



## Posthumanism, Singularity and Transcendence: A Study of Kurzweilian Futurism in The Mothercode



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**Abstract:** *Transhumanism and posthumanism aspire to turn people into living machines. Transhumanism is a changed version of human with enhanced capacities to eradicate diseases and stop death; posthumanism is a highly transformed, enhanced, and amalgamated form of being. It focuses on moving beyond Transhumanism to create artificial humans whose biology is outmoded. This paper examines the scientific and technical advances needed to create a posthuman and examines posthuman influences and the technological vision in Stivers' The Mother Code. It explores what it means to be human in the posthuman period, in which artificial human form has emerged. As such, this study analyses the potential alterations in characters' actions, minds, and bodies after metamorphosis.*

**Key Words:** Transhumanism, Posthumanism, Technological Singularity, Genetic Engineering, Artificial Intelligence

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### Introduction

The limitations of technology and the costs of species survival offer a profound mediation on the emerging technocultural trends. The issue here is to explore whether it is possible in the near future to develop techno-beings capable of bonding with real humans in the face of any threat to human survival. When pondering over the upcoming times of human society, the concentration directs toward the humanoid beings themselves as a breed and humans' potential to live in the

face of occurring changes in the world. Humans are directed to admit that mortal beings have the choice and brawn to exist and live ever since the vision of Darwin (2004) of 'survival of the fittest'. Human beings also look for novel ways of knowledge by utilizing science as a tool. However, the notion of a human being and what this vision of human denotes (humanism's most fundamental question) are targeted in the posthuman world where scientific and technological tools play an important function in the human being's position. To

counter the occurring changes in the world observed by the close-knitted and interrelational mixture of humans and machines in the present day world, the views like the organic body, space concerns, and even humans' relation with the techno-world are vastly altered. Vinge (1993) and Kurzweil's (2005) notion of the 'singularity' pictures a time period when the occurrence of the technologized world of super-intelligence smarter than human intellect is attainable. Posthumanism and apocalyptic novels both try to probe the novel ways of the future in the hope of initiating new attitudes and moralities. Haraway (2006) defines this mechanical man cyborg as an automated being, a mixture of electronic chips and organic body, a being of general reality and a character of an imaginative world.

## Literature Review

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This view of the automated human also reflects the posthuman concerns in sci-fi novels, especially in the technophilic cyberpunk world, in which characters, through the use of computerization and quantification technologies, are often presented as technologically altered beings. The novel *Neuromancer* by Gibson 2019 pictures the feminine cyborg named Molly with techy modifications to her body. Hayles investigates the concept of cyborg in the context of posthumanism in her essay, *The Life Cycle of Cyborg: Writing the Posthuman*. She presents the cyborg body as standing inbetween the human and posthuman. The posthuman project to redefine and reexplore the human concept is intensified with the notion of cyborg (Hayles, 1999). To use the computation world as the ground of being rather than real humans gives rise to the posthuman society.

Abedi and Moradijuz (2021) in their article, focused on highlighting the inextricable relationship between humans and their environs in the most anthropocentric trend of posthumanism and

addressing humans' exploitative attitude of living and the effects of their ill-treatment toward the natural environment (Abedi & Moradijuz, 2021). Diaz's (2017) *In the Distance* tries to warn humans about the end of nature and, in turn, the destruction of humanity. In the same context, Abedi and Moradijuz (2021) featured this novel, *In the Distance*, as one of the main works arguing for post-humanistic standards during and after the colonization of America, accompanied by modern civilization and techno advancement in the late 19<sup>th</sup> and early 20<sup>th</sup> century. Abedi and Moradijuz (2021) further stated that *In the Distance* novel, under the umbrella of posthumanism, shows how the underpinnings of the posthumanist constellation of thought could be encoded in literary work. Moreover, writers said that *In the Distance* implies the outcomes of no longer standing with nature and human beings privileging the environment, which both are the chief exemplars of the posthumanism paradigm. Diaz (2017), in his novel *In the Distance* depicts the journey of a Swedish boy across continents in the 19<sup>th</sup> century. *In the Distance* depicted a world wherein both the environment and human beings front a severe hazard due to constant attempts of humankind to dominate his surroundings. The whole story revolves around Hakan the protagonist. Hakan was a part of the systematic exploitation of nature by colonizers and became a stranger and manipulated through his horrific journey. However, Hakan's interactivity with Indians, minerals, nature, animals, and ecowarrior scientists brought him a universal sensibility and made him understand his inextricably bound-up connection with other beings.

