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**BACHELOR'S THESIS**

**Ethics of Artificial Intelligence in Kazuo Ishiguro's**
***Klara and the Sun***

Etika umělé inteligence v románu Kazua Ishigura *Klára a Slunce*

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**DECLARATION**

I hereby declare that this bachelor's thesis, "The Ethics of Artificial Intelligence in Kazuo Ishiguro's *Klara and the Sun*", is the result of my own work, written under the supervision of PhDr. Tereza Topolovská, Ph.D., and that I have used only the cited sources. This thesis was not used to obtain any other academic title.


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Signature


Prague, 10th July 2023 Barbora Fenclová

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**ABSTRAKT**

Cílem této práce je prozkoumat etické dilema umělé inteligence prezentované v románu Kazua Ishigura *Klára a slunce* (2021). Teoretická část práce se zabývá tématy umělé inteligence a jejími formami, etickými otázkami, které existence AI otevírá, a obecně tématy AI a etiky v kontextu sci-fi. V praktické části práce je interpretován román *Klára a Slunce* s ohledem na výše popsaná témata. Argumentace této práce se zaměřuje zejména na spojitosti mezi vyspělou umělou inteligencí a lidstvem a etickými dilematy, která jsou jejich důsledkem.

**KLÍČOVÁ SLOVA**

Umělá inteligence; etika; Kazuo Ishiguro, *Klára a slunce*, sci-fi

**ABSTRACT**

The aim of this thesis is to examine the ethical dilemma of artificial intelligence as represented in Kazuo Ishiguro's novel *Klara and the Sun* (2021). The theoretical part of the thesis delves into the topics of AI and its forms, the ethical questions arising from the existence of AI and the connection of AI and ethics with science fiction in general. The practical part of the thesis assesses *Klara and the Sun* with regard to the topics described. The argument of the thesis mainly focuses on the line which may be drawn between sentient AI and humanity and the ethical dilemmas raised by this notion.

**KEYWORDS**

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# 1. Introduction

Kazuo Ishiguro's *Klara and the Sun* (2021) is a futuristic dystopian fiction that explores the core of love and relationships, emphasising how easily such emotions can be exploited. The main character of the aforementioned novel is Klara, an advanced futuristic artificial intelligence humanoid. Klara is an AF, an artificial friend, an AI humanoid manufactured to serve as a companion for children. Not only is Klara the main character, but she is also the novel's narrator, which provides an exciting insight into the depicted eerie futuristic society. This uncanny valley narrator builds an unnerving ambience and offers a plethora of stimulations for discourse about the ethics of AI, which is the focus of this thesis.

The study of AI ethics revolves around both its ethical implications as well as its ethical values (Stahl 35). The research on the ethical implications of AI mainly focuses on two contrastive branches of vulnerabilities, the drawbacks of the AI itself and the liabilities of the human factor (Liao 3). Consequently, the current context of AI ethics offers a wide range of perspectives from which the subject can be interpreted, such as the point of view of privacy and security (Liao 5-6), job displacement (Tiwari 2), or regarding the lack of transparency in AI decision-making (Batiashvili and Gondauri 1234). I believe that viewing *Klara and the Sun* from the perspective of AI ethics can open a great deal of subjects for debate. AI ethics can thus function as a valuable standpoint in examining *Klara and the Sun*. Therefore, the primary objective of this thesis is to identify the foremost ethical issues of the AFs depicted in the novel and evaluate them utilising the available research on the related topics. This thesis seeks to answer the following research questions; what ethical issues concerning AI can be found in *Klara and the Sun* and what implications sprout from this matter.

With companies' finding new ways to implement AI, the technology is now becoming increasingly more present in the lives of everyday people (Greek 18). This direction leads to the spread of debate about and fear of its ethical implications. I find the ethics behind an invention of this calibre extremely fascinating. The questions about AI ethics range extensively, it was, however, not until I read Kazuo Ishiguro's *Klara and the Sun* that I started to ponder about the morality of such technology from the perspective of the AI

itself. The whole novel is permeated with a sense of injustice towards Klara. Moreover, basic AI systems are already omnipresent in our society, and Kazuo Ishiguro pushes this matter further by making extremely advanced AI ubiquitous, which is what has piqued my interest. Additionally, our contemporary technological inventions are already unfathomably advanced. Though they by far do not reach the extent of the complexity of the AFs in *Klara and the Sun*, the technology behind the futuristic AI does not seem unreachable, which makes the story hit home. Not only is the novel incredibly impactful, but it also inspires contemplation about the matters portrayed long after the reader finishes it. Upon devouring the book, I felt immensely frustrated with the workings of the society depicted in *Klara and the Sun* and its treatment of the AFs. It is for this reason and because we as a society are already inundated with news about AI that I decided to analyse this novel from the perspective of AI ethics.

Science fiction has often been used as an example, or a precursor, of AI ethical studies (Zeng 3). Hence, *Klara and the Sun* provides a sound basis for discourse about AI ethics and the morality behind the creation of technology that is advanced to these extents. The novel raises several ethical dilemmas, such as the AF's lack of moral rights. Moreover, it highlights Ishiguro's concerns as his fiction often focuses on moral dilemmas (Matthews and Groes 3). Furthermore, science fiction literature not only provides a good framework for discourse about futuristic possibilities but also functions as a mirror to or a commentary on the author's contemporary society (Baron et al. 157). Therefore, the ethical implications presented in sci-fi literature fall into two distinctive branches, one focusing on what the future might bring and the other alerting on the present conditions.

This thesis builds on the basis of the existing debates about the ethics of AI and connects them with Kazuo Ishiguro's futuristic dystopia *Klara and the Sun*. The theoretical part puts forward the relevant ideas found in the study of literature concerning the subject examined. It offers a brief outline and context of the production of *Klara and the Sun* and essential information about AI, its ethics, and its presence in fiction. The practical part of this thesis is a critical literary analysis. It provides a subjective interpretation of the novel *Klara and the Sun* based on the knowledge introduced in the theoretical part.

Therefore, this thesis helps address the ethical implications of AI using *Klara and the Sun* to discuss real-world anxieties about the omnipresent and rapidly evolving AI, such as the fear of job loss or data security breaches.

# 2. Theoretical part

## 2.1 About Kazuo Ishiguro

Kazuo Ishiguro is a novelist, short-story writer, and screenwriter. He has written eight novels so far and was awarded both the Nobel Prize in Literature in 2017 and the Booker Prize in 1989, making him one of the most critically acclaimed contemporary authors. This chapter concerns his literary work, motivation, reoccurring themes, and his usage of the figure of the narrator, for which he is renowned.[1]

Kazuo Ishiguro is of Japanese origin and was born on November 1954. At the age of five, he moved with his family from Japan to Britain. During his studies at the University of Kent at Canterbury for a Bachelor of Arts in English Literature and Philosophy, Ishiguro became influenced by the works of Proust, Kafka, Charlotte Brontë, Jane Austen, Dostoyevsky, Tolstoy, Chekhov, and Plato. His work often deals with ethical and political issues, to which he first became sensitive while volunteering for charity organisations and functioning as a community worker, associating with underprivileged families, and tackling the homelessness issue.

He started publishing short stories during his studies, but it was his novels that made him notable and critically esteemed. He made writing his profession with publicising his first novel, *A Pale View of Hills (1982)*, which along with *An Artist of the Floating World (1986)*, is his only novel that takes place in Japan. Shaffer describes his novels as "intricately crafted, hauntingly evocative, psychologically compelling" (2). Besides writing short stories, novels and screenplays, Ishiguro also worked as a lyricist, pointing to his close relationship with art forms other than literature, such as visual arts and aesthetics (Garrido Castellano 237). Art is heavily prominent in his writings, e.g., in *An Artist of the Floating World* (1986), visual art is the predominant concern (Wong 59) and *The Unconsoled* (1995) centres around music (Wong 65). Ishiguro focuses on the genre of the historical novel, but in later works, he dives into the genres of science fiction

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[1] If not stated otherwise, the information to be found in this chapter comes from:
Kazuo Ishiguro – Biographical. NobelPrize.org. Nobel Prize Outreach AB 2023. Wed. 15 Mar 2023. https://www.nobelprize.org/prizes/literature/2017/ishiguro/biographical/

and fantasy. Even though Ishiguro is often associated with postmodernism, he does not recognise himself as a postmodernist author (Ishiguro as quoted in Matthews and Groes 117).

