

Ink and Code: An In-depth Exploration of Artificial Intelligence as an Author in Literary Expression

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Abstract—Artificial intelligence (AI) is a highly innovative and transformative advancement in technology of this era, revolutionizing how people perceive and interact with the world. With its origins in the pursuit of developing intelligent machines to resemble human-like cognitive functions, AI has morphed into a multidisciplinary domain with extensive implications encompassing an array of fields. AI has arisen as a transformative field of study, reshaping the landscape of science and technology but also of literature and society. Researchers initiated the investigation of neural networks that draw inspiration from the human brain, resulting in significant advancements in pattern recognition, language comprehension, and image processing. Inspired by behavioral psychology, reinforcement learning has emerged as an effective foundation in artificial intelligence, empowering computers to make decisions and enhance their techniques via iterative trial and error. Simultaneously, literature has evolved as a form of artistic expression and cultural reflection. The study will use qualitative research methodology to investigate the flamboyant intersection of AI and literature. This research paper will examine distinctive AI-generated works: *I the Road*, an experimental novel; *Aum Golly: Poems on Humanity*, an AI-authored poetry collection; and *Alice and Sparkle*, an illustrated children's book composed using the language AI GPT-3. In addition, the paper will analyse *Pharmako AI*, the book co-authored with GPT-3, investigating concepts of individual identity, and technological advancements. Through an in-depth analysis of these primary texts, the research seeks to uncover the ways in which AI influences literary creation, shapes narrative structures, and challenges traditional interpretative frameworks.

Index Terms: Artificial intelligence, literature, artistic expression, technology, poetry

I. INTRODUCTION

“Writing is that neutral, composite, oblique space where our subject slips away, the negative where all identity is lost, starting with the very identity of the body writing.”

(Barthes, 1977, p. 142)

Exploring AI-generated tales, novels, and short stories reveals a dynamic interaction between algorithms and human creativity. AI-generated narratives question conventional ideas of authorship and prompt readers to consider the future of storytelling in a time when artificial intelligence contributes to the literary landscape. The contemporary proliferation of artificial intelligence (AI) research worldwide is substantial. The ongoing technological advancement is crucial for modern civilisation. Researchers predict a future when artificial intelligence will be integrated into daily lives as essential tools, aides, and aids for certain social groups or as support for people performing various activities.

The Cambridge Dictionary defines AI as: “[T]he use of computer programs that have some of the qualities of the human mind, such as the ability to understand language, recognise pictures, and learn from experience”. (Cambridge Dictionary Britannica). Winston provides a definition of AI as “the study of the computations that make it possible to perceive, reason, and act.” (Winston, 1992, p. 5). Every emerging technology has impacted our lives and will shape our future. While technology resolves several issues, it often creates new obstacles. According to Nilsson, “AI has as one of its long-term goals the

development of machines that can do these things as well as humans can, or possibly even better” (Nilsson, 1998, p. 2).

Cyberterrorism represents just a few negative aspects of rapidly advancing information and technology. AI currently has a significant influence on nearly every aspect of human behaviour. In 2018, OpenAI developed a sentence-generative language model called GPT-2, but the developers mentioned that it is “too dangerous to release” (Griffin, 2019). Collaboration between human writers and AI systems conveys remarkable outcomes. When authors collaborate with algorithms or vice versa, the resulting narratives combine human originality with computer efficiency, showcasing the future potential of synergistic storytelling. This research contributes to the ongoing discourse on the intersection of technology. The study intends to explore the revolutionary possibilities and limitations of integrating AI in the creative field by analysing its roles as a solo author and collaborator. AI delves into the complexities of human emotion, creating stories that vary from optimistic fables to wrenching tragedies. Criticism emerges over the extent of emotional comprehension and the ability of AI to replicate the human experience effectively.

John McCarthy coined the term and provided a succinct description, “[T]he science and engineering of making intelligent machines or “making a machine behave in ways that would be called intelligent if a human were so behaving”. (McCarthy, 2004). The American Heritage® Science Dictionary defines Artificial Intelligence as: “The ability of a computer or other machine to perform actions thought to require intelligence. Among these actions are logical deduction and inference, creativity, the ability to make decisions based on past experience or insufficient or conflicting information, and the ability to understand spoken language.” (The American Heritage® Science Dictionary). Some individuals worry that intelligent computers will supplant humans in different activities and occupations. Conversely, some argue that the introduction of artificial intelligence will create new employment opportunities and affluence in the world. Elon Musk, who is the founder of SpaceX, announced on Twitter, “We need to be super careful with AI because it is potentially more dangerous than nukes”. Professor Jefferson, in his *Lister Oration*, emphasises the

distinction between humans and machines states “Not until a machine can write a sonnet or compose a concerto because of thoughts and emotions felt, and not by the chance fall of symbols, could we agree that machine equals brain—that is, not only write it but know that it had written it. No mechanism could feel (and not merely artificially signal an easy contrivance) pleasure at its successes, grief when its valves fuse, be warmed by flattery, be made miserable by its mistakes, be charmed by sex, be angry or depressed when it cannot get what it wants (qt. in Turing, 1950, pp. 445- 446).