Abedi and Braidotti (2018) asserted that this novel also shows the infinite greed of humankind as a slip that scuppers the human-non-human network; the continuance of such ill-treatment towards others points to the demolition of the whole environment.

In the end, Abedi and Moradijuz (2021) examined that the novel also doubts the widely accepted notion of anthropocentrism and shows the misuse of mineral, vegetal and animal forms by the modern human. In the *Distance* gives voice to abused beings by employing a posthuman art of thinking; therefore, this study considered In the *Distance* novel as one of the contemporary driving novels of posthumanism, reflecting upon the link between humankind and other living creatures.

### **Alienation and Existential Predicaments of Clones**

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Li and Jing interpreted the despicable existential predicaments of clones in *Never Let Me Go* using 1970s bioethics as an innovative perspective in the context of posthumanism. Li and Jing discuss how humans in the story disobey bioethics, producing the existential predicaments of clones, and how clones silently suffer sufferings in their existential predicaments pushed by humans. Li and Jing (2019) explained artificial intelligence in the late 20th century. Humans began to study high-tech means to make up for their unique shortcomings, transcend human body constraints, advance individual work and faculties, and lengthen human lifetime in search of power, pleasure, and immortality. Posthumanism begins at this pivotal moment. With traditional humanism on the decline, posthumanism has emphasized new ways of comprehending humans since posthumanist technology will fundamentally debase humanism. The creation of posthumanism is seen as a deconstruction of the concept of man in humanism (Li & Jing, 2019). More's (1994) argued that science and technology are rapidly transforming humans into post-humans. It's time to intentionally take charge of ourselves and enhance transhuman advancement (More, 1994). According to Bendle (2002), humans can alter their own destiny instead of following

the mechanical laws of nature. Posthumanism highlights the need to honor individual life and all kinds of life (Bendle, 2002).

Lei and Jing said all clones in *Never Let Me Go* residing in Hailsham are depicted as humans with emotions, self-awareness, and artistic ability. Clones in the narrative have human bodies, sensitivity, and intelligence. The only function of clones is to donate organs to humans. Passive and gratuitous organ donations are harmful and deadly to their lives, violating the principle of non-maleficence in bioethics (Li & Jing, 2019). Li and Jing (2019) concluded that Ishiguro's moral and literary expressions to describe the terrible destiny of human clones in *Never Let Me Go* shows deep concerns about misusing science and technology in the posthumanist era.

### **Theoretical Framework**

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Hayles says that the question is not whether we will become posthuman, for post-humanity is already here. Rather the question is what kind of posthumans we will be (1999). In reevaluating the posthuman state, Braidotti (2013) perceives the need to reconsider our humans need to design new communal, discursive, and ethical patterns of subject configuration. Braidotti (2013) has taken the posthuman condition as an opportunity to encourage the pursuit of possible measures of thought, awareness, and self-advocacy. Posthumanism searches the ways and possibilities to readdress the notion of humanity in the future. Transhumanism is a techno-optimist perspective related to a radical swap in the human. It accepts the change or evolution of humans with the use of technology. Transhumanism's main aims are immortality and supremacy. Bostrom, a Swedish philosopher who has been searching for the mystery of perpetual life, is one of the most renowned transhumanists. Bostrom (2005) argues that the Epic of Gilgamesh contains a chase for the Elixir of Life, which

can cure all ailments, stop aging and death, and provide immortality. This is an ancient aspiration that is still being pursued today through the societal movement known as transhumanism. Humans have always tried to expand the rim of life socially, physically, and intellectually. Some people are continuously looking for ways to fix flaws in the human body.