Kazuo Ishiguro does not deem himself a prolific writer (Channel 4 interview, "Kazuo Ishiguro on AI and Love"). He is motivated by the desire to engage in a deep dialogue with his readers about what makes living valuable (Ishiguro as quoted in Matthews and Groes 116). He states that his main goal in writing is not to merely entertain and hold people attentive for the course of reading the piece but to remain in their minds (Channel 4 interview, "Kazuo Ishiguro on AI and Love"). Furthermore, the notion of lingering in the readers' minds is supported by the fact that Ishiguro's work is repeatedly critically read and recurrently inspires new interpretations and analyses (Matthews and Groes 1). Ishiguro's work is thus widely recognised as thought-provoking and tackling many different evocative phenomena.

The most central themes of his works are time, memory, and lifelong deception, alongside the topics of "interrelations of art and life and of aesthetics and ethics" (Matthews and Groes 2). Ishiguro often deals with the issues of ethical dilemmas and the complexity of human relationships (Matthews and Groes 3), and another aspect that permeates the author's work is the topic of crime against nature (Groes and Dean 1022). All of these notions are heavily evident in *Klara and the Sun*, as it focuses on love and relationships. One of the main ethical dilemmas in *Klara and the Sun* revolves around AI, which will be the main focus of this thesis.

Moreover, one of the most recurrent themes in Ishiguro's novels is the ethical, political, and psychological crises that are simultaneously experienced by the characters, functioning as personal predicaments, and having a global or international significance (Groes and Dean 1019). Groes and Dean state: "Crises in Ishiguro rarely either reveal or resolve the wider meaning of events in the forms that they initially promise" (1020). Ishiguro's works thus inspire the readers to ponder these issues and explore these matters, whether they are ethical, political, or psychological, alongside the characters in the novels themselves. Ishiguro's ability to inspire these ethical questions sprouts from his persistently and recurrently writing on the topic of conflict, or rather the repercussions of a conflict (Sloane 4). In his fiction, he explores "the radiating political, historical, social

and personal scars of conflicts' aftermath" (Sloane 4). Ishiguro's characters are put in a scenario where they are faced with their ethical challenges and ultimately confronted with the "signs of the factual and ethical dubiousness of that consolation" (Groes and Dean 1019). The characters in the dystopian universe built in *Klara and the Sun* face a handful of conflicts, the most prominent of which being the decision whether or not to undergo artificial gene editing.

One of the reasons why Ishiguro is widely translated and internationally enjoyed is his ability to address readers of different cultural origins, his open-mindedness and candidness, and his ability to describe universal experiences such as the theme of otherness (Matthews and Groes 3). His internationalism relates to the way he works with the aspect of the place in his writings. Ishiguro states, "this is a very practical problem for a novelist; there is always the tension between the setting you choose and the fact that you want to use the location for universal metaphors, for stories that can be applied to all sorts of human situations" and deems it difficult to find this equilibrium of the particularity of the setting with inspiring a more universal message (Ishiguro as quoted in Matthews and Groes 119). Matthews and Groes say, "the necessity of setting demand a level of responsibility or fidelity towards locale and history" (3). In Ishiguro's writings, the place aspect is often only hinted at within the narration, being only implicitly present and seemingly unperceived by the characters, though accurately embodied and crucial nevertheless (Matthews and Groes 3). Ishiguro's main focus in writing is his storytelling and exploring the various dubious ethical dilemmas. Hence, he uses setting and history only as a "backdrop" or "dramatic effect" for his narrative motivation and thinks he often takes advantage of history and its tragic experiences for the benefit of his storytelling (Ishiguro as quoted in Matthews and Groes 118). His writings are thus not predominantly about the setting itself; the author explores the aspect of the setting during the later stage of his writing process and finds a location that would complement his story the best retrospectively (Ishiguro as quoted in Matthews and Groes 118). Thus, they always present a meaning to be universally related to. Setting in Ishiguro thus functions predominantly as a means of exploring the various ethical, political, or psychological dilemmas that have a more comprehensive global significance.

Another prominent reoccurring theme of Ishiguro's work is the topic of art and the link between art and ethics (Matthews and Groes 2), which is a widely explored theme in literature. Matthews and Groes state that "his characters' experience of music, painting or writing consistently brings into focus the moral, emotional or political questions they face" (5) and art, specifically a character's connection to art, is often the medium through which the most paramount aspects of characters' psyches are revealed (Matthews and Groes 5).

Ishiguro also broaches the subject of dichotomy, "between history and the present, objectivity and subjectivity, reality and imagination, individual and collective, contingency and universality, realism and surrealism" (Matthews and Groes 7), which are constructed through the use of language. Hence, Ishiguro uses language to build an artificial reality within the narrative. However, the contrivance of the language makes the reader consequently question the authenticity of said imaginative reality (Matthews and Groes 7).

The author explores different narrative techniques but is most often praised for his unreliable first-person narrator (Ishiguro as quoted in Matthews and Groes 119). "The first-person narrative works to hide certain things, even from the narrator himself" (Ishiguro as quoted in Matthews and Groes 119). The unreliable narrator framework traps the reader within the character's faith in an ideology, their limited worldview and the comfortable and polished way of storytelling (Groes and Dean 1022). Consequently, Ishiguro delights in exploring the self-justifying and psychologically or politically impaired narratives that conceal the real world behind misleading or irrelevant storytelling (Groes and Dean 1025). His work thus challenges the reader to remind themselves to question and challenge the "modern myths that clutter the public unconscious" (Groes and Dean 1025).

To conclude, though Ishiguro's work varies in locale and temporal setting quite extensively, it is his interest in exploring various philosophical and social dilemmas that bind his writing together. Whether being historical novels focusing on social roles or dystopian works concentrating on cloning or the role of AI, Ishiguro's novels are permeated with crises. These crises offer the opportunity for both the author and the reader to reflect upon the personal as well as the global significance of the matter shown

within the story. Through the complex narration and the use of language, the author coaxes information about the state of the world and humanity and allows the reader to ponder about the material. All these notions are noticeable in *Klara and the Sun*, especially in its focus on the ethics of the depicted futuristic technology, using AI as the primary source of conflict. It is precisely the moral tension that permits the contents of the book to linger in the reader's mind.

## 2.2 Artificial intelligence and its ethics

As *Klara and the Sun* present a plethora of grounds for debate about AI ethics, it is necessary to address the questions of the ethical studies of AI. Therefore, this chapter provides a theoretical background about artificial intelligence and the ethical implications that are tied to it.

### 2.2.1 What is artificial intelligence

It is as problematic to precisely define AI as it is challenging to define the meaning of intelligence itself. As a term artificial intelligence was coined in the 50s by John McCarthy (Manning), and AI has been a subject of many scientific discussions as well as the object of interest of many science fiction authors for decades since. Therefore, a question arises of what exactly AI is and what it encompasses. McCarthy describes artificial intelligence essentially as intelligent machines (McCarthy 2). Intelligence would then be described as "the computational part of the ability to achieve goals in the world" (McCarthy 2). Further, Kaplan and Haenlein describe AI as "a system's ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation". The definitions of AI thus vary in specificity; however, they render a reasonably clear picture of what the scientific field of AI involves.

Modern AI has shifted significantly from the technology for which the term was coined originally. This shift is primarily noticeable in the machine learning (ML) process itself as the technology moved from traditional statistic and rule-based linear models to deep learning models of ML (Xie et al. 85). This new model of machine learning is much more complex and no longer linear (Samek 245). Modern AI machine-learning models require vast amounts of data (Samui 389). This data is now accessed from the "cloud", information stored online, making substantial amounts of data easily accessible (Greek 22-23). This ML evolution results in AI becoming more and more sophisticated and its process less transparent. This shift with AI's access to data results in a ground for vast ethical implications.

To illustrate the ability of contemporary AI, here is a definition of artificial intelligence constructed by an open-access text-based AI:

> Artificial intelligence (AI) refers to the development of computer systems that can perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and language translation. AI involves the use of algorithms and statistical models to enable machines to learn from and make predictions or decisions based on large sets of data. There are several subfields of AI, including machine learning, natural language processing, computer vision, and robotics, each with its own specialised techniques and applications. AI has the potential to revolutionise many aspects of our lives, from healthcare and transportation to entertainment and education. (OpenAI, ChatGPT)

The field of artificial intelligence has been rapidly expanding recently; nevertheless, there yet are some restrictions in machine intelligence expansion. These constraints are inflicted mainly by the limits of the AI designers' understanding of the mechanisms of the intellectual processes (McCarthy 4). The field of AI is reasonably wide and encompasses many different realisations of machine intelligence. John McCarthy defines several branches of artificial intelligence, among them being search AI, pattern recognition AI, or for instance, logical AI (8), all of these having numerous applications such as game playing or speech recognition (McCarthy 10).

