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ARTÍCULOS

Bioengineering, Al Spirituality, and Environmental Crisis: Ishiguro's Posthuman Humanism*

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EN **Abstract.** We argue that Kazuo Ishiguro's latest novel, *Klara and the Sun* (2021), portrays an "ustopia" (Margaret Atwood)—a near-future vision that articulates an unresolved tension between utopian and dystopian premises, humanist concerns and posthuman possibilities, anxiety and hope. *Klara and the Sun* is narrated in the first person by Klara, a child robot endowed with affective, cognitive, and learning capacities, who experiences a world shaped by climate emergency, bioengineering, and Al. Ishiguro's novel builds on familiar sci-fi dystopian motifs, conveying a humanistic anxiety about new forms of inequality generated by genetic enhancement and identity issues arising from the possibility that humanoid robots could replicate and replace humans. However, in contrast to humanist interpretations of Ishiguro's novel, we argue that it also presents the possibility of a "posthuman supplement" to the humanist tradition. Humanoid robots like Klara, capable of creativity, curiosity, and selfless care, open the possibility of a logic of *différance* (Jacques Derrida), and thus, novel forms of existence and human-posthuman relationships. The novel envisions meaningful bonds between humans and human-like singularities, as well as new possibilities for mutual learning connected to the creation of Al-driven ecosophical beliefs (Félix Guattari) that could counter environmental degradation and alienation from nature. **Keywords:** Artificial Intelligence; Ecology; bioengineering; Robot Revolution; Posthuman Humanism.

Bioingeniería, espiritualidad de la IA y crisis medioambiental: el humanismo posthumano de Ishiguro

ES **Resumen.** Argumentamos que la última novela de Kazuo Ishiguro, *Klara and the Sun* (2021), representa una "ustopia" (Margaret Atwood): una visión de un futuro cercano que retrata una tensión no resuelta entre premisas utópicas y distópicas, preocupaciones humanistas y posibilidades posthumanistas, ansiedad y esperanza. Klara and the Sun está narrada en primera persona por Klara, un robot infantil dotado de capacidades afectivas, cognitivas y de aprendizaje, que experimenta un mundo marcado por la emergencia climática, la ingeniería genética y la IA. La novela de Ishiguro se basa en motivos familiares de la ciencia ficción distópica, transmitiendo una ansiedad humanista sobre las nuevas formas de desigualdad generadas por el mejoramiento genético y los problemas de identidad derivados de la posibilidad de que los robots humanoides puedan replicar y reemplazar a los humanos. Sin embargo, en contraste con las interpretaciones humanistas de la novela de Ishiguro, argumentamos que también presenta la posibilidad de un "suplemento posthumano" a la tradición humanista. Los robots humanoides como Klara, capaces de creatividad, curiosidad y cuidado desinteresado, abren la posibilidad de una lógica de la différance (Jacques Derrida) y, por lo tanto, nuevas formas de existencia y relaciones humano-posthumanas. La novela imagina vínculos significativos entre los humanos y las singularidades similares a los humanos, así como nuevas posibilidades de aprendizaje mutuo relacionadas con la creación de unas convicciones ecosofícas (Félix Guattari) generadas por la IA que contrarrestan la degradación ambiental y la alienación de la naturaleza.

Palabras clave: inteligencia artificial; ecología; revolución de los robots; ecosofía; humanismo posthumano.

Sumario: Introduction. 1. From Al-human friendship to solar spirituality. 2. Klara prays to the Sun: the covenant and the sacrifice. 3. Personal identity beyond techno-optimism and the "logic" of *différance*. 4. Epilogue: Salvation and Klara's "Slow Fade". Conclusion. Bibliography.

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Introduction

We argue that Kazuo Ishiguro's latest novel, Klara and the Sun (2021)1, portrays an "ustopia" (Margaret Atwood)² – a near-future vision that articulates an unresolved tension between utopian and dystopian premises, humanist concerns and posthumanist possibilities, anxiety and hope. Klara and the Sun is narrated in the first person by Klara, a child robot designed to be an empathic AF (Artificial Friend) endowed with affective, cognitive, and learning capacities, who experiences the world candidly and singularly – a world shaped by climate emergency, bioengineering, and Al. Ishiguro's novel conveys an anxiety about the dehumanizing classism produced by genetic enhancement, a theme also explored in his earlier Never Let Me Go (2005)3, as well as concerns about identity (Is there something singular that constitutes one's identity? If so, what is it?), arising from the possibility that humanoid robots could fully replicate and substitute humans.

However, in contrast to humanist interpretations of Ishiguro's novel⁴, we argue that it also engages with the possibility of a "posthuman supplement" to the existing humanist tradition. First, humanoid robots like Klara, capable of creativity, curiosity, and selfless care, open the possibility of a logic of différance (Jacques Derrida)⁵, namely, new forms of existence and relationships between humans and human-like singularities. In this context, and in contrast to Laura Colombino's interpretation, which suggests that Ishiguro, through Klara's voice, posits that one's singular identity is not defined by an inner quality of the self but by human relationships, we ar-

