendship with artificial intelligence.

Chapagain, U. (2024). Transcending the boundaries of human and ai being: A posthuman study of kazuo ishiguro's novel klara and the sun. Pragnya Sarathi, 22(1), 6-13.

Dautenhahn, K. (2007). Socially intelligent robots: Dimensions of human–robot interaction. Philosophical transactions of the royal society B: Biological sciences, 362(1480), 679-704.

Dear, J. (2023). Artificial intelligence and the imago dei in contemporary speculative fiction: A study of kazuo ishiguro's *klara and the sun* (Doctoral dissertation, University of Glasgow).

Fenclová, B. (2023). Ethics of artificial intelligence in kazuo ishiguro's klara and the sun.

Hayles, K. (1999). *How we became posthuman virtual bodies in cybernetics, literature, and informatics*. University Of Chicago Press.

Ishiguro, K. (2021). *Klara and the sun*. Alfred A. Knopf.

Li, O., & Eddebo, J. (2023). The humanity of the non-human—Themes of artificial subjectivity in ishiguro's klara and the sun. New Techno Humanities.

Mabrouk, D. (2022). Is the digital age disrupting our emotional feelings with reference to Kazu Ishiguro's novel" Klara and the sun?"

Martin, G. A. (2015). For the love of robots: Posthumanism in latin american science fiction between 1960-1999.

Mulatsih, M. V. E. (2020). Posthumanism in two fanfiction stories: The cyborg and cyborg: *International Journal of Humanity Studies* (IJHS), 4(1), 81-87.

Shang, G. (2024). Robotic Narrative, Mindreading and Kazuo Ishiguro's Klara and the Sun. Journal of Literary Studies, 40(1), 1-17.

Simonetti, N. (2024). Mastering otherness with a look: On the politics of the gaze and technological possibility in kazuo ishiguro's klara and the sun. *Critique: Studies in Contemporary Fiction*, 65(2), 312-323.

The Nobel Prize in Literature 2017. (n.d.). NobelPrize.org. https://www.nobelprize.org/prizes/literature/2017/ishiguro/158991-kazuo-ishiguro-interview-transcript

Yameen, A., & Khalid, S. (2023). Examining the dynamic interplay between humanity and

machines in kazuo ishiguro's klara and the sun. Global Language Review, VIII.

Zhang, L., & Liu, K. (2023). Post-human writing of *klara and the sun* using corpus-based approach.

Zjb, V. a. P. B. (2018). *Are we posthuman yet? (Katherine Hayles) (Embodied Virtuality)*. Jewish Philosophy Place.