Kaplan and Haenlein define three generations of AI: Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), and Artificial Super Intelligence (ASI) according to the AI's level of autonomy and scope of ability. Autonomous AI encompasses systems that "can independently plan and decide sequences of steps to achieve a specified goal without micro-management" (Manning). Artificial Narrow Intelligence, able to solve problems only in a specific area, is now ubiquitous and can be found, for instance, in Siri's voice recognition or Tesla's self-driving cars (Kaplan and Haenlein). The second-generation AI systems, Artificial General Intelligence, encompass AI that would be able to perform tasks for which it was not designed, attaining a certain level of autonomy (Kaplan and Haenlein). AGI "seeks broadly intelligent, context-aware machines" (Manning). The third generation AI, a futuristic possibility, Artificial Super Intelligence,

would cover creative intelligence with social skills and wide-ranging knowledge that would be "truly self-aware and conscious" and would, to a certain degree, "make humans redundant" (Kaplan and Haenlein).

Furthermore, there is a specified branch of systems called Human-Centred Artificial Intelligence among AI. It is inspired by human beings and encompasses tools and partners, such as helpers and companions, for people, trying to increase human abilities and address their needs (Manning). This field would then benefit from the machine's abilities in the fields of emotional and social intelligence. Even though AI truly cannot experience emotions, it can attain some degree of emotional and social intelligence through observation and the study of facial expressions, as facial-recognition AI is able to, and train how to react to them adequately (Kaplan and Haenlein). Truly humanised AI that would be self-aware and conscious of its own being is not available yet and is a mission for the future; however, there has been rapid progress in the development of AI's ability to identify, analyse, and imitate human activity (Kaplan and Haenlein). The AI model of 'artificial friends' from *Klara and the Sun* would thus fit somewhere into these labels of human-centred or humanised ASI the best, and even though these AI categories are not yet available, they likely remain a realisable futuristic prospect.

## 2.2.2 The ethical questions posed by the existence of AI

The spread of the technology of AI, and its consequent being in the public eye, is a consequence of companies' finding more uses of the technology and implementing it in a way that now directly affects everyday people (Greek 18). Therefore, with the rapid expansion of the field of AI and with artificial narrow intelligence becoming abundantly present in everyday life, questions arising about the ethics of AI are becoming virtually ubiquitous. The ethical dilemmas concerning AI are no longer solely a kind of a futuristic debate, but they revolve around the contemporary AI that is implemented in everyday life. Whether speaking about targeted advertisement or, for instance, surveillance systems, AI sparks many debates. From human substitutability to data mining, these contemporary anxieties about AI can be used to establish the basis of ethical concerns about AFs in Kazuo Ishiguro's *Klara and the Sun*.

One of the most central questions about the ethics of AI is the matter of privacy and security, from facial recognition and surveillance systems to breaches of sensitive data. Machine learning is data-hungry; hence, to function sufficiently, it needs to be provided with vast amounts of data, some of which can be of the sensitive or personal kind (Liao 5-6). Such issues of the use of data mining can be illustrated, for example, on the notorious Cambridge Analytica scandal, where data was used to influence political campaigns, in response to which "companies and governments have begun to take steps to regulate data mining practices and improve transparency and accountability" (Rakha). Furthermore, the usage of AI often necessitates the storage of large amounts of data which can lead to misuse of personal information, data breaches, and unauthorised access to sensitive information (Batiashvili and Gondauri 1234).

Liao distinguishes two major categories concerning the ethics of contemporary AI, "vulnerabilities in machine learning" and "human vulnerabilities" (3). To start with, "vulnerabilities in machine learning" encompass the issues that are rising because of the doubt about the sufficiency of AI (Liao 3). "Human vulnerabilities", on the other hand, voice doubt about the human ability to remain resilient in the presence of AI (Liao 3). Such issues of the human factor may culminate in deception or AI's overdriving human capability. The second branch of doubts about AI hence concerns it slowly becoming humanised as well. Consequently, it is the question of whether there remain any solely

human characteristics which the rapidly spreading technology would not be able to mimic that arises. Kaplan and Haenlein say that even though it is difficult to give any definite answer, it is likely going to be human creativity that will be the distinguishing aspect.

AI's operation is quite an intricate process and presents a great many opportunities for collapse, from faulty design to biased input or operational strategies. AI is being designed by humans; hence it is bound to feature human factor mishaps. To start with, the extent of the quality of the machine learning process solely depends on the quality of the data used for input (Liao 6). Hence as it cannot be surmised that most data are adequate and accurate, it likely contains bias which AI systems are bound to exacerbate (Batiashvili and Gondauri 1234). Being programmed by humans, faulty algorithms are also bound to occur (Liao 6). With the increasing complexities of AI, the process is slowly becoming impenetrable, meaning that "it is difficult to interpret how these connections are interacting with each other and why they make certain predictions" (Liao 7). This issue culminates in a state where the process of AI operations can no longer be explained. It can be problematic as it cannot be interpreted on which grounds AI is making decisions and whether they are reasonable and reliable (Liao 7). This so-called "black box problem", or, the lack of transparency in decision-making, of artificial intelligence leads to a loss of accountability (Batiashvili and Gondauri 1234).

Another issue lies in AI's being programmed to make moral decisions and yet lacking the consciousness to make such causal decisions itself; hence it is programmed to take specific steps with such ethical choices. Liao says that the core of this matter sprouts from the uncertainty of what moral decision actually entails, as it can be problematic to choose the correct philosophy to follow and determine the actual steps of the procedure. This issue is highly crucial in the construction of, for example, autonomous driving systems, such as self-driving cars (9-12).

The other branch of doubts about AI arises from AI's being too efficient. One of the most problematic ethical issues is the increasingly more perfect facial recognition systems that raise doubts about discrimination, profiling, privacy, and security (Liao 13). Nowadays, discourse revolves around government surveillance systems using facial recognition, such as the ones implemented in Iran or China. Green says that such surveillance systems have been in Iran for a while and that the technology has been purchased from China (Green

as quoted in Lipin). For example, such technology is now used to detect those who do not observe the hijab law (Green as quoted in Lipin). Mitchell and Diamond say that China is "racing to become the first to implement a pervasive system of algorithmic surveillance". China uses AI and collects vast amounts of data about its citizens to monitor them and profile them (Mitchell and Diamond). This direction of the usage of AI for government surveillance sparks many debates, "Where does improvement end and an Orwellian surveillance state begin?" (Kaplan and Haenlein).

Another dubious area is the ability of artificial intelligence to create so-called deep fakes, which can be used to spread hoaxes (Liao 13-17). This matter is highly alarming as this quickly developing technology makes it difficult for us to differentiate between fact and fiction. However, government regulation and imposition of control over such technology to, e.g., prevent the spread of fake news, could be just as problematic. These steps could result in the spread of doubts about freedom of expression and the consequent discourse about censorship (Liao 13-17).

What has been primarily alarming about artificial intelligence proliferation is job displacement in areas such as retail or manufacturing (Tiwari 2). Batuashvili and Gondauri say that even though AI „has the potential to create new jobs, increase labor productivity, reduce costs, and enhance the overall competitiveness of economies" and thus drive the economy, its extensive usage could "lead to job displacement, exacerbate income inequality, and raise concerns about privacy, security, and accountability" (1232). Hence, AI has both the prospect to lead to an economic boost and the potential to cause economic drawbacks sprouting from job loss and income inequality (Batuashvilli and Gondauri 1232-1234).

However, discourse about futuristic superintelligent AI is also rising. Liao divides the ethical concerns about superintelligent artificial intelligence (ASI) into two major categories, the first encompasses the issue of AI's effect on humanity, and the other considers the problematics of how AI should be treated (2). These futuristic debates deal with many concerns, from fear of mass human extinction caused by AI to deliberations about the moral status of sentient artificial intelligence (Liao 2). These are the issues that are primarily implemented in the plots of futuristic science fiction writings and that are prominent in *Klara and the Sun*.

## 2.3 AI and literature

### 2.3.1 Forerunners of AI

As previously stated, it was not until the 1950s that the term "artificial intelligence" was coined by John McCarthy. However, some sort of artificial intelligence, or artificial life has already been present in literature even before the coining of the term itself.