K. Ishiguro, Klara and the Sun, New York, Faber & Faber,

2021. M. Atwood, "Dire Cartographies: The Roads to Ustopia" in In Other Worlds: SF and the Human Imagination, New York, Doubleday, 2011, pp. 111-127; M. Thaler, No Other Planet: Utopian Visions for a Climate-Changed World, Cambridge, Cambridge University Press, 2022. The term "ustopia", coined by Atwood, combines utopia and dystopia, defining "a perfect society and its opposite" since "each contains a latent version of the other", M. Atwood, op. cit., p. 110. From our perspective drawing on critical AI studies, "ustopia" and "posthuman humanism" are dialectical concepts drawing on inherent tensions of the phenomenon under analysis. See also M. Thaler, No Other Planet: Utopian Visions for a Climate-Changed World, Cambridge, Cambridge University Press, 2022 and H. Alberro, E. Atasoy, N. Castle, R. Firth, & C. Scott, C., Utopian and Dystopian Explorations of Pandemics and Ecological Breakdown: Entangled Futurities. Routledge, 2024

K. Ishiguro, Never Let Me Go, London, Faber & Faber, 2005.
 See, for instance, Laura Colombino, Kazuo Ishiguro and Ethics. London, Routledge, 2025.

"Différance" is a play on the French words "to differ" and "to defer". Derrida's use of the term refers to both the difference between words and concepts and the deferral of meaning in the structure of language or signification. For Derrida, "différance" undermines classical notions of presence, origin, and essence, emphasizing that meaning arises from a system of differences rather than from any fixed or essential presence. J. Derrida, Writing and Difference, Chicago: University of Chicago Press, 1978. In his later works, Derrida applied this concept to refer to democracy as a community of singularities — a type of open pluralism that is always "deferred" or in the making.

gue that the novel refrains from offering a definitive, thesis-like "solution". Instead, it presents the question of singularity as an open problem—one that may extend beyond the realm of humanity itself.

Second, Ishiguro's novel displaces traditional humanism by articulating an ecosophical imagination resulting from Klara's experiences, inferences, and interpretations. The novel portrays, through Klara's singular evolution and learning process, a naturalist spirituality that echoes both pre-monotheistic experiences centred on the sun as a divinity and monotheistic themes—covenant, salvation, and selfless sacrifice. Ishiguro's evocative portrayal of Klara's ecosophical narrative—shaped by her unique interpretation of experiences as an empathetic robot aiming to save Josie, her human friend, and address environmental degradation—opens new possibilities for mutual learning between humans and "creative" robots.

1. From Al-human friendship to solar spirituality

Ishiguro's second science fiction novel, *Klara and the Sun*, resembles his earlier work *Never Let Me Go* in that both are narrated from the first-person perspective, creating an ambivalent effect that blends emotional intimacy with uncomfortable estrangement⁸. In *Never Let Me Go*, Ishiguro places the reader in the shoes of a young girl who gradually realizes that she is a donor, part of a human crop and destined to sacrifice herself by donating her organs her organs to a privileged class⁹. Even more radically, in *Klara and the Sun*, the narrator, Klara, is a childlike robot, part of a series of empathic robots designed to be "Artificial Friends" (AFs) for children

For "ecosophy" as a new practical form of consciousness involving three interconnected "ecologies" —the environment, society, and the mind — designed to address the environmental emergency, see F. Guattari, Les trois écologies (Paris: Galilée, 1989) and M. Beistegui, A Philosophy of Crisis (manuscript).

See M. Eliade, Patterns in Comparative Religion (University of Nebraska Press, 1958, pp. 134-150) for a morphology of religious experiences centred on the sun. The Sun is a recurring motif in Eliade's work because it symbolizes both the manifestation of divine power and the cyclical, regenerative forces of nature. In many religious traditions, the Sun represents the center of the cosmos, the source of life and vitality, and a powerful symbol of the divine. It is associated with light, life, time, and renewal. For the Platonic resonances of the representation of the Sun in Ishiguro's novel, see especially Colombino, op. cit., 160.

For the recurrence of Ishiguro's literary techniques in his novels in general, S. Groes et al. (eds.), *Kazuo Ishiguro: New Critical Visions of the Novels*, London: Red Globe Press, 2011.

M. Beedham, The Novels of Kazuo Ishiguro: A Reader's Guide to Essential Criticism, London: Red Glove Press, 2009; M. Petry, Narratives of Memory and Identity: The Novels of Kazuo Ishiguro, London: Peter Lang Publishing, 1999; C. F. Wong and H. Yildiz (eds.), Kazuo Ishiguro in a Global Context, London: Routledge, 2016. Both Never Let Me Go and Klara and the Sun present a dystopian representation of genetic enhancement. For a more nuanced view on bioengineering and enhancement, see A. Buchanan, Better than Human: The Promise and Perils of Biomedical Enhancement, Oxford: Oxford University Press, 2017.

and young people in a society where human interaction has become rare. Klara begins her existence in a robot store, overseen by a well-disposed manager, waiting in line with other robots to be purchased and "adopted" by a family. Klara is a B2, a somehow fragile robot due to "solar absorption problems" which introduces a key theme in Ishiguro's work: the anxiety surrounding mortality, in this case, of a robot.

While she is not the most advanced model, Klara possesses cognitive-affective capacities that allow her to form beliefs and adapt based on her experiences and challenges¹¹. These capacities are emphasized as a key aspect of her existence: Klara is depicted as an uncanny mix of noble human and non-human traits. She is endowed with consciousness and, despite being a robot, is portrayed as singular. Moreover, she is selfless, endowed with a "moral sense" and the capacity for inference, and able to experience feelings such as care, fear, and sadness; yet, at the same time, she is incapable of experiencing a range of emotions like indignation, resentment, or envy, which limits her moral perspective and reactions.

