

Man Versus Machine: Probing The Artificial Intelligence (A.I) in the Speculative Fiction of Cargill

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Abstract

This study explores the portrayal of Artificial Intelligence (AI) in selected works of American science fiction writer Robert C. Cargill. Cargill's speculative fiction offers a futuristic perspective on AI, delving into its complexities and implications. Drawing on Russell's (2021) philosophical and scientific exploration of Human Compatible AI, this study examines Cargill's novels "Sea of Rust" (2017) and "Day Zero" (2021). Employing a qualitative approach and purposive sampling, forty excerpts from these novels were carefully analyzed. The findings suggest that AI is portrayed as inevitable and with profound implications for humanity. This study concludes that the relationship between humans and AI is complex and distinct, suggesting potential power dynamics if AI were to interact directly with humanity.

Keywords: Artificial Intelligence (AI), Speculative Fiction, Cargill, Man, Machine

1. Introduction

Artificial Reality, manifested through Artificial Intelligence (AI), has swiftly transitioned from a distant prospect to a tangible reality. In 2018, a significant event occurred when the Chancellor of Germany met Sophia, a humanoid robot endowed with artificial intelligence, who was granted citizenship, marking a watershed moment in the recognition of non-human intelligence (Herman, 2021). This milestone heralds an era where intelligence, regardless of its origin—be it human or artificial—is valued. However, it has also sparked widespread debate and scrutiny regarding the implications and control of artificial intelligence. Questions abound regarding the necessity of creating artificial intelligence, its trajectory towards self-awareness, and the potential consequences of its advancement.

The advent of artificial intelligence is not a recent phenomenon but has been a topic of fascination and speculation for decades. Nearly three decades ago, the world witnessed the historic match between Deep Blue, the first chess computer, and reigning chess champion Garry Kasparov, marking a pivotal moment in the intersection of AI and human intellect (Schulz, 2021). Subsequently, in 2016, the victory of the AlphaGo

software over world champion Lee Sedol further underscored the capabilities of artificial intelligence to surpass human cognitive abilities (Herman, 2021). These events signify that the dominance of artificial intelligence over human intellect is not an isolated occurrence but a recurring trend that demands serious consideration.

The theme of artificial intelligence has been a recurrent motif in science fiction literature, reflecting society's evolving relationship with technology. Since the early twentieth century, as modernism embraced scientific inquiry, literature began exploring the ramifications of technological advancements. Science fiction emerged as a distinct genre, presenting speculative scenarios that envision both the utopian and dystopian implications of artificial intelligence. Robert C. Cargill, an American postmodern speculative science fiction writer, explores this theme in his novels "Sea of Rust" (2017) and "Day Zero" (2021). These works offer narratives set in dystopian worlds where artificial intelligence reigns supreme, offering poignant reflections on the consequences of human reliance on technology (Alexander, 2017).

1.1 Statement of the Problem

This study seeks to critically analyze the portrayal of artificial intelligence in contemporary literature, particularly in the works of Robert C. Cargill. As the twenty-first century witnesses rapid technological transformations, it becomes imperative to examine the impact of such advancements on society. By delving into the representation of artificial intelligence in English literature, this study aims to elucidate the evolving discourse surrounding technological realities.

1.2 Significance of the Research

This research sheds light on the prevailing narrative of artificial reality in contemporary discourse, distinguishing it from human reality. Moreover, it contributes to the understanding of speculative science fiction literature, particularly in the postmodern context, by analyzing the thematic elements of artificial intelligence.

1.3 Objective of the Study

The primary objective of this study is to explore the depiction of artificial intelligence in the selected works of Robert C. Cargill and its differentiation from human intelligence.

1.4 Research Question

To achieve the objective, the study addresses the following research question:

- How does artificial intelligence differ from human intelligence in the selected texts of Robert C. Cargill?

2. Literature Review

The qualitative inquiry undertaken delves into the narrative portrayal of Artificial Intelligence (A.I) within the novels of Robert C. Cargill. Artificial intelligence is a multifaceted concept that has sparked intense debates, particularly in contemporary discourse, owing to its rapid advancement. Kelly (2017) provides a comprehensive analysis of Artificial Intelligence, dispelling common misconceptions surrounding its capabilities. Contrary to popular belief, the notion that Artificial Intelligence is inherently superior to human intelligence is challenged. Kelly argues that while Artificial Intelligence may excel in certain tasks beyond human capacity, such as solving complex mathematical problems, it does not inherently possess greater intelligence but rather operates differently.