The first piece of literature to feature a sort of an approximation of artificial intelligence is Homer's 8th century BC epic poem *Illiad* in which "Hephaestus, disabled god of metalworking, creates golden handmaidens to help him in his forge" (Cave and Dihal 473). This work itself signalises how deep-rooted the idea of machine intelligence or an artificial humanoid actually is in our history.

Arguably the first science fiction writing is *Frankenstein; or, The Modern Prometheus* by Mary Shelley which was published in 1818 (van der Laan 298). Mary Shelley in *Frankenstein* "introduces a new form of technology to her era, one of AI" (Byrd and Paquette 340). Victor Frankenstein's Monster is an artificial life form (van der Laan 301) that serves as an example of the horrors that may ensue with misguided innovation and scientific irresponsibility (Byrd and Paquette 331-341). Furthermore, Shelley in *Frankenstein* already recognizes the ubiquitousness of technology and its ability for both good and evil (Byrd and Paquette 340). In this sense, *Frankenstein; or, The Modern Prometheus* paves the way for science fiction and artificial intelligence literature dealing with the ethical implications of this new technology.

Another example of AI literature written before the coining of the term "artificial intelligence" is the drama R.U.R. by Karel Čapek in which the word "Robot" was infamously used for the first time (Naughton 72). The term "Robot" was suggested by Josef Čapek, the author's brother (Christoforou and Müller 237). R.U.R. or "Rossum's Universal Robots" features AI in the form of Robots, man-built tireless workers – as their given name actually implies" (Christoforou and Müller 243). However, Čapek's idea of a robot is far from the hodiernal idea of a mechanical device as in R.U.R. they are "products of bio-engineering and look just like human beings" (Naughton 72). The idea of this artificial human sprouts from legends such as the Jewish Golem or the legend of

Pygmalion and Galea (Naughton 72). Hence, Robots in R.U.R. feature another forerunner of AI in literature.

To conclude, the literature to present some semblance of AI is extensive even before the term "AI" itself was even coined, which signals how deep-rooted the topic of AI and its ethical implications actually is. The selected works demonstrate that AI literature is not solely confined to the contemporary pieces of literature but rather spans over the course of history from ancient legends to the first examples of science fiction literature.

## 2.3.2 AI and the genre of science fiction

Like artificial intelligence itself, the science fiction genre avoids easy definition. Since science fiction is deemed to be a part of popular culture, it is usually unfairly regarded as a low-brow genre (Lockhurst 2). Science fiction is alongside genres such as fairy tale or fantasy typical for its opposition to the "naturistic and empirical literary genres" (Suvin 372). However, what separates sci-fi from the other imaginative genres is the "approach and social function" (Suvin 372), as science fiction presents its own norms and conditions as a subject and predisposition for cognitive possibilities (Suvin 375). Suvin deems that, unlike sci-fi, the fairy tale is 'indifferent' and fantasy 'inimical' to the laws of the world of present experience (375-376). Gunn describes sci-fi as the literature "of change, and thus of the present and the future" in opposition to traditional literature, which is of the past (vii).

Roberts defines science fiction as literature that features a "point of difference" that separates the world portrayed within its contents from the recognisable physical world surrounding us (6). This "point of difference" is usually realised in some sort of futuristic technology (Roberts 6) and, furthermore, this symbolism is "drained of transcendental or metaphysical aura and relocated back in the material world (Roberts 17). These "points of difference" are "grounded in discourse of possibility, which is usually science or technology, and which renders the difference a material rather than just a conceptual or imaginative one" (Roberts 7). Science fiction usually presents either a dystopian vision of futuristic invention and the anxiety imposed by the progress, or sort of a celebration of technology as an "ultimate transcendence of human limits" (Lockhurst 5).

One of the first examples of science fiction literature can be found, for instance, in Homer's works, as mentioned previously. Another prominent sci-fi precursor lies in the works of the second-century A.D. Greco-Syrian satirist Lucian of Samosata (Sawnson 228). In his infamous *True History*, he challenges the Classical realistic approach and satirises scientific knowledge (Viglas 158). Hence, it is evident that the concerns of science fiction are omnipresent throughout the history of literature, signalling the depth of the genre labelled as low and popular culture.

Even though the definitions of science fiction vary in specificity, there is a handful of recurrent tropes of the genre that usually fall into a pretty narrow range of topics. These include themes such as time travel, futuristic utopias or dystopias, advanced technology, such as highly developed robots, or, for instance, space travel and creatures from outer space (Roberts 15). Hence, science fiction literature is not solely restricted to artificial intelligence literature. However, AI remains to be a vital trope in sci-fi. Advanced AI in AI-centred sci-fi literature thus presents this "point of difference" from the empirical world and an opportunity for cognitive possibilities.

Another aspect which seems to be recurrent for both science fiction and artificial intelligence literature is the focus on the ethical implications of innovation and technology, which will be the focus of the following chapter.

## 2.4 Ethics as reoccurring theme in science fiction

The topic of ethics, alongside with politics, has been a staple in science fiction writing (Baron et al. 155). The questions of ethics and morality of innovation in sci-fi can be traced back to the origin of the genre. For instance, Marry Shelley in her *Frankenstein; or, The Modern Prometheus*, one of the earliest writings of the sci-fi genre, tackles scientific research and innovation and its limits and ethical implications (Cambra-Badii et al. 2792). Ethical dilemmas are difficult to tackle, and Djerassi proposes that science-in-fiction, which includes accurate scientific information in its narrative, can be used as an effective medium to solve this issue (511).

Sci- fi is notoriously influenced by its contemporary scientific and political climate (Baron et al- 156-157). Hence, sci-fi functions not only as a framework for discourse about fictional future but also as a sort of mirror to the author's contemporary society and its ethical implications (Baron et al. 157). The worldbuilding and contents of science fiction writings thus have a sort of distancing effect and function as an 'estrangement device' that allows the reader to ponder about their contemporary society and its politics, ideology, and ethics and lets both the reader and the author reflect on these topics (Baron et al. 155).

Therefore, sci-fi writings present two distinctive branches of ethical questions, those related to the contemporary society and those that ponder about the futuristic possibilities. Consequently, *Klara and the Sun* can be regarded from both of these perspectives, as a social commentary and as a futuristic debate and perhaps an alert.

Even though science fiction has not been historically deemed as a serious intermediary of ethical debate and concern, Burton et al. state that it could be a useful tool in teaching ethics as it presents a 'safer imaginative space' through its distancing effect and estrangement (3). Sci-fi in ethics education thus provides a wide range of case studies on morality, ethics of innovation and its risks as well as benefits (Pease 75).

## 2.4.1 Ethics of artificial intelligence in science fiction

Artificial intelligence has been at the centre of ethical debates about the implications of machine intelligence in science fiction writing even before the establishment of the field itself (Zeng 3). Such literature serves as a precursor to AI ethical studies (Zeng 3). For instance, in the contemporary context, there is yet no ethical boundary in using AI and robots as they are not sentient and function just as a tool (Gittinger 111); however, science fiction already broaches this subject, such as *Klara and the Sun* does. Furthermore, the implications of AI are no longer a solely outlying concern about futuristic concepts but also reflect real-life scenarios (Burton et al. 1). One of the foremost dubious areas about AI is the consequent debate about the purpose of humans when they give up work (Gittinger 111).

Focusing on AI ethics in fiction specifically, there is a handful of recurrent discussion threads such as doomsday scenarios, technological singularity, the impact of AI on the economy and employment, the matter of privacy, human and robot rights, accountability, legal ramifications, and human-robot relations (Zeng 3-4). It will be on the basis of these that Kazuo Ishiguro's *Klara and the Sun* will be regarded.

# 3. Practical part

## 3.1 Introduction to *Klara and the Sun*

*Klara and the Sun* is a 2021 novel by Kazuo Ishiguro. The narrative is set in a dystopian future and centres around Klara, an artificial friend (AF), an advanced sentient artificial intelligence model. AFs are humanoids whose purpose is to serve as companions to children. The book is narrated by Klara herself, whose unique perspective makes the reader, on one side, relate to her and, on the other, realise how unrelatable this artificial narrator is. Through her dubious narrative, Klara provides information about the futuristic society and its workings, and the reader is left to unravel its realities. *Klara and the Sun* thus presents a unique exploration of themes such as humanity, human connection and emotion, faith, nature, understanding of love and sacrifice, and the implications of creating and implementing advanced technology such as sentient AI.