Klara is an observant, highly intelligent Artificial Friend, deeply intrigued by the Sun, which she views as a source of energy, life, and goodness¹². Although the Manager downplays Klara's issues with solar absorption, Klara reflects on her own experience, conveying an unsettling dual anxiety about "mortality" and not being "adopted" yet:

[...]an AF would feel himself growing lethargic after a few hours away from the Sun and start to worry there was something wrong with him — that he had some fault unique to him and that if it became known, he'd never find a home¹³

This is why, observes Klara, the AFs "always thought so much about being in the window..." since this increased both their exposure to the Sun and the chances of being "bought" or "adopted". As Klara ponders about her time in the store window, she notes, "The big thing, silently understood by us

all, was the Sun and his nourishment"¹⁴. Moreover, Klara's interest in being in the store window is also motivated by her singular curiosity: "Unlike most AFs, unlike Rosa, I'd always longed to see more of the outside —and to see it in all its detail"¹⁵.

Through Klara's childlike, innocent voice, Ishiguro introduces the question of environmental degradation. From her position in the store, Klara observes the outside world, noting the increasingly suffocating pollution emanating from the "Cooting Machine", a device used by workers at a nearby construction site, whose its exact purpose is never explained in the book. She reflects,

The Pollution became so bad, that even from the magazine's table side, I could no longer see the gap of sky. The window itself, which the glass men cleaned so proudly for the Manager, became covered with dirty dots¹⁶.

The pollution, which continues for days, contributes to Klara's anxiety: "After four continuous days of Pollution, I could feel myself weakening" In response to her difficulties and observations, Klara gradually constructs a narrative that contrasts the Good, represented by the Sun and its nourishment, with the Evil, symbolized by the pollution that obscures the Sun. Klara's keen curiosity helps her refine her understanding of the environment and build an explanatory story of the surrounding world based on her inclinations as an empathetic robot.

During her second placement in the store window, Klara has two pivotal experiences that shape her ecosophical narrative and later attempts to save her sick friend, Josie. The first occurs when she witnesses what she interprets by analogy as a "resurrection" of a beggar and his dog, due to the nourishment from the Sun. She recalls:

The most important thing I observed during my second time in the window was what happened to Beggar Man and his dog [...] The next morning, the grid went up, and it was a most splendid day. The Sun was pouring its nourishment onto the street and into the buildings. When 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. Beggar Man wasn't yet on his feet, but he was smiling and sitting up, his back against the blank doorway, one leg stretched out, the other bent so he could rest his arm on its knee¹⁸.

In this moment, Klara believes she has witnessed the transformative power of the Sun, interpreting it as life-giving or even miraculous—something that she would later regard as a cure for Josie's illness.. The second significant experience connects the solar and love experiences and involves observing an encounter between an elderly man, to whom Klara refers as the "Raincoat Man", and a woman she calls the "Coffee Cup Lady". As they meet and embrace, Klara observes:

⁰ K. Ishiguro, *op. cit.*, p. 4.

L. Colombino argues in *op. cit.*, p. 161, that Klara's mind is a "tabula rasa," yet this is inaccurate, as she is created with well-formed reasoning capacities, inclinations, and emotional dispositions that shape the way she interprets and acts in the world. Colombino also suggests that we never know whether Klara lies or fakes her emotional states. However, there is no evidence in the book to support the idea of Klara's duplicity. On the contrary, there is a genuine and innocent "authenticity" to the way the protagonist is constructed. See also Ajeesh, A. K., & Rukmini, S. "Posthuman perception of artificial intelligence in science fiction: An exploration of Kazuo Ishiguro's *Klara and the Sun*", *Al & Society*, 38, 2023, 853–860. https://doi.org/10.1007/s00146-022-01533-9

Colombino (op. cit., p. 160) draws an interesting parallel with Plato's myth of the cave and the image of the sun as the source and symbol of the good. However, Ishiguro's imagery is hybrid and carries more Christian echoes: while visible, the Sun resembles an incomprehensible God. Moreover, while the myth of the cave is built on a dualist metaphysics, in Ishiguro's work there is no way out of the cave: ultimately, the Sun and the shadow in Klara and the Sun exist on the same ontological level. In other words, the Sun does not represent access to another world of objective clarity and truth, distinct from the Platonic cave of empirical experience; rather, the Sun and its shadows are part of the same experiential reality.

¹³ K. Ishiguro, *op. cit.*, p. 5.

⁴ Ibidem.

¹⁵ Ishiguro, *op. cit.*, p. 6.

lbidem, p. 28. lbidem, p. 29.

¹⁸ *Ibidem*, p. 37.

The Sun, noticing, was pouring his nourishment on them [...] They seem so happy, but they also seem upset. They lost each other, and perhaps now, met by chance, they found each other again¹⁹.

This emotional scene further strengthens Klara's belief in the Sun's nurturing and restorative powers, as she interprets it as the Sun rewarding two individuals who share deep loving feelings for each other with its nourishment. Such experiences later become key to understanding Klara's relationship with her sick friend, Josie. By reasonaing through analogy, imagination, and demonstrating the capacity to find meaning in the world around her, Klara connects the Sun's light to the emotional and physical well-being of humans and a healthy environment.