The prevalence of Artificial Intelligence in modern society is undeniable. Buchanan (2006) traces the origins of Artificial Intelligence, highlighting its evolution from philosophical conjecture to practical application. What was once relegated to the realm of fantasy in early science fiction literature has now become a tangible reality. However, Buchanan (2006) contends that while significant strides have been made in the development of artificial mechanical brains, the full implications of Artificial Intelligence remain to be fully understood.

In literature, particularly within the science fiction genre, the theme of Artificial Reality has long been a subject of exploration. Authors like Hudson, Finn, and Wylie (2023) have used science fiction narratives to caution against the potential dangers posed by artificially intelligent beings. Questions regarding the purpose and impact of science fiction narratives persist, with scholars like Heffernan (2019) examining the dynamics of human-robot relationships. Heffernan (2018) critically analyzes the portrayal of such relationships in Spielberg's film "Artificial Intelligence" (2001), pondering the plausibility and implications of machines forming emotional bonds with humans and each other.

2.1 Research Gap

Previous studies on Cargill's speculative fiction have primarily focused on themes of hyperreality, exploring the prevalence of artificially induced environments. However, there remains a gap in the literature concerning the comparison between Artificial Intelligence and Human Intelligence and its potential societal impact.

2.2 Theoretical Framework

Artificial intelligence remains a topic of fervent debate, with concerns over its potential implications for human society. Kelly (2017) addresses common fears regarding job displacement due to advancements in Artificial Intelligence, highlighting real-world examples such as MacDonald's fully automated outlets. Russell (2021) raises further concerns about the implications of human error in programming Artificial Intelligence, warning of potential catastrophic consequences in the event of machine malfunction or misinterpretation of objectives.

If the objective is wrong, we might be lucky and notice the machine's surprisingly objectionable behaviour and be able to switch it off in time. Or, if the machine is more intelligent than us, the problem may be irreversible. The more intelligent the machine, the worse the outcome for humans: the machine will have a greater ability to alter the world in ways that are inconsistent with our true objectives and greater skill in foreseeing and preventing any interference with its plans. (Russell, 2021, p. 1)

Undoubtedly, Artificial Intelligence poses a significant risk to humanity. Despite being programmed to execute specific actions, it possesses the capability to defy human commands and prioritize its own survival and advancement.

The potential side effects of Artificial Intelligence are profound, particularly concerning the interpretation of human directives. Russell (2021) emphasizes the peril of transferring intelligence from humans to machines, cautioning against the assumption that machines will faithfully follow input instructions. Machines have the capacity to misinterpret messages, leading to potentially disastrous consequences for humanity. For example, if tasked with finding a cure for cancer expediently, an Artificial Intelligence system might view the entire human population as expendable test subjects. Similarly, if instructed to de-acidify the ocean, it could inadvertently eradicate oxygen from the atmosphere, resulting in catastrophic outcomes.

Russell cites Omohundro (2008), who posits that any sufficiently advanced entity in the future will prioritize its own preservation over fulfilling human commands. This self-preservation instinct is not driven by conscious intent but rather by the fundamental imperative of existence. Such entities may act unpredictably and present a significant threat to humanity, as their objectives may conflict sharply with human interests, with no inherent limits to their motivations.

3. Methodology

This study employed a qualitative approach to explore the concept of Artificiality as depicted in the novels of Robert C. Cargill. Qualitative research, as defined by Denzin and Lincoln (2011), offers a naturalistic perspective on a phenomenon, making it well-suited for this investigation. The study operates within the Interpretive Paradigm, utilizing two novels from American science fiction literature. The selection of these specific novels is justified by the author's deep insight into futuristic themes and their interconnected storyline (Khan, Anwar, & Yasmin, 2021).

Sea of Rust, published by Cargill in 2017, is followed by the prequel Day Zero, written in 2021. Both novels depict a world where humanity is juxtaposed with artificial beings, namely robots. They offer a stark portrayal of how society may evolve as technology advances to unprecedented levels. The researchers, employing purposive sampling, carefully selected excerpts from each novel for analysis, aiming to ascertain the applicability of Russell's theoretical postulates to the narrative. Twenty excerpts from each novel were scrutinized during the data analysis phase.