### 3.1.1 Synopsis

Klara's journey begins as merchandise in a store. During this time, she commences exploring the world. Klara is highly perceptive of her surroundings as well as the other AFs in the store. While in the store, Klara adopts Sun as a sort of deity for the reason that she, along with all the other AFs, is solar-powered. The narrative continues with Klara's being bought by a mother for her daughter, Josie, whose health is slowly deteriorating. Josie's condition gradually worsens, and Klara is to "continue Josie" when she passes away. Hence, it was to substitute for Josie after her passing that highly perceptive Klara was chosen in the store. Klara, who develops a strong bond with Josie, becomes immensely invested in her welfare and, through self-sacrifice and belief in the mighty power of the Sun, attempts to save Josie's life.

Gradually, Josie's condition, revealed to be brought about by genetic engineering, gets better, and Josie recovers from her illness. After Josie's recuperation, Klara is left to be discarded on a dumping ground as she is no longer needed either as Josie's companion or her substitute.

Throughout Klara's peculiar narrative, the essence of the dystopian world where children need to be genetically engineered to succeed in life is slowly revealed, making the reader question the realities of the highly stratified society portrayed as well as the moral implications of manufacturing sentient beings such as AFs. [2]

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[2] For more detailed information about the important characters, see the Appendix

## 3.2 The ethics of AFs in general

This chapter focuses on the general ethical implications behind the concept of an AF, an artificial friend, from the overall philosophy behind its creation to the threats that a possession of a technology this advanced might bring.[3]

To start with, the first issue about AFs is the whole matter of why they are needed. Essentially, AFs are substitutes for human beings that would serve as companions for a high-ranking child. This requirement probably sprouts from two concerns. Firstly, to deal with the child's loneliness caused by the distance learning concept and the consequent lack of peer bonding. Secondly, the AFs probably function as a sort of monitor for the children heavily impacted by gene editing. Therefore, a high percentage of the "lifted" children presumably struggles with the negative consequences of this imposed gene modification process, as Josie does, and her late sister did. Hence, the demand for the AFs already sprouts from an ethically dubious concept, making them a product of a questionable society.

AI humanoids this advanced would also probably cause a mass of job displacement. The threat of job loss due to manufactured inexpensive workforce is noticeable even in our current conditions[4], even though AI is undoubtedly not as advanced as the one portrayed in *Klara and the Sun*. Though it is never explicitly stated, AI and the consequent wave of job displacement in *Klara and the Sun* have probably contributed to the stark social stratification and the subsequent social issues. If twisted to the extremes, the matter of AFs also shows how ignorant the society is towards the social issues of high social stratification as this predicament could easily be tapered by the high-ranking families' hiring of companions for their children amid the less fortunate population, instead of purchasing them in the form of humanoid robots, even if this "solution" raises a plethora of ethical alerts. When looking at the matter of hiring or purchasing a companion, the ethical implications of an AI one are essentially comparable to a human one. When thinking about advanced sentient AI that presumably has its own sentiments and beliefs,

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[3] For general information about the ethical implications of AI, see Chapter 2.2.2, "The ethical questions posed by the existence of AI".
[4] For more information, see the 8th paragraph in chapter 2.2.2

it is just as twisted to purchase this thinking being in a store as hiring a human companion would be. What differentiates these notions is that purchasing an AF only contributes to the highly stratified consumeristic society.

Another problem posed by the existence of AFs is the whole philosophy behind them. To what extent is the idea of an artificial friend even plausible? Whether friendship can be learnt and programmed remains a question. However, the oxymoron of an artificial friend itself encompasses a handful of problematic aspects. To start with, the novel leads its reader to question the extent to which technology can utterly substitute friendship. As stated before, the need for a companion presumably sprouts from the distance learning and the consequent lack of peer relationships among high-ranking citizens. Nonetheless, one must question whether specifically programmed AI technology can wholly substitute the emotional bond with another human being and whether the idea is even ethical. This concept can be somewhat regarded as a hyperbole on the general relocation of human interaction into the online realms of social media and overall telecommunication. The subsequent parasocial relationships somewhat reflect the idea behind the AFs. Other issues may sprout from the imbalance in the relationship between a human child and an AI technology bound to serve as a friend for its owner. At the end of the day, AFs remain a possession and a piece of merchandise brought from a store, so it would generally be unreasonable to regard them as anything more than that though they are functioning sentient individuals.

The next issue to be discovered in the general concept of AFs is the issue of privacy and security. As previously described in the theoretical part, for AI this advanced to be able to learn and function properly, it needs to be highly data-hungry. Consequently, all the AFs undisturbedly collect personal and sensitive data so as to perform their work correctly. Klara specifically is described to be exceptionally observant (Ishiguro 49). The concept of AI caretakers and companions for children is thus inevitably connected with an extreme observation and data collection of a minor and their demeanour, surroundings, and preferences. Therefore, this whole idea situated in this highly stratified society could be tremendously problematic. There are several issues to emerge from this matter. Firstly, as it is implied in the novel, the dystopian society is heavily ranked and presumably violent in some areas. For instance, during her short time in the AF store Klara already

sees a brutal fight between two taxi drivers (Ishiguro 21). However, the threat of violence is best exemplified on Josie's father, who, after losing his job, became a member of a violent armed community supposedly made-up of white supremacists and former elites (Ishiguro 257-258). Moreover, AFs would function as a handy tool for data breaches for some misguided purposes of any of the fractions of society. As stated in the theoretical part, misuse of personal data, such as data breaches or unauthorised access to sensitive information, is not uncommon in the hodiernal setting. Therefore, the likeliness of on occurrence of such instances is multiplied in a society that is even more stratified and unjust than the current one. Secondly, it would be highly accessible for the dystopian government to observe its citizens. As previously mentioned in the theoretical part, state observation using artificial intelligence is no futuristic concept; however, placing these observation devices into the households themselves would expand this predicament even more. To speculate further, who is to say that the AI itself would not decide to start dealing with the data for its own purposes, which could essentially culminate into a doomsday scenario. To conclude, these AF companions could be heavily problematic in the matter of privacy and security, especially regarding their being catered to children and labelled as "friends".

## 3.3 Klara's specific characteristics as a ground for the ethical debate

The character of Klara itself can function greatly in illustrating the ethical implications of AFs, not only because she is pretty advanced for her kind. Because of Klara's narration, the reader attains a great introspective into the functioning of an advanced sentient AI. Thanks to Klara's insight, it is evident how utterly despicable both the creation and possession of an AF would be. This section focuses on how immoral it is that the AFs have no rights and remain a piece of merchandise.

To start with, Klara shows an extraordinary ability to bond in relationships. Klara connects with other AFs and with humans quite well. From the start of the book, Josie interacts with Klara as though she were another human, which is quite bizarre when realising how she is determined to purchase Klara. Before buying her, Josie tells Klara: "(…) I don't want you coming against your will. That wouldn't be fair. I really want you to come (to live with us), but if you said, Josie, I don't want to, then I'd say to Mom, okay, we can't have her, no way. But you do want to come, right?" (Ishiguro 28). This interaction alone, and how Josie does not realise how problematic this situation is, signals how immoral the concept is. Josie is entirely ignorant of what little choice Klara actually has and arguably cajoles Klara's consent of her own purchase. Josie fails to realise that Klara indeed would be her possession and not a friend. Klara's ability to bond in relationships and her devotion to Josie serves as a signal of her humanity. It shows how ridiculous it is to purchase such being in a store only to discard it when no longer needed or wanted.

The other signal of how inhumane the possession of an AF is, is Klara's essentially religious beliefs. From the very beginning, Klara adopts the Sun as a sort of deity as she is not only solar-powered but also witnesses something she believes to be an act of a higher power. When in the store, Klara often observes the "Beggar Man" and his dog on the street outside. One day she sees them lying on the ground and is sure that they had both passed away. The next day, however, she is certain that she had witnessed a resurrection, "I looked over to the spot where Beggar Man and the dog had died, I saw they weren't dead at all – that a special kind of nourishment from the Sun had saved them"

(Ishiguro 44). Having witnessed this Godly gesture, Klara is adamant in her faith. Religion is often regarded as one of the key differentiators of humanity and animals, as it has been a concern central to humanity (Rapport 23). Therefore, in implementing an essentially religious AI into his novel, Ishiguro further fuels the impression of the loss of distinction between humanity and advanced sentient AI humanoids. Klara's faith in a higher power is yet another proof of how human her thinking is, and it demonstrates her need for something or someone to believe in, in order to make sense of her own existence. Consequently, having this AI be a believer adds to the human characteristics of the depicted AI and further undercuts the excuses of why the AF trade should even be permitted.