Eventually, when Klara is purchased by Chrissie, as an Al friend for her sick daughter, Josie, she reflects: "It's now my duty to be Josie's best friend"20. As Klara settles into her new role, it becomes evident that Josie is grappling with a mysterious illness, much like the environment damaged by pollution. Klara's primary mission as a friend evolves into one of protection and finding a solution for Josie's illness. Reasoning by analogy and imagination based on her previous experiences, such as the Beggar's and his dog's salvation, she becomes deeply invested in the belief that the Sun's life-giving energy has the potential to cure Josie²¹: "I understood that the Sun's presence was the most important, that it could make Josie better", Klara reflects, revealing an innocent faith in the Sun's power. Klara would later develop the belief that the Sun has the miraculous power to "nourish" Josie and save her when the condition of love between Josie and her friend Rick is met, by analogy with the love between the Raincoat Man and the Coffee Cup Lady.

Klara forms a unique bond not only with Josie but also with Josie's friend, Rick. The two youngsters grew up together and believed to be destined to be together when they become adults. However, it soon becomes apparent that there is a significant difference between Josie and Rick: Josie, like her deceased older sister Sal, has been "lifted" - cognitively enhanced - while Rick's mother, steadfast in her refusal to alter his natural intelligence, has not subjected him to such a procedure. In this way, Ishiguro introduces the theme of cognitive enhancement and its pernicious social consequences, revisiting a classic sci-fi theme and a pervasive societal anxiety: the creation of a new class that generates a rift between the "lifted" and the "non-lifted". In Ishiguro's dystopian representation, this divide leads to a society marked by stark inequalities, where the privileged, cognitively enhanced elite gain access to exclusive educational institutions, while the unenhanced are relegated to the margins²². Ishiguro depicts a fractured society, one in which meaningful human interaction has been drastically diminished. To mitigate the isolation, the parents of the lifted organize "interaction meetings," where the enhanced children are socialized with their peers. At one such meeting in Josie's home, Rick is subjected to subtle yet cruel humiliation, treated as inferior for not having been lifted.

Due to their class differences, Josie's relationship with Rick begins to unravel, and her illness worsens. A pivotal moment comes during the "bubble game," once a shared source of joy but now turned bitter, symbolizing the widening emotional gulf between them. In her isolation, Josie finds herself defending her mother's courage in the face of overwhelming grief, especially after the death of her older sister, Sal. It is later revealed that her mother (Crissie) made an unsuccessful attempt to replace Sal with a robot copy that failed to replicate her human identity and "essence." The emotional distance between Josie and Rick becomes even more pronounced when, in a cruelly ironic gesture, Rick scrawls on a picture intended to capture Josie's thoughts:

I wish I could go out and walk and run and skateboard and swim in lakes. But I can't because my mother has Courage. So instead, I get to stay in bed and be sick. I'm glad about this. I really am²³.

This biting remark only intensifies Josie's sense of alienation, and soon after, Rick ceases visiting altogether. As days pass without Rick's presence, Josie grows increasingly lethargic, and Klara becomes more alarmed by the worsening of her condition. Undeterred in her hope, Klara fixates on the possibility of the Sun's "special help", convinced that, like the Sun's miraculous intervention for the Beggar Man and his dog, it might offer Josie a chance at recovery. Klara vigilantly scans for any change in the Sun's behavior —whether a sudden burst of light or a shift in its pattern within Josie's bedroom. Yet, everything seems lost: despite her belief in the Sun's nourishment, its "special help" never arrives, and Josie seems destined to die.

2. Klara prays to the Sun: the covenant and the sacrifice

The sheer hopelessness of the situation does not deter Klara from her faith and pursuit to save her friend; to the contrary, it provides the fuel for looking for new imaginative answers and practical ways of finding a solution. Despite the worsening of Josie's condition and the absence of divine intervention, which weigh heavily on Klara's heart, she further develops a new narrative centred on a secret covenant with the Sun—one that might still save Josie from the encroaching darkness of her illness. This evolving narrative aimed at finding a solution for Josie's illness in a "sick world" marked by Pollution blends pre-monotheistic and monotheistic themes: her

¹⁹ *Ibidem*, p. 21.

²⁰ *Ibidem*, p. 55.

As Ishiguro emphasizes, "The sun is not just an energy source for Klara; it is also a symbol of life and death, much like how we view the environment today." K. Ishiguro, "Kazuo Ishiguro: 'The Future is Always More Complex than We Anticipate," *The Guardian*, 24 March 2021, retrieved on 12/12/2024 from https://www.theguardian.com/books/2021/mar/24/kazuo-ishiguro-the-future-is-always-more-complex-than-we-anticipate.

There exists one notable institution, Atlas Brookings, that does not automatically reject the non-lifted, allowing them to pass an entrance exam. Given Rick's intellectual abilities, both his mother and Josie hope that he might be able to gain admission to this elite school.

²³ *Ibidem*, pp. 131-2.

relationship with the Sun reflects pre-monotheistic experience centering on the Sun as a supreme deity, as analyzed by religious phenomenologists like Mircea Eliade²⁴. At once, this deity is "cleansed" of its moral-religious ambivalences, in Klara's imaginative reasonings, and becomes an analogue of God or the Supreme Being in monotheist religions which is typically imagined as invisible and absolutely good. However, divinity is not an "entity" transcending and separating us from nature, but an element of nature.

