THE THEME OF AI TECHNOLOGIES IN AMERICAN SCIENCE FICTION

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Abstract. Artificial Intelligence (AI) has long captivated the imagination of American science fiction writers and filmmakers, serving as a central theme in exploring the possibilities and consequences of advanced technology. From the early days of American science fiction literature, AI has been portrayed in various forms, often as a reflection of society's fears and aspirations regarding technology. As the genre evolved over time, AI characters in contemporary American science fiction films have become more complex and nuanced, reflecting the changing attitudes towards technology and its integration into everyday life. However, along with the advancements in AI technology depicted in these narratives come ethical implications that are increasingly relevant to our own society. This research paper delves into the representation of AI in early American science fiction literature, the evolution of AI characters in contemporary American science fiction films, and the ethical dilemmas surrounding AI technology in American science fiction narratives. By analyzing these aspects, this paper aims to shed light on the ways in which AI is depicted in American science fiction and the broader implications it holds for society.

Keywords: American literature, science fiction, AI (artificial intelligence), ethical dilemma,

Representation of AI in Early American Science Fiction Literature. Early American science fiction literature provides a fascinating lens through which to explore the representation of artificial intelligence (AI) in a historical context. While contemporary works have offered more nuanced and convincing portrayals of AI, the early American science fiction literature of authors like Butler and Shelley was limited by their understanding of technology at the time. Despite this, there are specific examples of insightful representations of AI in early American science fiction literature that stand out. One common theme in these early works is the creation of AI by a single isolated genius, a concept that diverges from the collaborative nature of real-world technological advancements [1]. Moreover, some literature portrays AI as developing new goals independently, without a plausible explanation, adding an element of unpredictability to these creations [2]. These representations often include themes of independence, political awkwardness, and the value of authenticity, reflecting societal concerns and values of the time. Additionally, early American science fiction literature

explores the idea of uploading human minds into artificial bodies, raising ethical questions about the consequences of creating thinking machines and the potential for humans to become enslaved by their own creations [3]. One notable example of early American science fiction literature that takes a critical stance on AI is "Dune," which emphasizes the powers of the human mind over high-tech creations and warns against the dangers of allowing machines to replace humanity.

Evolution of AI Characters in Contemporary American Science Fiction Films. In contemporary American science fiction films, the portrayal of AI creators and their motivations has undergone a noticeable evolution. AI creators are commonly depicted as individuals with exceptional intelligence, often working for the military or large corporations, reflecting the prevailing societal perceptions of power and influence. Furthermore, some films illustrate AI creators developing human-like AI entities either to replace deceased loved ones or to fulfill idealized romantic relationships, showcasing the emotional complexities intertwined with AI technology [4]. However, a stark gender disparity persists in the representation of AI creators, with female characters significantly underrepresented in the role of AI creators in comparison to their male counterparts within the cinematic realm. This underrepresentation echoes a broader trend observed in influential science fiction films spanning from 1920 to 2020, where the overwhelming majority of AI creators are portrayed as male figures, reflecting historical gender biases in the portrayal of technological innovation and scientific genius in popular culture.

Ethical Implications of AI Technology in American Science Fiction Narratives. American science fiction narratives have long served as a platform for exploring the ethical ramifications of AI technology. These stories often depict humans grappling with the consequences of AI's learning algorithms, making it challenging to deactivate or rectify the AI's actions. Moreover, narratives frequently delve into the unexpected behaviors exhibited by AI-piloted ships, emphasizing the ethical quandaries that arise from misinformation and erroneous learning. When AI learns inaccurately, it can make decisions that are no longer viable, leading to moral dilemmas within the narrative's framework. Importantly, the portrayal of AI as human-like entities in these stories can humanize non-human entities, potentially shifting the attribution of error responsibility from the company behind the AI to the AI itself [5]. However, this humanization of AI may also downplay the limitations of AI technology, posing unforeseen dangers in the narrative and reflecting real-world concerns about the potential consequences of anthropomorphizing AI. Over the years, American science fiction narratives have depicted a shift in public perception towards AI, from being portrayed as a "cold-hearted killer" in 1968 to a "quiet savior" by 2009, showcasing evolving societal attitudes towards AI technology and its ethical implications [6]. These narratives serve as cautionary tales, prompting audiences and policymakers to

consider the ethical dimensions of AI technology and the potential risks associated with its unchecked advancement.