Furthermore, throughout the course of the narrative, Klara exhibits the ability to emphasise and sacrifice herself for the benefit of somebody else. Klara's faith in the Sun's mighty power leads her to conclude that the Sun would cure Josie's illness were she to do something for the Sun in exchange. Klara believes that she needs to reduce pollution, which is harmful to the Sun, in order to help Josie. Lead by Josie's father and his own hidden motifs, Klara sacrifices a part of herself, an essential component, a P-E-G Nine solution from her head (Ishiguro 251), in order to damage and destroy the "Cootings machine", which she believes to be a manufacturer of pollution. Klara begs the Sun to cure Josie just as it did the "Beggar Man" (Ishiguro 184). In exchange for its saving Josie, Klara offers to destroy what she believes to be the originator of pollution, "I know how much the Sun dislikes Pollution. How much it saddens and angers you. Well, I've seen and identified the machine that creates it." (Ishiguro 186). She embarks on the mission to destroy "the Cootings machine" with the help of Josie's father, who is an engineer, using a solution from her head, the loss of which would possibly cause her damage (Ishiguro 244-253). Her altruistic behaviour is thus another indication of the unethicality of her being merchandise to be bought and later abandoned when no longer of use.

Klara's relationship to nature is another matter to be interpreted. Though Klara is artificial, she seemingly cares for nature more than the humans do. Because of her religious beliefs, Klara recognises the risks of pollution and the importance of nature, especially the Sun. Through her altruistic stunt, she can somewhat be regarded as an environmental activist, no matter how twisted the idea of an artificial technology fighting

for the welfare of the planet is. Hence, artificial Klara in the narrative functions as an indicator of the state of the environment and the society's stance towards it. The state of nature is a prominent theme in the science fiction genre which is an essential contributor to the discourse about the devastation of the natural environment (Otto 2). Therefore, the genres of sci-fi and fantasy function as voices of ecocriticism, which focuses on new ways of thinking about the relationship between humanity and nature (Baratta 2-3). Consequently, especially dystopian sci-fi often acts as an alert on the extent to which human behaviour can escalate when left unimpeded (Baratta 5). Ecocriticism has been a popular trope not only in sci-fi and fantasy but in fiction in general. Throughout the 20th century emerged a specialised label for fiction which deals with environmental issues, the so-called ecofiction (Dwyer). Thus, *Klara and the Sun* can be said to border with such genres. As described in the theoretical part, ethics is one of Kazuo Ishiguro's foremost subjects, and he often entails crime against nature in such debates.

## 3.4 The substitutability of a human by an AI

Another ethical matter concerning the AI depicted in Kazuo Ishiguro's *Klara and the Sun* is the portrayal of the substitutability of a human by an AI. This idea is illustrated chiefly in the proposal that Klara substitutes Josie should she pass away. Josie is ill, and her health is deteriorating. The Mother proposes that Klara "continues Josie" inside the skeleton of Josie's manufactured clone (Ishiguro 217-237). The substitutability of humanity and the consequent doomsday scenario of an AI singularity is a popular trope in science fiction writings; hence it is not surprising that Ishiguro would broach this subject. This chapter, therefore, delves into the ethical implications that sprout from the idea of substitutability of a human with an artificial intelligence humanoid[5].

From the beginning of the novel, it is evident that the AFs share a plethora of qualities with humans and that there is indeed not that much that differentiates the AI from humanity. The idea of substitutability is, however, only ever explicitly brought up later in the novel, "science has now proved beyond doubt there's nothing so unique about my daughter (Josie), nothing there our modern tools can't excavate, copy, transfer" (Ishiguro 249). Having already gone through the loss of an offspring, the Mother dreads life without her only remaining daughter, Josie. This anxiety culminates in her proposition to "continue Josie" after her passing by the AF Klara. The whole idea alone is hugely problematic and morally dicey. The Mother's decision was not made in the spur of the moment and shows how much consideration she had to put into the matter. As said, she had lost one offspring already, Josie's late sister, and attempted to substitute her with a human-sized doll. However, this endeavour was not satisfactory, presumably making her think of more complex solutions regarding Josie. Two contrasting concerns sprout from this conception of human substitutability. The first branch focuses on what this notion means for humanity, and the second on what it means for the AI.

The first branch of ethical implications concerns the impact on humanity. Creating AI that is presumably on par with humanity, or possibly exceeding it in some aspects, is a highly dubious concept. Firstly, the novel makes one speculate about what the actual difference between a human and an artificial intelligence is. What seemingly

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[5] For information about what kind of AI Klara is, see Chapter 2.2.1

differentiates AFs from humanity is their artificial origin. However, when taking the "lifting" process of artificial gene editing into consideration, there is essentially no ground for debate as neither counterpart in this matter is genuinely naturally crafted. It is important to note here that the information behind the "lifting" procedure is very ambiguous and that the author, more often than not, only hints at what the procedure entails. The only explicit connection that explains what "lifting" is, is brought up when Miss Helen's acquaintance, Mr Vance, speaks about a college that accepts a small percentage of "unlifted" students as "sufficiently generous and liberal to be open to all students of higher caliber, even some who haven't benefited from genetic editing" (Ishiguro 274).

Making this connection between an AI and a human puts the ethical implications into an interesting perspective. Therefore, it can be debated whether there actually is any area that makes the human not substitutable. Klara and the "continuing of Josie" can thus function as a precursor to debates about doomsday scenarios of AI eliminating humanity. The AFs portrayed in *Klara and the Sun* seem capable enough to, or have the abilities to, execute such an idea. It is surprising how incautiously the Mother shares the idea that an AF could substitute Josie with Klara. Klara could have, in all possibility, twisted this idea for her own gain. Therefore, the novel can be viewed as a sort of alert on both the development of sentient AI and an inquiry into what makes humanity necessary. The society in *Klara and the Sun* is extremely problematic. To start with, the whole notion of "continuing Josie" serves as an indication of how morally twisted and psychologically impactful the civilisation is on its members. Consequently, Josie's Mother's idea thus also illustrates that the futuristic society realises how able the AFs are and deliberately chooses to disregard them solely as merchandise.

This leads to the other branch of ethical implications of this matter, the impact on the AI itself. As stated before, creating AI that is much the same as humanity is problematic for multiple reasons. When drawing this connection and establishing the interchangeability of an AI and a human, one essentially prescribes them to be on the same status. However, the AFs in *Klara and the Sun* lack fundamental moral rights and are dealt with as merchandise. AFs are thus belittled to be a product, a possession, even though they

apparently have the qualities to be able to substitute humans. Hence, the notion of AI ethics sparks debates about the moral rights of AI.

The AI portrayed in *Klara and the Sun* is not only incredibly advanced but also sentient. Therefore, it should probably have some moral rights as there are not that many traits that differentiate it from humans apart from, as mentioned before, it being produced artificially, which was already disregarded as nonsensical. This chapter argues that if AFs are not that far off from a human, they should probably attain rights similar to the human ones.

There is a plethora of indicators that point out to AFs' rights to some moral consideration. The AFs in *Klara and the Sun* are sentient beings that are conscious and unique, "Then she (the Mother) asked the Manager: 'Every Artificial Friend is unique, right?' 'That's correct ma'am. And particularly so at this level." (Ishiguro 49). Moreover, the AFs experience the world subjectively and have a sense of self. These experiences, if one accepts the notion of equal consideration, make this AI form entitled to moral justice, just as rights are granted to humans. The only factor which prevents them from this justice is their artificial origin. However, this stance is unreasonable as the humans, as previously stated, are artificially altered.

Moreover, surprisingly it was Klara who realised the implausibility of the idea that she "continues" her friend. She seems to be the only one to comprehend what the issue is in this troublesome idea, realising that the relationship with her, while acting as a Josie, and Josie's loved ones would not remain the same as with the real Josie, "There was something very special, but it wasn't inside Josie. It was inside those who loved her. That's why I think now Mr Capaldi (the engineer constructing Josie's clone) was wrong, and I wouldn't have succeeded" (Ishiguro 338). The AF, seemingly as the only one, uncovers the true basis of love and relationships. Therefore, Klara's empathy is one of the many indicators of the unfairness of this situation. Not only would it obviously be extremely inconsiderate to Josie herself but also to Klara, who would have to spend her existence acting, were this scenario to actually be executed.