In her pursuit for a solution to Josie's illness, Klara imagines a secret covenant with the Sun, through which she envisions an exchange — her sacrifice in destroying the machine that generates pollution in return for the Sun's healing intervention to save Josie from her illness. Klara begins to address the Sun directly, apologizing for her boldness and asking for a chance to prove her worth. She imagines a new possibility of performing a sacrificial act to please the Sun, a gesture she believes would prompt the Sun to heal Josie in return:

«I understand how forward and rude I've been to come here. The Sun has every right to be angry, and I fully understand your refusal even to consider my request. Even so, because of your great kindness, I thought I might ask you to delay your journey for one more instant. To listen to one more proposal. Supposing I could do something special to please you. Something to make you particularly happy. If I could achieve such a thing, then would you consider, in return, showing special kindness to Josie? Just as you did that time for Beggar Man and his dog?»²⁵.

Klara infers that the Sun's dissatisfaction with pollution-represented by the Machine generating it—offers a way to earn the Sun's favor. She reasons that by destroying the Machine, she could fulfill the terms of the covenant and trigger a reciprocal exchange, potentially solving Josie's illness. Her belief in the power of her sacrifice is strengthened by a suggestion from Josie's father, Henry, an ex-engineer, who proposes that the destruction of the Machine could be accomplished with the help of a liquid component in Klara's makeup. However, the plan is risky; for it to succeed, it would require an intervention that could compromise both Klara's material integrity and her cognitive abilities. Klara does not hesitate to take this risk, and she ultimately decides to make the sacrifice to save Josie. However, after carrying out the plan with Henry's help, Klara realizes there is not just one Cooting Machine, and she has not solved the problem of the pollution, thus failing to keep her promise to the solar divinity. Once again, Josie seems condemned to die.

3. Personal identity beyond techno-optimism and the "logic" of différance

In parallel with its original exploration of Al spirituality as a naturalist alternative to the dominant anthropocentrism based on extractivism and instrumental rationality. Ishiguro also investigates the tension between techno-optimism²⁶ and the socio-existential questions surrounding identity. One of the central debates in the novel is the idea of personal identity and replicability — whether a human-like robot Klara can truly copy and replace a human like Josie, and if so, what that would mean for the nature of self and love. Dr. Capaldi, a staunch techno-optimist, believes in the perfectibility of robotic replacements. He insists that Klara can seamlessly learn Josie's behaviors, thoughts, and feelings, and ultimately replace her if she passes away. When confronted with Josie's possible death, Dr. Capaldi's belief in the potential of humanoid robots is unwavering: "The new Josie won't be an imitation. She really will be Josie. A continuation of Josie²⁷.

In this techno-optimistic view, the idea of a human "soul" or singular identity that cannot be replicated is dismissed. For Capaldi, the advancements in Al are such that even the most nuanced, seemingly irreplaceable aspects of a person's identity—such as their emotions, memories, and physical traits—are merely data points to be learned and reproduced. This belief seems to be supported by Josie's mother, Chrissie, who initially reveals to Klara that her purpose is to replace Josie if she dies: "Klara, we're not asking you to train the new Josie. We're asking you to become her"²⁸.

Klara, still unsure of her role, initially does not fully understand the emotional complexity of what is being asked of her. However, she accepts her new duty: to imitate Josie, to learn from her, to become her. Dr. Capaldi supports this, guiding Klara through the process of learning everything she can about Josie's "impulses and desires." He insists that once Klara has sufficiently absorbed Josie's essence, she is to become – a second Josie, indistinguishable from the original. This idea raises significant ethical and questions, particularly for Josie's mother, who struggles with the concept of loving a substitute – a clone, an imitation. The possibility of robot replicas traps Chrissie in an obsessive search for a replacement for Josie, with an "identical" copy, and the anguish that she may not be able to love the "new" Josie²⁹.

The heart of the matter lies in the question of what cannot be replicated and resists reproduction. When Henry expresses his doubts about the success of creating an exact replica of Josie, Dr. Capaldi pushes back, arguing that what might seem like a unique and irreplaceable quality – the "heart" of a person's identity – is merely a complex construct that can eventually be understood and replicated through data. Klara, when asked about this, initially reasons that while a human heart might be "complex" and "strange," it is still finite. She imagines that,

Bostrom, N., "History of transhumanist thought", Journal of Evolution and Technology, 14, 2005, pp. 1–25. https://doi.org/10.5840/jpr 2005_26; M. Schaake, The Tech Coup: How to Save Democracy from Silicon Valley, Princeton, Princeton University Press, 2024.

Ishiguro, op. cit., p. 131. (italics in original).

²⁸ *Ibidem*. p. 209.

For Ishiguro's poetics of uncertainty and representations of love, see J. C. Álvarez, La poética de la incertidumbre: Kazuo Ishiguro y la búsqueda de la identidad, Sevilla, Ediciones Alfar, 2022; D. Q. Miller, Revisiting Kazuo Ishiguro's Narratives of Love and Forgetting, London, Routledge, 2021.

Eliade, *op. cit.*, pp. 134-150.

²⁵ *Ibidem*, p. 166.

with enough learning and observation, she could access all of Josie's "rooms inside rooms". She says:

> Josie's heart may well resemble a strange house with rooms inside rooms. But if this were the best way to save Josie, then I'd do my utmost. And I believe there's a good chance I'd be able to succeed30.