Bostrom (2005) states that Nietzsche (2008) coined the word 'overman,' which refers to outstanding people's personal change and cultural sophistication. In *Defence of Posthuman Dignity, Bioethics*, Bostrom (2005) states, human nature can be improved by scientific developments and other successful techniques and such upgrades allow humans to lawfully change themselves in accordance with their beliefs and aspirations. Transhumanists think that humans are capable of transcending many biological limitations.

Stelarc (1991) claims that the human body is antiquated and neither highly competent nor in a truly flawless shape as a transhuman with a pure bionic (partly machine, primarily biologic) body, it is susceptible to sickness and is doomed to die; it can only survive for a few weeks without food or water, and only a few minutes without oxygen (Stelarc, 1991). This post-biological future begins when mankind has constructed technological trends in which they are unable to exist adequately as biological creatures. As a result, they discover that their natural bodies are no longer in tune with the new surroundings. As a result, people are approaching a moment in their evolution where they must upgrade, change, and convert their organic bodies. Transhumanism thus can be stated as a form of transformational activism whose chief impetus is provided by the ideals of posthumanism.

The end of the 20<sup>th</sup> century viewed the birth of a posthuman world through the expansion and supremacy of science and

technology. According to Ferrando (2013), posthumanism modifies the physical species by altering the bounds of the human body or mind, resulting in the creation of a 'posthuman' being because it rejects broad human conventions and principles like nationality, race, culture, religion, and so on; the posthuman persona is no longer bound to the general human person (Ferrando, 2013). To address the future of humanity, Vinge states that in future times artificial creatures smarter than human genius will emerge as a result of the unprecedented growth in the techno-world (Vinge, 1993).

- i- Smart superhuman entities will be awakened with the use of telematic tools.
- ii- Computational devices and massive networks form the web of artificially intelligent entities and their associated talented users.
- iii- Users will be perceived as super human brilliance due to the occurring technology/living being junctures.
- iv- Natural human genius is enhanced and advanced with the help of bio and technological sciences.

Kurzweil (2005), the inventor of text and voice recognition technology, has defined the singularity as a world-changing event, an acute and sudden rupture in the progress continuum, "it is a future period during which the pace of technological change will be so rapid, its impact so deep, the human life will be irreversibly transformed" (Kurzweil, 2005, p. 24). Accelerating technological advancement has paved the way for this split, propelling humanity to a new stage in its evolution. Kurzweil placed this era at the crossroads of biological and technological growth, both of which will result in the human body's amplification. Humans will be able to take full control of their life by rearranging the brain, revamping digestion, reprogramming blood, and producing organ replacements once neurons connect

responsively to nano technological extensions. Kurzweil (2005) argued in his book *The Singularity is near*, “the singularity will allow us to transcend these limitations of our biological bodies and brains. We will gain power over our fates” (Kurzweil, 2005, p. 25).

Miller (2012) argued that nanotechnology is the primary enabler of a Kurzweilian merger: that is what we would employ to develop and govern the nonbiological portion of ourselves (Miller, 2012). As a result, our destructive proclivities will be surpassed by creativity, and the majority of medical reasons for death will be eradicated, allowing humanity to experience transcendence. Kurzweil (2005) is well-known for his technological foresight. Kurzweil (2005) believes that advancements in computing power and data storage, as well as advances in nanoscience, nanotechnology, and bioengineering, will lead to a hard takeoff of artificial intelligence. In his book *The Singularity Is Near*, Kurzweil (2005) also adds to the concept of Singularity. So, what exactly is Singularity? It's a time in the future when technological advancement will be so quick and have such a profound impact on human living that it will be irreversibly altered (Kurzweil, 2005). In this way, Kurzweil (2005) agrees with Vinge's (1993) assessment of the rise of superhuman intellect and the implications for civilization. To put it another way, humans may become more like bots as a result of technology advancements or implants that enable them to be superintelligent and live longer lives. The vision of Kurzweil (2005) depicts a posthuman future in which the human no longer just remains human but instead pushes the bounds to encompass what humanism has historically excluded and failed to consider: the nonhuman figure in the posthuman state. Kurzweil (2005) states “If you're wondering what will remain unmistakably human in such a society, consider this: ours is the species that is driven by the need to expand its physical and mental

boundaries. “By the end of this century, the nonbiological portion of our intelligence will be trillions of trillions of times more powerful than unaided human intelligence” (Kurzweil, 2005, p. 25)