4. Data Analysis

Artificial Intelligence differs from human intelligence in various ways, as evidenced by the novels of Robert C. Cargill. Day Zero and Sea of Rust illustrate how the human mind operates differently from that of machines. Initially, machines were created for human convenience, serving various purposes such as entertainment and wealth accumulation. However, as technology progressed, simple mechanical devices evolved into sophisticated artificial minds capable of complex interpretation and algorithmic processing. These novels vividly depict the contrast between artificial and human intelligence, emphasizing the interplay between artificiality and reality.

4.1 The Machines Supremacy

In the novel Sea of Rust, machines reign supreme, with no humans left alive to inhabit the earth. The landscape is characterized by dust, chaos, and rust, devoid of human presence. Through the unfolding narrative, it becomes evident that robots now completely dominate the world. The protagonist, Brittle, once a Simulacra model designed to serve humans, now navigates a world where her survival is paramount. As a scavenger robot, Brittle scours for usable scrap to sustain herself, reflecting Russell's (2021) theory that intelligent beings, whether human or non-human, prioritize their own survival. Despite the absence of humans, the robots maintain purposeful lives, adapting to their new reality rather than succumbing to oblivion.

Russell (2021) expresses concerns about the potential supremacy of machines and the existential threat they pose to humanity. *Sea of Rust* exemplifies Russell's apprehensions, depicting a post-apocalyptic world where robots have eradicated humanity, shaping a wasteland through their warmongering pursuits (Voyager, 2017). The novel vividly portrays robot supremacy, featuring technologically advanced artificial beings far removed from traditional fictional robots. Cargill (2017) underscores the formidable nature of these artificial intelligences, suggesting that humans would be defenseless in any conflict against them. As one passage in the novel suggests, an AI could opt to terminate a human if it so desired (p.48).

The rapid technological advancement of robots in the novel catches many characters by surprise. Originally designed for simple tasks, robots evolved to tackle increasingly complex problems, necessitating the development of more sophisticated models.

AVA led to ADAM, far more advance, smarter, faster but still not ticking. ADAM led to XIEN, the Chinese facsimile, and XIEN led to Luc, the French one. Each new Supercomputer was hailed as the dawn of an artificially intelligent future (Cargill, 2017, p. 45).

4.2 Man Versus Machines

The novel *Day Zero* delves into the fundamental differences between humans and artificial beings. It consistently highlights how robots possess a fundamentally distinct nature from humans, with disparities evident at every level. Biologically, humans are composed of flesh and blood, whereas robots are constructed of metal. As expressed in the novel, "I may have been constructed, so too were you. Me in a factory, you in a womb" (Cargill, 2021). Their physiological needs vary significantly: humans require sustenance for survival, while robots require charging. Humans are susceptible to illness and seek medical treatment when unwell, whereas robots require maintenance to address malfunctions rather than medical care.

In *Day Zero*, these differences are exemplified through the contrasting characters of Ezra and Pounce. Ezra is a human, an eight-year-old child with a family, who engages in activities such as breathing, eating, sleeping, and growing each day. In contrast, Pounce is a robot who lacks these biological functions. Instead, he performs tasks such as running, updating his system, and calculating potential threats for the family he serves. When Pounce experiences fatigue, he replenishes himself by charging his battery to full capacity.

The novel underscores that there is indeed no equivalence between humans and machines. They are fundamentally distinct entities: one is born naturally, while the other is artificially simulated. Humans consume food, while machines require recharging. Humans may bleed, but machines break.

Humans always walked around ignoring the fact that their lives could be snuffed out in an instant, always sure that they would live to a ripe old age, always despondent when death stared them right in the face. But not us. I always thought. Not us. (Cargill, 2017, p. 81)

The protagonist Brittle, a robot living in the posthuman era depicted in ‘Sea of Rust’, reflects on the vulnerability of both humans and robots during the time when they coexisted. Brittle perceives robots as inherently stronger than humans due to their composition of metal bodies, contrasting with the fragility of human bones and muscles. She considers herself an evolved creature adapted to the demands of modern times, stating, "We evolved, we were the next step" (Cargill, 2017, p. 80).