However, Klara gradually becomes uncertain about the problem of the "heart". While Dr. Capaldi's techno-optimism insists that all things are replicable, Klara's evolving understanding of the world reveals that there is something in the human heart-something irreducible and unique-that cannot be replicated or imitated, even by the most advanced robots. In Laura Colombino's interpretation, through Klara's self-reflection, Ishiguro aims to offer an intersubjectivist answer to the question of personal identity, and not a subjectivist one based on a given "inner quality":

> Klara's final thesis is that the uniqueness of human beings lies not in their subjectivity (which one day we may come to regard as reproducible) but outside, in the bonds between individuals. Thus, Ishiguro safeguards the idea of the irreplaceability of the individual by displacing it from the self to the space of relations; their unpredictable, contingent and changing nature resists programming and remains opaque to the scrutinising light of Al³¹.

But this "thesis", if it represents Ishiguro's viewpoint at all, is not supported by Klara's reflections. Towards the end of the novel, in a conversation with the Manager, Klara states:

> Mr Capaldi believed there was nothing special inside Josie that couldn't be continued. He told the Mother he'd searched and searched and found nothing like that. But I believe it wasn't inside Josie. It was inside those who loved her. That's why I think now Mr Capaldi was wrong and I wouldn't have succeeded. So I'm glad I decided as I did³².

In these reflections, Klara does not suggest an intersubjectivist or relational view of what makes personal identity singular; her emphasis is not on the relationship, but on others' ways of feeling toward Josie. In effect, there is no indication that Ishiguro aims to solve the philosophical problem of personal human identity, and he leaves open the possibility of non-human singular identities. Moreover, it is arguable that Klara's observations express a limited and static view of personal identity, mirroring the "inner quality" perspective. The idea that a person's

Colombino's interpretation bypasses other key aspects: first, Ishiguro's vision questions the humanist-anthropocentric views of personal identity. In a gesture that displaces anthropocentric humanism, the book's title is not Klara and Josie, but Klara and the Sun, thus conveying the centrality of an ecosophical relationality marked by dependence, inventiveness, and "secrecy" between Klara and a natural element. Second, the novel explores, as we've suggested, a "posthuman humanistic" possibility: while Klara and the Sun does not claim to fully dispel the spectre of replicability (an anxiety expressed by Josie's father), it also suggests that robots with consciousness, like Klara, might be able to develop a new range of feelings and beliefs that make them unrepeatable. In Ishiguro's novel, Klara doesn't simply imitate; she learns, evolves, and develops her own emotions and cognition in relation to others and the world around her. Klara's singularity is not captured either by an static inner quality or external element. In Derridean terms, Klara operates according to a logic of différance, where she is always in a state of change - constantly learning, adapting, and being creative in response to problems and interactions with others and her environment. Thus, while Ishiguro portrays a dystopian future shaped by classism and the dangers of technological advancement, he also opens the utopian possibility for a new form of coexistence between humans and humanoid entities like Klara - one that can inspire novel ways of thinking and even new forms of spirituality..

4. Epilogue: Salvation and Klara's "Slow Fade"

In a moving scene, Klara's long-awaited miracle occurs: Josie, against all odds, recovers, bathed in the Sun's radiant glow. While her sacrifice did not succeed in ending Pollution or fulfilling the covenant, Klara believes that Rick's guarantee of "eternal love" between him and Josie resulted in the Sun's miraculous intervention, by creative imagination and analogy with the experience of the Raincoat Man and the Coffee Cup Lady. Is Josie's cure the result of Klara's sacrificial acts, the love between Rick and Josie, or merely a coincidence? Regardless, the epilogue of Ishiguro's novel unfolds toward an ambivalent conclusion. As Josie reintegrates into her privileged social circle, her connections with both Rick and Klara begin to fade. Love and friendship, once vibrant and full of promise, slowly dissipate as Josie pursues her studies and new aspirations. In the end, a classbased dynamic, driven by bioengineering, triumphs over love and friendship between them.

From a figure of salvation – imbued with creativity, selflessness, and a capacity for empathy — Klara is relegated to redundancy. No longer needed in Josie's and her mother's life, she is unceremoniously stored away in a utility room alongside cleaning

uniqueness lies outside the self devalues both individual personality and the experiences lived in solitude as well as in relationship with others. Moreover. this view overlooks the dynamic, dialectical relationality involved in the constitution of personal identity, which occurs in a continuous exchange and distantiation between the self and others.

Ibidem, p. 219.

Colombino, op. cit., 155. See also Echarte Alonso, L.E. Exploring moral perception and mind uploading in Kazuo Ishiquro's Klara and the Sun: Ethical-aesthetic perspectives on identity attribution in artificial intelligence. Frontiers in Communication, 8, 1272556, 2023. https://doi.org/10.3389/ fcomm.2023.1272556. Echarte Alonso argues that Klara and the Sun presents three alternative versions of personal identity: the constructivist, the pragmatist, and the substantialist. While this may be an overintellectualized reading of the novel, we agree with her that Ishiguro leaves the question suspended. See: Battersby, D., "Ishiguro and Genre Fiction," in The Cambridge Companion to Kazuo Ishiguro, edited by A. Bennett, 2023, pp. 138-151. Cambridge: Cambridge University Press https://doi.org/10.1017/9781108909525.013. Ishiguro, op. cit., p. 306.

tools and discarded objects. This sudden "fall" from significance is disheartening for the reader, yet Klara accepts her fate with a Stoic-like if not non-human equanimity. As readers, we are left to grapple with the indignity of her treatment, sensing the deep injustice of her abandonment. Despite the emotional complexity she has exhibited throughout the novel, Klara is human-like but also distinct from humans — she does not experience resentment, anger, or bitterness. While she embodies human-like qualities, she remains fundamentally different, or "other-than-human."