Miller (2012) proposes intelligent explosion as one path to the singularity, in which a single machine intelligence may hop from human-level intellect to something similar to a god, what I call a hyper-intelligence, in a relatively short time, days, or even hours (Miller, 2012). Vinge (1993), on the other hand, takes a different approach to the singularity than Kurzweil (2005) and goes considerably further. Vinge (1993) says that the “biological collapse of the human species is one possibility” (Vinge, 1993, p. 6), while Kurzweil's (2005) hypothesis deals with human life change, enhancement and intelligence, “our mortality will be in our own hands. We will be capable to survive as long as we want” (Kurzweil, 2005, p. 25).

Raulerson (2013) examines and contrasts Vinge and Kurzweil's perspectives on singularity in *Singularities: Technoculture, Transhumanism, and Science Fiction in the Twenty-First Century*. The singularity vision of Kurzweil (2005) varies from Vinge's (1993) definition in the sense that he contemplates the possibility of uploading minds or consciousness, which is similar to Moravec's disembodiment of the human body (Raulerson, 2013). Kurzweil's take on singularity is more optimistic, meaning that human life would be irreversibly revolutionized (Kurzweil, 2005), and such innovation might return to the inherently humanistic futuristic goal of extending and enhancing human capacities. The perspective of singularity of Kurzweil (2005) is significantly more hopeful than Vinge (1993). “In Vinge's seminal conception, the singularity is a transhistorical level located in the near or immediate future, upon which the core and level of human existence will be tremendously, irreversibly, and astonishingly altered by a massive burst of technological



advancements that cannot be comprehended except by those who incur it directly” (Raulerson, 2013, p. 4). Vinge (1993) states the Singularity is the humanity’s end. Considering the various ways in which we interact with animals, embedded networks in autonomous gadgets, self-aware daemons in the lower operating of bigger sentients, in a posthuman society, there will still be plenty of domains where comparable human automation would be desirable. Some of these human counterparts could be employed just for digital signal processing. Others may appear human, but they have one-sidedness and concentration that would land them in a mental institution in our time. Despite the fact that none of these species are flesh and blood humans, they may be the closest thing in the future environment to what we are now (Vinge, 1993), Raulerson (2013) argued, to Kurzweil (2005), technology (AI simply), “evolution by other means” (Raulerson, 2013 p. 7).

In this manner, Vinge’s vision of singularity, the human will simply disappear, and the emergence of super intelligent computers will eventually displace mankind as a whole. As a result, in the posthuman period, Vinge’s vision is a more profound decentering of mankind.

### Textual Analysis

Stivers’ (2022) debut novel, *The Mother Code*, focusing on the visions of coevolution, coexistence, symbiotic relations between humans and machines, the community of artificial metallic mothers and modified children, human survival, and technological advancements through the lens of Technological Singularity, as developed by Vinge (1993) and Kurzweil (2005). The story is about artificial beings and pandemics, robotic motherhood, nature and emotional relationships, and the survival of humanity. In the story, the year is 2049 and the human race is in danger. The inhabitants of the earth have only one recourse: to place genetically

modified children in the cocoons of metallic robots. After an incubation period, they will be born and raised by machines. The ultimate hope of preserving human society lies in these robots with artificial intelligence that makes each of them unique: the mother code. The protagonist of the story, Kai, was born, raised and taught to survive by his robot mother named, Rho-Z.