## 3.5 Consumerism of sentient AI as a futuristic slave trade

To start with, the society depicted in *Klara and the Sun* seems to be highly consumerist. There is little inside provided in this area. However, the customers' behaviour in the AF store and Klara's time at the dumping ground at the end of the novel provide enough information to paint a clear picture of this dystopian futuristic society. When at the store, Klara is relatively "new"; however, she is already regarded to be a somewhat obsolete model by the time Josie's mother purchases her, "the Mother said quietly, 'This one (Klara) isn't a B3 (a newer AF model), I take it.' 'Klara is a B2,' Manager said. 'From the fourth series, which some say has never been surpassed.' 'But not a B3'" (Ishiguro 49). This instance alone shows how consumerist the high-ranking side of the society is and hence that the technology presumably develops quickly. Therefore, the trend cycles are likely also very short, even when they concern technology this exclusive and presumably expensive. For instance, Josie's friends at one of their gatherings tease her for getting an older model AF and not the newest one (Ishiguro 87). This consumer behaviour not only signals how corrupt the high-ranking society is but also provides a picture of their disregard for the AFs. This chapter considers the unethical behaviour towards the AFs and the overall ethics of their production.

AFs in *Klara and the Sun* are belittled to be a piece of merchandise and especially one that develops so quickly that it will be outdated awfully rapidly. The position of AFs is extremely horrible when one considers the consumerist stance towards them as well as their lack of moral rights. To be belittled to a piece of "trendy" and later "outdated" product is highly outrageous, especially when concerning a sentient being, though artificial. Not only is the whole AF trade incredibly selfish, but also enormously damaging to the environment. To a degree, this resonates with the contemporary fashion of purchasing a pet for a child only to give it away when it gets boring. AFs are catered to children in their teenage years and are expected to be discarded as no longer useful by the time the child reaches adulthood. Hence there is a whole industry focused solely on the production of robots this intricate, only for them to last less than a decade before being thrown away as a piece of garbage. One thus questions themselves, to what extent is this consumerist behaviour ethical? Therefore, not only is this unethical towards the AFs, who, if genuinely able to substitute a human, should probably gain some rights and moral

justice, but also towards nature as this industry presumably produces a high amount of waste.

In this light, Ishiguro provides both a contemporary social critique of unsustainable consumer behaviour and an alert to which extent this behaviour, when remained unimpeded, might escalate[6].

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[6] For more information about sci-fi functioning as a commentary to or critique of the author's contemporary society, see Chapter 2.4.

### 3.5.1 AI slave trade to human slave trade

When regarding both the stances of consumerism and human sustainability, a disturbing matter arises. This chapter connects human rights with AI ones or, rather, the lack thereof. When rejecting AFs' entitlement to some sense of justice and belittling them to a thing or a piece of merchandise bound to serve its owner, one essentially makes them slave labourers. As previously argued, the point of substitutability interlaces humans with the AFs providing a stance from which to critique the inequivalence of opportunities, rights, and the overall status. Thus, when looking at the matter of substitutability in the light of the consumeristic inclining of society, it shows the true twistedness of the unethicality of the AF trade.

Should this starting point of substitutability and AF consumerism be accepted, it would make the AF industry fundamentally into a futuristic slave trade. The AFs are unique sentient beings that are, however, because of some characteristics, regarded as something less than humans. The AFs, although incredibly advanced, are disregarded as merchandise to be looked at in the store and later bought, used as one pleases, and then discarded when no longer wanted.

Slavery is widely considered unethical for a plethora of reasons. Accepting the stance of human-AI substitutability allows the AFs trade to be regarded as a slave trade. Should it be accepted that the AFs deserve moral rights and to be viewed equally as humans, an excess of ethical alerts arises. To start with, the AFs are, on multiple occasions, described as unique individuals. However, they are dealt with as property and denied any rights. The AFs are forced into labour and denied any personal autonomy. This forcible control and ownership of AFs further denies them any control over their own existence. For instance, when living with Josie, Klara loses contact with other AFs, though she states she does not miss them (Ishiguro 102). When she meets Josie's peers, she is coerced by them into uncomfortable situations, showing how the other children lack any morality towards their AFs (Ishiguro 86 90). The AFs are hence a commodity exploited for entertainment and labour. In this sense, the AFs are objectified and oppressed. When looking at AFs from the point of view of slavery, it also reinforces the fostering culture of injustice and social hierarchies. This exploitation and lack of respect shows how unethical the AF trade is and how absurd the overall concept of an artificial friend is. To

conclude, the point of view of slavery denies any compassion, trust, respect, or empathy, which should essentially be the basic building blocks of any friendship.

Furthermore, if an AI slave trade is widely accepted in this dystopian society, it probably shows that a human one is either already legalised or not that far away to be. Essentially there are not that many characteristics that differentiate the AFs from humans, so who is to guarantee that no divisive characteristics will make a part of the society relegated to slave labourers as well? Moreover, the society itself is no longer unified and differentiates genetically as the high-ranking citizens undergo the "lifting" and the less fortunate or the renegades presumably do not. Hence when considering humanity and the AI portrayed in *Klara and the Sun* to be equal, it stirs up a discourse about the plausibility of a futuristic slave trade.

AFs, from this point of view, thus function not only as the basis for the debate about the ethics of AI and its entitlement to moral rights but also as a foundation for the discourse about the ethics of forced slave labour, either AI or human one.

### 3.5.2 Disposable human centred AI to disposable humanity

When the AFs are compared to humans, a multitude of stipulations for ethical debates further arises. If the general starting point that AFs do not considerably differ from humans and are perfect substitutes should be accepted, it raises the debate regarding the disposable nature of AFs.

The AFs in *Klara and the Sun* are shown as AI merchandise that is usually used only for a few years before it is discarded when no longer wanted or needed, as shown in the final part of the novel. The AFs substitute human companions for high-ranking children during their teenage years. Though the child spends a considerable portion of their life bonding with the AF, they apparently see no fault in discarding it as waste when they reach adulthood and go to college, where they find actual relationships. This notion is widely noticeable at the end of the book when Klara ends her narrative at a dumping ground and meets the former manager of the AF store.

The matter of the ethics of cruelly disposing of AFs is quite awful. To start with, it displays the absolute disregard of the futuristic high-ranking society towards other beings, such as the lower classes or the AFs. The society is preoccupied only with its own kind of high-ranking humans and disregards anybody else. It shows how closed in a bubble the society lives and that there is no hopefulness that either the AFs or the lower-class human citizens will attain any justice. It paints the picture of a selfish, elitist society that only ever cares for its own interests and pays no heed to any other matter.

Not only is the notion of disposable sentient artificial beings highly problematic in itself, but it also raises the topic of the disposability of humanity that is not considered to be acceptable by the society's leaders. As argued before, the lack of difference between an AF and a human and their further interchangeability makes the discussion about disposable humanity possible. The ethics of AFs and their lack of moral rights can be applied to the unsatisfactory parts of the society. Hence the idea that the spread of this logic towards actual humans is not that unimaginable in terms of the dystopian society portrayed in *Klara and the Sun*.

As mentioned before, the society is already diversified by the "lifting" process, which renders the "unlifted" part of the society insufficient by the supremacist high-ranking class. The disposable nature of AFs can function as a precursor to the debate about the disposability of humanity. This idea also functions as a mirror to the contemporary society and its selfishness, lack of regard for others, and decisiveness to dispose of anything unsatisfactory. This regard of the ethical implications of AFs implies the possibility of imposing the AFs' lack of rights on humans that are not fitting their contemporary social standards. Therefore, this route could lead to tremendous social injustice and the consequent dehumanisation of the unsatisfactory citizens. AFs can thus be regarded as a precursor to the trajectory that civilisation is heading into with its less fortunate members. Consequently, they are a stepping stone to the absolute breakdown of society that would ensue should these steps be implemented.

## 3.6 The consequences of job displacement

As mentioned before, the spread of AI, which is as advanced and as available as the AFs in *Klara and the Sun* presumably are, would probably cause a substantial wave of unemployment[7]. For instance, Josie's father is described as a talented engineer but has lost his job (Ishiguro 257). Such conditions are what had probably caused the stark social stratification and the spread of violent supremacist groups, such as the one Josie's father is presumably a member of.