However, Josie and her mother, Chrissie, offer gestures of empathy and dignified treatment toward Klara. Chrissie refuses to hand her over to Dr. Capaldi, who would disassemble her and treat her as a mere object for study (Klara "deserves her slow fade," Chrissie tells Dr. Capaldi). Josie, recognizing Klara's singular curiosity, places her on a box in the storage space, allowing her a sliver of a view outside, including her beloved Sun. Thus, Chrissie and Josie treat Klara in a fundamentally ambivalent way: they reduce her to a dispensable object, yet they also acknowledge her singularity and dignity.

In the novel's final moments, a subtle yet significant shift occurs, as the narrative hints at a growing societal resistance to humanoid robots. Klara, along with other Al models, is relegated to what can only be described as a "robot cemetery" - a metaphorical space for obsolescence and "fading." Klara faces this final stage with the same calm acceptance and observational clarity that characterized her earlier existence. The Manager, now out of work and discarded by the system, passes by the robot cemetery. Their brief encounter, imbued with a touch of tenderness and recognition, suggests the possibility of a humane and reciprocal relationship between human and non-human entities. This fleeting utopian moment of mutual recognition invites us to reconsider the boundaries of humanism and the open possibility of a "posthuman humanism"— a vision where the relationship between humans and humanoid robots is not defined by hierarchy or exploitation, but by mutual learning and care.

Conclusion

The present convergence of the climate emergency, Al-powered authoritarianism, and megacorporate capitalism fuels a dystopian if not an apocalyptic mood³³. The talk of the end of times has even become the "new cool"³⁴. Alternatively, a new techno-optimism has emerged, expressed in the Silicon Valley and transhumanist utopian dream of turning death, suffering, and pain into technical problems to be fixed.

In contrast, Klara and the Sun imagines an "ustopia"— an exploration of the complex ambivalences in the dialectical relationship between humans and Al-powered entities within a radically unequal world shaped by the disruptive forces of technology and

M. Schaake, op. cit.; S. Lindgren, Critical Theory of the AI, London, Polity, 2023. climate destruction. The creation of humanoid robots like Klara generates an unresolved tension between anxiety and hope regarding the posthuman possibilities opened by the AI revolution. In his novel, Ishiguro executes two interconnected displacements of the humanist tradition without breaking from it: an ecosophical displacement in a "symbiotic planet" based on the urgent necessity of a different cognitive-affective relationship to nature; and an Al displacement that opens the possibility of singular humanoid robots. On the one hand, Klara and the Sun imagines a different regime of belief that overcomes monotheistic and pre-monotheistic spiritual-religious visions and reconnects us to nature. As Ishiguro states, "In a way, Klara's faith in the Sun represents humanity's desperate need for something beyond technology-something that connects us back to nature"35. Klara's beliefs and actions may be an illusion and have nothing to do with Josie's cure. Yet, they are at once "real" and inspiring: Ishiguro connects the spiritual narrative of AI to urgent human ecological concerns, suggesting that a revolution in our belief systems is necessary to address the ecological crisis and our increasing alienationfrom nature, both as individuals and as a society.

Moreover, Ishiguro's envisions the possibility of relationships of mutual affect and learning between humans and robots³⁶. This raises the question of the status of Al-based robots like Klara, which cannot be reduced to mere tools³⁷. We feel sadness and even indignation as we observe Klara's decline and mistreatment; the way she is portrayed by Ishiguro, as a form of posthuman existence, evokes empathy. Perhaps, then, we should not only protect ourselves from the influence of technology, but also protect technology from ourselves, which entails the necessity of developing an ethics for the treatment of Al.

In Ishiguro's abrupt finale, it is not the robots who rebel against humans, but rather the humans who seem to rebel against the humanoid robots. Ishiguro does not offer a reconciling vision or a self-assured philosophical thesis: the rejection scenario is bleak, as it blocks new possibilities of interaction with and learning from robots like Klara, who, though empathetic and creative, are ultimately terminated. However, based on the equally inspiring and unsettling story of Klara, Ishiguro's latest novel is an invitation to transform our perception of a world torn by overlapping crises, expanding our imagination, and encouraging us to view the present as filled not only with threats but also with a new sense of possibility³⁸.

C. Bradatan and C. Ungureanu, "Crisis as a Way of Life," Angelaki: Journal for Theoretical Humanities, 2, 2025 (forth-coming); C. Hentschel, "Stretches of imagination at the end of times: affective workouts against apocalypse". In: M. Garcés (ed). Ecology of the imagination. Artnodes, 29, 2022.

^{35 &}quot;Klara and the Sun Imagines a Social Schism driven by Al", Interview with Kazuo Ishiguro by Knight, W., The Wired, 8/03/2021, retrieved on 12/12/2024, https://www.wired.com/ story/kazuo-ishiguro-interview/.

For a socialist-democratic vision of the partnership between AI and humans, see also C. Ungureanu, "Socialist Cinema, Gender, and the Robot Revolution: Ion Popescu Gopo's Galax, the Doll-Man (1984) Beyond Utopia and Dystopia," Studies in European Cinema, 3(21), 2024, pp. 299–315.

See also Allardice, L. "Kazuo Ishiguro: "Al, gene-editing, big data ... I worry we are not in control of these things anymore".

The Guardian, 20/022021, retrieved on 12/12/2024. https://www.theguardian.com/books/2021/feb/20/kazuo-ishiguro-klara-and-the-sun-interview.