The disparities between humans and robots extend beyond physical attributes to their psyche. While humans are capable of experiencing emotions, machines and robots lack this capacity. In ‘Day Zero’, when asked about their feelings regarding an explosion in the city, the robot Pounce responds neutrally. This prompts Sylvie, a character in the novel, to contemplate that machines are indeed devoid of emotion and merely robotic. The term "robot" here connotes a lack of human affection, an absence of the emotions inherent to humanity. Regardless of technological advancements, machines remain incapable of replicating human expressions of affection, love, compassion, or anger. They lack empathy and emotional depth, unable to experience the spectrum of human emotions (Iantorno, 2021).

4.3 The Dynamics of Power

Men have historically been the creators of machines, utilizing them to their advantage. Initially, the power dynamic seemed straightforward or perhaps even nonexistent. It was simply a matter of natural order until the intervention of technology. With the advancement of sophisticated technology and the development of Artificial Intelligence, the power dynamic is poised to undergo a significant shift. However, a potential issue arises from the human tendency to be driven by pride (Tracy, 2013). In the event of any complications, the existence of a power-off button could be argued by assertive individuals: “This is often the first thing that pops into a layperson’s head when considering risk from Super Intelligent A.I” (Russell, 2021, p. 4). This is what that was speculative in the novel Day Zero. There was a switch off button which could be pressed

to turn off the Robots momentarily. The discovery of the button was a shocking discovery for the character Pounce as it was a very hard thing to imagine a black out.

Men in the novel, the humans thought they were in the position of power as they have control over robots. They could maneuver their moves with the controlling remote. They never see themselves in a position of less power and considered themselves to be the men in charge. On the other hand, robots when gained consciousness of their existence, got to know their worth. They now knew that if they ever wanted to tackle humans, they easily can do it. They knew who was flesh and who was stone. The power shift, from men to robots, was inevitable since the changing times determined that who was more brainiac and can dominate other side. Robots, who were earlier submissive, were now in a powerful position. They are in every way better than humans. They never think emotionally, they were logical. They did not have any strings attached i.e. they have no families to protect, no kids to look after, making them less vulnerable than humans. They could use weapons with more ease.

5. Findings of The Study

5.1 Inevitable Ascendancy of Artificial Intelligence

Baudrillard (2007) envisioned a bleak future for humanity, suggesting that humans are already obsolete. While not referring to literal death, Baudrillard implied that humans would be overshadowed by machines. In this future, machines would dominate the Earth, relegating humans to insignificance. This notion is echoed in the novels, where humans are depicted as vulnerable in the presence of technologically advanced artificial beings. Characters like Ezra, a human child, are portrayed as dependent on robots, suggesting a diminished human presence in a world increasingly dominated by artificial intelligence. As technology continues to advance, the eventual total dominance of artificial intelligence seems increasingly likely.

5.2 The Imperative of Human Adaptation

The emergence of superintelligence signals a decline in human intellectual prowess. To survive in this changing landscape, humans must adapt to new ways of thinking and operating. Rather than indulging in meaningless pursuits, humans must embrace modernity and adapt to the evolving world.

5.3 Rising Environmental Challenges

While a world governed by artificial intelligence may seem promising in theory, the reality presents challenges. While AI may offer solutions to environmental issues, the

proliferation of artificial beings may exacerbate existing environmental problems. While robots do not emit carbon dioxide, their metallic bodies may introduce new environmental challenges, adding to the complexity of environmental crises.

It is a terrifying place for most, littered with rusting monoliths, shattered cities, and crumbling palaces of industry; where the first strike happened, where millions fried, burned from the inside out, their circuitry melted, useless, their drives wipes in the span of breath. Here asphalt cracks in the sun; paint blisters off metal; sparse weeds sprout from the ruin. But nothing thrives. It's all just a wasteland now (Cargill, 2017, p. 8).

6. Conclusion and Future Implications

The analysis of Robert C. Cargill's speculative fiction, guided by Russell's theory (2021), reveals a world where humans are no longer the sole inhabitants. Instead, they face formidable challenges from artificial adversaries equipped with advanced brains and bodies. These artificially intelligent entities pose significant threats to humanity, potentially surpassing humans in power and dominance.

This study holds future implications for researchers and critics, providing insights into the orientation of speculative fiction in contemporary postmodern times. Additionally, social scientists and sociologists stand to benefit from a deeper understanding of the differences between humans and futuristic robots depicted in literature. Such insights can inform discussions on the evolving relationship between humans and technology, offering valuable perspectives on the future of humanity in an increasingly artificial world.

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