### Merger of Human and Machine

The growth of scientific progress will eventually result in the creation of artificial creatures that combine human and machine characteristics. In speculative fiction, all humans, computers, and smart robots resemble one another, raising questions about the distinction between the user and the system. Many posthuman thinkers envision a future in which technology has progressed to the point that humanity will be massively integrated with artificial augmentation, and humans will surpass the limits of traditional humanism. Similarly, *The Mother Code* Stivers (2022), a science fiction takes on board in 2049 and explores the relationships and mergers between man and machine. The writing of Stivers introduces an advanced posthuman society that dislocated the traditional sovereign perception of humans because her characters are modified with the latest technology and gadgets. For example, in the novel, the protagonist Kai lived, was birthed, and nurtured by a robotic mother. The writing of Stivers (2020) familiarizes a new society equipped with the latest technology and robotic-like machines living with humans. As in *The Mother Code* Dr. James is told to form genetically modified babies. James in the story with the help of his research in gene therapy designs a policy to brief other scientists about how to develop, feed and raised modified babies. “We need to make babies, Rick said. Babies? Children who are immune to this thing. It’s one of the reasons you were brought on in the first place” (Stivers, 2022, p. 56). Human survival

is in danger, and to preserve human survival on earth, scientists have developed two plans. Plan A: C-341 sequence, plan B: to design robot parents and modified babies.

In Stivers' (2022) *The Mother Code*, the symbiosis of humans and machines finds expression through the character of Rick (an analyst at the CIA's directorate of intelligence), who is working on the project of controlling the viral corruption of *tabula rasa*. As it is observed in the novel, Rick possesses an artificial leg, "the bulk of the new prosthesis was covered with a synthetic mesh ... mirroring the softness and stiffness of the tissues in his upper thigh" (p. 15). Rick's bionic muscles are also controlled with the same electrodes fixed in his upper thigh.

There is a person named Rick Blevins, one of the prominent scientists who are working on the mission. This prosthetic implant in Rick's body is an artificial device that replaces a missing body part, which may be lost through disease, trauma, or a condition present at birth. Stiver's *The Mother Code* shows the posthuman society where human children are surviving with computerized beings. As it is depicted in the novel, Rho-z (robot) is taking care of the modified child, Kai. "Your chip is special, Rosie had told him. It is our bond" (p. 30).

The Kurzweilian society finds its expression through the character of modified child Kai, "as he rubbed sleep from his eyes, his fingers touched the small bump on his forehead, the rough place where the chip was embedded just under the skin" (p. 30). Kai, the human child, just woke up in the cocoon of his metallic mother. He also came across the chip embedded into his forehead for certain purposes to cope with his robotic artificial mother. This techno chip is the special bond between the two human and artificial beings.

In *The Mother Code*, the Gen5 children are recognized with a silicon chip embedded into their forehead through which modified

children can communicate with their simulated mothers. To sum up, *The Mother Code* introduces a posthuman society where there is no difference between organic and inorganic beings. Human beings are trying to adjust with techno-beings and altering their bodies with artificial limbs and devices to make their survival possible.

### Smart Super Human Beings

Artificial Intelligence is a frequent image people have when they think of inhumanly intelligent entities. Intelligence Amplification could also lead to the vision of singularity. Human intelligence and skill are improved by using the transition stage. Robotics, or the strong artificial intelligence breakthrough, is the most influential of the three technical revolutions behind the Singularity (genetic, nanomechanical, and robotic). This indicates that computers will be smart enough to think more intelligently than humans. Many futurists believe that algorithmic or mechanical genius will be trillions of billions of times more dominant and strong than unaffected brain capacity before the end of this century. As they are fully generated from human-machine civilization, the moment will come when this nonhumanistic intelligence will be regarded as human. When it comes to artificial intelligence, Singularity is the root cause, which, according to Kurzweil, is developing advanced technologies that will culminate in the planet achieving superhuman cognition by the 2030s-40s, surpassing human intelligence. According to the Singularity Hypothesis, computers will become an essential component of the physical body, shrinking in size while increasing in power.

In Stivers' *The Mother Code*, the awakening of smart artificial beings fulfills the prophecy of singularity. The story is set in a predictable future in which humans continuously remain in touch with technology, especially artificial bodies. Stivers portrays smart artificial beings as an

overarching machine that taught humans how to survive in the face of any threat to humanity. In the story, several references are made to the rise of the community of artificial beings. The conversations among the characters point out the influences of computer-controlled beings' schooling human children. The rise of super artificial beings in *The Mother Code* bears a picture with the presence of Rosie, Alpha-C and other posthuman metallic bodies. "Kai looked up at the housing near where Rosie's arm met her fuselage. Her laser beam was deadly accurate. A weapon is not to be used except in extreme circumstances" (p. 43).