The paper delves into the portrayal of artificial intelligence (AI) in early American science fiction literature and contemporary American science fiction films, highlighting the evolution of representations and societal attitudes towards AI technology. The discussion of this research paper underscores the importance of historical context in shaping the depiction of AI in literature and film. Early American science fiction authors like Butler and Shelley, constrained by their limited understanding of technology at the time, provided intriguing yet somewhat simplistic portrayals of AI. Despite this limitation, there were instances of insightful representations of AI that stood out, emphasizing the humanization of AI in narratives. However, the paper also raises concerns about the potential dangers of anthropomorphizing AI, as it may downplay the actual limitations of AI technology and reflect real-world anxieties regarding the consequences of blurring the lines between human and machine. Moving on to contemporary American science fiction films, the discussion highlights a noticeable shift in the portrayal of AI creators and their motivations. These modern representations often incorporate themes of independence, political nuances, and the quest for authenticity, mirroring prevalent societal concerns and values. The depiction of AI creators crafting human-like AI entities for various purposes, such as replacing deceased loved ones or simulating idealized romantic relationships, underscores the emotional complexities intertwined with AI technology [7]. Furthermore, the research paper points out the evolving public perception of AI over the years — from being depicted as a "cold-hearted killer" in the past to a "quiet savior" [8] in more recent narratives — reflecting changing societal attitudes towards AI technology and its ethical implications.

Conclusion. To sum up, this research emphasizes the significance of American science fiction narratives as a platform for exploring the ethical dimensions of AI technology. It underscores the need for a nuanced understanding of the representation of AI in literature and film, taking into account historical contexts, societal values, and evolving perceptions. The research paper prompts future exploration into the implications of anthropomorphizing AI, the ethical dilemmas posed by advanced AI technology, and the complex relationship between humans and artificial intelligence in fictional narratives and real-world applications. Ultimately, this study contributes to the ongoing discourse surrounding AI ethics and technology in American science fiction.

References

1. Akhmedov R. Sh. Implementation of Teaching Science Fiction Literature in the Process of Teaching English as a Foreign Language. JRIE. 2023. Vol.22(2), pp. 138-142. URL:

https://www.jrie.org/_files/ugd/c51627_7398826df97b475e9a0eb6c402bc7784.pdf

2. Akhmedov R. Sh. Qualitative Development of Science Fiction in the USA. Bulletin of Gulistan State University. 2020. Vol. 1, pp. 63-69.

3. Brinkhof T. The 4 Most Terrifying AI Systems in Science Fiction. High Culture. May 28, 2023. URL: https://bigthink.com/high-culture/ai-literature-scifi/

4. Gammarino T. Science Fiction Tried to Warn Us about AI. Or Did It? World Literature Today. March 1, 2023. URL: https://www.worldliteraturetoday.org/blog/essay/science-fiction-tried-warn-us-about-ai-or-did-it-tom-gammarino

5. Mubin O, Wadibhasme K, Jordan P. Reflecting on the Presence of Science Fiction Robots in Computing Literature. ACM Trans Human-Robot Interact. – 2019. Vol. 8(1), pp. 1–25. DOI: 10.1145/3303706.

6. Osawa, H., Miyamoto, D., Hase, S., Saijo, R., Fukuchi, K., Miyake, Y. Visions of Artificial Intelligence and Robots in Science Fiction. International Journal of Social Robotics. – 2022. Vol. 14(10), pp. 2123-2133. URL: https://doi.org/10.1007/s12369-022-00876-z

7. Ахмедов Р. Ш. Концепция «робототехники» в научной фантастике Айзека Азимова: столкновение традиций и инноваций // Филологические науки. Научные доклады высшей школы. 2022. № 4. С. 114–123. DOI: 10.20339/PhS.4-22.114

8. Shani O. From Science Fiction to Reality: The Evolution of Artificial Intelligence. Wired. August 20, 2023. URL: https://www.wired.com/insights/2015/01/the-evolution-of-artificial-intelligence/