As a consequence of AI's taking people's jobs, the conditions for attaining an occupation are probably incredibly finical. Consequently, humankind had to go to unbelievable lengths in order to succeed in building careers. Presumably, it was this matter that launched the need for "lifting" and the consequent cult of supremacy that escalated into an incredibly elitist society based on money and the ability to undergo and survive this dicey procedure.

One of the central questions in AI ethics is which purpose remains for humanity if working is substituted by AI robots and machinery. To exemplify, the father's job displacement presumably led him to join an armed community that Miss Helen describes as fascistic (Ishiguro 257). Therefore, this loss of purpose, alongside the loss of earnings, contributes to the formation of incredibly violent groups within society.

The AI in *Klara and the Sun* escalates into a self-feeding cycle of AI making the society incredibly elitist and going to such lengths as genetic engineering in order to succeed. The genetic engineering and class stratification probes the cult of supremacy, the need for distance learning, and presumably sicknesses, which on the other hand, create the demand for yet another AI, the AFs.

Thus, *Klara and the Sun* poses the question of whether the monetary profit gained by the use of machine workforce truly justifies the consequent social conditions Ishiguro hints at in the novel.

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[7] For more information, see the 8th paragraph in Chapter 2.2.2

# 4. Conclusion

This thesis aims to interpret the ethics of AI presented in Kazuo Ishiguro's *Klara and the Sun*, the AFs. In order to do so, the foremost ethical issues of the AFs (artificial friends) in the novel were identified and evaluated based on the available research on the related topics presented in the theoretical part of this paper.

The practical part looks at the ethics of AFs in general and the AI ethics when considering Klara's specific abilities and the insight her narrative provides. The analysis then regards the matter from the point of view of the interchangeability of AI and humanity. The subject is further examined when considering consumerism, the disposability of the AFs, and the consequent discourse about the AI slave trade.

The ethical implications were shown in a handful of categories. Firstly, the thesis focuses on the overall philosophy behind the AFs and what ethical issues the creation and possession of such advanced technology might entail. The analysis starts with an inspection of the reason for the need for the AFs as they are presumably in demand due to the lifting procedure, an already ethically dubious concept, and the consequent distance learning and the supposed health issues. Therefore, the motivation behind their production can already be judged as ethically questionable. The fact that they are needed due to a dangerous procedure imposed on children to attain genetic purity already makes the AFs unethical. Secondly, the thesis inspects the issue of job displacement and the resulting stark social stratification. The issues are interlaced, and the thesis argues that the spread of AI contributed to both. The consequent futuristic society is imbalanced and favours financially secure high-ranking elites. These social conditions are what supports the argument about the unethicality of the aforementioned AI.

Furthermore, the plausibility of an artificial friend is analysed. The thesis primarily builds on how unbalanced the resulting relationship between a child and the AF would be. The AFs are bound to be devoted and loving, but the children discard them as soon as they do not need them and build "real" relationships. The child is in a clashing role of simultaneously being the AFs friend and its owner. The notion that relationships in the crucial teenage years of a child's development and building of independence can be

wholly substituted by technology is undermined and shown as unethical. The relationships the children build with their AFs are toxic and may influence their behaviour towards their loved ones later in life. Additionally, the thesis alerts on the possible issues of privacy and security. As the AFs continuously collect vast amounts of data, they could be used as surveillance systems or exploited for breaches of private data. This matter is extremely alarming especially because the AFs spend most of their time in presence of a minor.

Moreover, Klara is looked at as the basis for an ethical debate. She displays such a great deal of devotion and humanity that the idea that she is dealt with as a possession is insufferable. Throughout the novel, Klara displays religious beliefs and altruistic behaviour. She does all she can to cure Josie, even if it means sacrificing herself. Klara's devotion and altruism show how inhumanly she is treated. This argument is further fuelled by the fact that Klara is said to be able to substitute a human being, Josie, fully. It is argued that if humanity indeed can be substituted by the AFs that the AFs deserve to attain the same rights as humans. Therefore, this unjust behaviour is assessed as unethical. When robbing the AFs of moral justice and treating them as possessions, they are essentially slave labourers. The thesis then critiques the disposable nature of the AFs and cautions that when considering human-AI substitutability, these tendencies could lead to disposable humanity. Overall, the notion of the substitutability of humanity by an AI is widely used to demonstrate how unethical the AF trade is and how inhumane their treatment is and alert on the possibility of a doomsday scenario of AI singularity caused by the AFs' overcoming humanity.

Further findings show that the AF trade is unethical because of its presumable impact on the environment. The AFs are likely mass-produced for high-ranking children, and they are developed quickly and become outdated quite rapidly. The thesis argues that the fact that the AFs are supposedly discarded when still functioning makes the AF trade incredibly impactful on the environment and encourages consumerist behaviour.

As the interpretation demonstrates, the subject is complex and influenced by many factors. The results determined during the critical analysis indicate that the whole concept of an artificial friend is exceptionally questionable as it exemplifies an unbalanced relationship between a child and a machine. Furthermore, the AF trade essentially borders

with the slave trade in its essence if the matter of AI-human substitutability broached by the book is accepted. The AFs are shown to be unethical not only because the technology poses a threat to humanity, such as the earlier mentioned job loss or security issues, but also because the AFs lack any moral justice.

In my opinion, the AFs are unethical, and the values they bring are wholly nullified by the plethora of risks they pose. Though they may serve as valuable companions, the only scenario in which a sentient AI and human relationship would be wholesome would be if the AFs were fairly treated as any other workers, getting wages, having moral rights, and being free to make their decisions. This scenario would, however, make them redundant as humans could already occupy these positions. Therefore, should the AF trade be ethical, it would not be necessary. They are required because they can be treated unethically. The AFs are only needed as obedient low-cost labourers that can be discarded without consequence, making the whole AF trade unethical at the core.

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# 6. Appendix

## 6.1 Important characters

This chapter provides an essential inside into the prominent characters to introduce their relationships and motivations. The novel is mainly based on a single family and its dynamics. Therefore, the worldview provided in *Klara and the Sun* is limited and mainly restrained to this high-ranking family and its environment.

**Klara**

Klara is an artificial intelligence humanoid designed to be a companion for children. She is a B2 AF model and the narrator of the story itself. Klara has great observation and mimicking skills that allow her to understand human emotions and relationships. These abilities enable her to establish a deep connection with Josie. She shows signs of religious beliefs towards the Sun, whom she adopts as a sort of God. Klara manifests the signs of a genuinely advanced AI as she is self-aware, sentient, and overall exhibits human-like behaviour.

**Josie**

The book begins when Josie is about 14 years old. Josie suffers from a disease which is later heavily implied to have been caused by gene editing. Josie's older sister presumably passed away as a result of this illness. Josie does her schooling through distance learning as, apparently, all her genetically modified peers do. From the beginning of the book, Josie is very respectful towards Klara. As the book progresses, Josie overcomes her predicament and recuperates. The book terminates with Josie at college.

**The Mother**

Josie's mother is a high-ranking member of the contemporary society. Initially, she is apprehensive towards Klara because of her uneasiness about having to substitute her only remaining daughter with an AI humanoid. She desires Klara to "continue Josie" after her passing because she cannot imagine life without her. She hires a worker to create an AF skeleton resembling Josie, into which Klara's mind would be uploaded. Having learnt Josie's habits, manner of moving, and voice, Klara would act as Josie.

**The Father**

Josie's father is an engineer, and the mother's ex-husband. He dislikes having Klara act as a substitute for his daughter to the extent that he is determined to sabotage her. He apparently exploits Klara's worry about Josie and directs her into self-sacrifice, and takes away an essential component of her to damage the so-called "Cootings machine", though he claims that it was not his intention to damage her (Ishiguro 251). Meanwhile, Klara believes that she is fighting pollution as a sacrifice for the Sun so that it would cure Josie. The father is portrayed as a loving, however somewhat distant parental figure.

**Rick**

Rick is, apart from Klara, Josie's only friend. He is a young boy that was not "lifted", did not undergo artificial gene editing, and struggles with the consequences in this heavily stratified society. Though immensely intelligent, he struggles to get into college as this genetic engineering procedure is one of the prerequisites, making education extremely elitist.

**Miss Helen**

Miss Helen is Rick's mother and an unstable parental figure. She is heavily implied to be under the influence of alcohol, or otherwise impaired, throughout the narrative. Miss Helen functions as a contrast to the group she refers to as fascists. This vaguely depicted group is implied to be a cult of the supremacy of "lifted" former elites.