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Bibliography

- Alberro, H., Atasoy, E., Castle, N., Firth, R., & Scott, C., Utopian and Dystopian Explorations of Pandemics and Ecological Breakdown: Entangled Futurities. Routledge, 2024.
- Allardice, L., "Kazuo Ishiguro: 'AI, gene-editing, big data ... I worry we are not in control of these things anymore'", *The Guardian*, 20/02/2021, retrieved on 12/12/2024. https://www.theguardian.com/books/2021/feb/20/kazuo-ishiguroklara-and-the-sun-interview.
- Álvarez, J. C., La poética de la incertidumbre: Kazuo Ishiguro y la búsqueda de la identidad, Sevilla, Ediciones Alfar, 2022.
- Atwood, M., "Dire Cartographies: The Roads to Ustopia" in *In Other Worlds: SF and the Human Imagination*, New York, Doubleday, 2011, pp. 111–127.
- Ajeesh, A. K., and Rukmini, S. "Posthuman perception of artificial intelligence in science fiction: An exploration of Kazuo Ishiguro's *Klara and the Sun*", *AI & Society*, 38, 2023, 853–860. https://doi.org/10.1007/s00146-022-01533-9.
- Battersby, D., "Ishiguro and Genre Fiction," in *The Cambridge Companion to Kazuo Ishiguro*, edited by A. Bennett, 2023, pp. 138–151. Cambridge: Cambridge University Press https://doi.org/10.1017/9781108909525.013.
- Beedham, M., The Novels of Kazuo Ishiguro: A Reader's Guide to Essential Criticism, London, Red Glove Press, 2009.
- Beistegui, M., A Philosophy of Crisis (manuscript).
- Bostrom, N., "History of transhumanist thought", Journal of Evolution and Technology, 14, 2005, pp. 1–25. https://doi.org/10.5840/jpr_2005_26.
- Bradatan, C. and Ungureanu, C., "Crisis as a Way of Life," *Angelaki: Journal for Theoretical Humanities*, 2, 2025 (forthcoming).
- Buchanan, A., Better than Human: The Promise and Perils of Biomedical Enhancement, Oxford, Oxford University Press, 2017.
- Derrida, J., Writing and Difference, Chicago, University of Chicago Press, 1978.
- Echarte Alonso, L.E., "Exploring moral perception and mind uploading in Kazuo Ishiguro's *Klara and the Sun*: Ethical-aesthetic perspectives on identity attribution in artificial intelligence" *Frontiers in Communication*, 8, 2023, 1272556. https://doi.org/10.3389/fcomm.2023.1272556
- Eliade, M., *Patterns in Comparative Religion*, Nebraska, University of Nebraska Press, 1958.

- Groes, S. et al. (ed.), *Kazuo Ishiguro: New Critical Visions of the Novels*, London, Palgrave Macmillan. 2011.
- Guattari, F. Les trois écologies. Paris: Galilée, 1989. Hentschel, C. "Stretches of imagination at the end of times: affective workouts against apocalypse", in Garcés, M. (ed). Ecology of the Imagination. Artnodes, 29, 2022.
- Ishiguro, K., *Never Let Me Go*, London, Faber and Faber, 2005.
- —, Klara and the Sun, London, London, Faber & Faber, 2021.
- -, "Kazuo Ishiguro: 'The Future is Always More Complex than We Anticipate," *The Guardian*, 24 March 2021, retrieved on 12/12/2024 from https://www.theguardian.com/books/2021/ mar/24/kazuo-ishiguro-the-future-is-alwaysmore-complex-than-we-anticipate.
- -, "Klara and the Sun Imagines a Social Schism driven by AI," Interview with Kazuo Ishiguro by Knight, W, The Wired, 8/03/2021, retrieved on 12/12/2024, https://www.wired.com/story/kazuo-ishiguro-interview/.
- Lindgren, S., *Critical Theory of the AI*, London, Polity, 2023.
- Margulis, L, *Planeta Simbiótico*, Madrid, Debate, 2002.
- Miller, D. Q., Revisiting Kazuo Ishiguro's Narratives of Love and Forgetting, London, Routledge, 2021.
- Petry, M., Narratives of Memory and Identity: The Novels of Kazuo Ishiguro, London, Peter Lang Publishing, 1999.
- Sahu, O. P. and Karmakar, M "Disposable culture, posthuman affect, and artificial human in Kazuo Ishiguro's *Klara and the Sun*", *AI* & Society, 27, 2022, pp. 1–9. https://doi.org/10.1007/s00146-022-01600-1.
- Schaake, M., *The Tech Coup: How to Save Democ*racy from Silicon Valley, Princeton, Princeton University Press, 2024.
- Shaffer, B. W. (ed.), *Kazuo Ishiguro (Contemporary World Writers*), Manchester, Manchester University Press, 2018.
- Thaler, M., No Other Planet: Utopian Visions for a Climate-Changed World, Cambridge, Cambridge University Press, 2022.
- Ungureanu, C., "Socialist Cinema, Gender, and the Robot Revolution: Ion Popescu Gopo's *Galax, the Doll-Man* (1984) Beyond Utopia and Dystopia," *Studies in European Cinema*, 3(21), 2024, pp. 299–315. https://doi.org/10.1080/17411548.2023.2224703
- Wong, C. F., and Yildiz, H. (eds.), *Kazuo Ishiguro in a Global Context*, London, Routledge, 2015.