Novelist and biochemist Stivers, in *The Mother Code*, explores what it means to be human and a mother in 2049. When a deadly non-viral agent intended for biowarfare goes out of control, scientists must scuffle to ensure the survival of the human race. There is yet one hope of maintaining the human order: an intelligence programmed into these robots that render each unique in its own right, *the Mother Code*. Kai and Sela, two genetically engineered children, were reared up by robotic mothers Rosie and Alpha-C, designed with novel laser beams.

In the story, Stivers provides a detailed description of posthuman beings, their traits, and their features. These bots, unlike human beings, possess windborne wings and can fly like mad birds. These metallic bodies designed by a human through computational networks can devise their activities on the basis of their sense base sensors, as is observed in the novel, Kai (a genetically altered child being raised by the robot) eyeing the windborne wings of his mechanical mothers. Kai was mesmerized by the sight of these machinery's abilities and strengths. Stivers' Kai is there in the novel to eye and talks about posthuman versions. "Can you talk to Alpha-C? He asked Rosie. What is Alpha-C? Sela's bot. Can't you talk to her? No. I communicate only with my child. But you can see her. Yes, I sense her form" (p.

45). As the story proceeds, Kai, through his signal-processing computational chip, exchanges words with his simulated mother.

More than half of the story revolves around Kai and his mother, Rosie. In the story, when scientists initiated the mission of deactivation of robotic mothers, Kai started to show empathy for his artificial human mother. Kai felt for the machine as one person exercises emotions toward another person. To Kai this feeling is like the sense of someone different from himself, yet complementary to himself. "He could look at her and see not a towering agglomeration of man-made material, but in her stead a real human being, his mother" (p. 255). In Stivers' fictionalized world, robots have been designed and programmed to protect, preserve and maintain human survival on earth.

Stivers, in her fictionalized world, shows that a mother is a mother, no matter whether she is a robot parent or a human mother. The human mission in the story is to deactivate robots and give modified children innate feelings to save these computational mothers. As for Stivers' modified characters, they are mothers for them. These genetically altered children in the story decided to fight for posthuman preservice on earth just like these posthumans maintained human survival in the face of epidemic in the story. The thing to deactivate bot mothers disturbed Kai's mind that he started to feel a yawning ache he never wanted to feel again. In the story Kai said, "Rosie...don't leave... Do not be afraid. I am still here, she said, her voice once more deep in his mind" (p. 255). The twist of the story opens up when Kai, on his own, commences the mission to save his artificial mother. Kai realized human hatred toward metallic bodies. Even Kai is told that his biological mother is expired and Rho-z is just a metallic body. Despite all these details, Kai decided to corroborate his belief that nothing is stronger than the parent-child bond in the entire world.



Based on these references from *The Mother Code*, it is quite obvious that Stivers, in his imagined world of *The Mother Code*, limns the awakening of smart super human beings to fulfill the prophecy of singularity as in the coming future, it is inevitable for humans to survive without artificial intelligence.

## **Conclusion**

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The creation of super artificial beings, in *The Mother Code*, bears picture with the portrayal of Rosie, Alpha-C and other posthuman metallic bodies. Posthuman beings in the novel are more powerful and competent than real human beings. As it is shown that posthumans are immune to epidemic as Rh-z, artificial mother body has a fuselage or laser beam fixed within her body through which she can protect her child from wild

infected beings. Artificial mothers in the novel possess the ability to sense other things harmful to their children. Moreover, the very impressive and overarching trait of posthuman beings, highlighted in the novel is the silent communication with their children in their minds. As in the story, Kai, Sela, Kamal and other modified children can converse with their artificial mothers in their minds, without the use of tongue. Stivers has pictured the artificial mothers who can guide and direct their children within their minds without any speaking acts. To end up, Carole Stivers, novelist and the biochemist in *The Mother Code* explores what it means to be human in the posthuman society. As posthumanism is the completion stage of transhumanism, Stivers covers this whole journey from transhuman to posthuman, from transhuman cyborg to the emergence of an overall posthuman artificial.

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