II. EXPLORING ROSS GOODWIN’S “1 THE ROAD” AND BEYOND

Artificial intelligence is a crucial technical achievement in the 21st century as it leads to advances in the digital transformation of contemporary culture and the modern world. AI generates literary works by utilising examples created by computer programmes such as OpenAI. Artificial intelligence technology has gained significance in the literary domain. AI-enabled machines now do tasks that were once exclusive to human cognitive functions. Although AI can decrease specific faults, it is not impervious to its own constraints and may generate errors or biased results depending on its instructional data. This study paper explores the constantly evolving discipline of literature, with a particular emphasis on the involvement of Artificial Intelligence (AI) as an author, co-author, and poem composer. Also, there is an emphasis on thoroughly examining the influence of AI-generated literature, including tales, novels, poetry, fiction, and non-fiction, by differentiating them from works created by human authors. There are discussions among researchers regarding both AI’s favorable and unfavorable impacts on the literary world, providing insights into its complexities. Some case studies investigate cases where AI has independently created literary masterpieces.

Literary works are created using generative artificial intelligence systems that are designed. Aydoğdu Çelik, M. in his study mentions Literary works produced using AI for example “Ross Goodwin’s 2018-novel 1 the Road is often cited as one of the earliest novels completely generated by AI; The Aum Golly Series – Poems on Humanity by Artificial

Intelligence (2021, 2023) are developed by GPT-3; *The Day A Computer Writes a Novel* (2015), produced by a group of Japanese researchers, appears as a joint effort of humans and machines; *Bob The Robot: Exploring the Universe – A Cozy Bedtime Story Produced by Artificial Intelligence* (2020) is a children’s book written by AI; and *The Inner Life of an AI: A Memoir by ChatGPT* (2022) is a memoir also produced by artificial intelligence systems.” (Çelik, 2023, p.145). GPT-3 by OpenAI is a leading AI system for generating written content. Its capacity to comprehend context, produce coherent chapters, and imitate various writing styles has resulted in the development of stories spanning from science fiction epics to realistic discussions. But simultaneously, there has to be an evaluation of the quality, inventiveness, and originality of AI-generated content in contrast to literature created by humans. Researchers examine the collaborative efforts between human authors and AI systems, which requires analysing the nature of these collaborations, the extent of AI’s contribution, and the impact on the creative process. Contemporary technological advancements usher human life into a new era of existence. Russell and Norvig outlined four ways for AI: “thinking humanly, acting humanly, thinking rationally, and acting rationally.” (Russell & Norvig, 2016, p. 2). With the progression of AI technology, one may ponder if robots will be capable of producing engaging narratives and characters that match the quality of those created by human writers. It emphasises the significance of assessing the poetic excellence, emotional profundity, and thematic complexity of AI-generated poetry compared to those produced by human poets. It delivers the possibility of evaluating AI’s potential to enhance literary creativity and originality. Novels produced by artificial intelligence have come to light, each representing a distinct experiment in creation.

III. “THE POLICEMAN’S BEARD IS HALF CONSTRUCTED”: AI AND THE FUTURE OF NARRATIVE CREATION

The book “The Policeman’s Beard is Half Constructed” is a peculiar novel that blurs the distinction between both human and computer authorship, created through a collaboration between editors who are humans and an algorithm produced

by artificial intelligence. Ray Bradbury’s *The Flying Machine* portrays the tale of an individual who creates a flying machine for the improvement of human life. Kurzweil articulates that Artificial Intelligence is “the art of creating machines that perform functions that require intelligence when performed by people.” (Kurzweil, 1990, p. 117). The narrative exemplifies the repercussions of technology and underscores the need to take accountability for such innovations. There is an instance to examine specimens where AI has imitated traditional forms or created innovative methods in narrative and expression. However, it is necessary to explore the ethical implications of AI-generated writing at the same time. AI demonstrates proficiency in creating brief stories, as seen in the popularity of AI-generated micro-fiction. The frequently unprecedented and compelling short stories demonstrate how algorithms may condense complicated ideas into concise literary masterpieces. Also, this underscores the need to examine intellectual property concerns, authorship attribution, and the ethical obligations of AI systems in artistic and creative endeavours.

However, the main subject is how readers interpret and interact with writing created by artificial intelligence. Examine reader preferences, biases, and their possible influence on literary consumption trends. It is necessary to recognise the obstacles that AI encounters in creating exceptional literature and the potential it has for pushing the limits of creativity in narrative. AI disregards literary norms and explores several genres. AI algorithms examine a wide range of literary genres, including mystery, romance, horror, and fantasy, by pushing limits and experimenting with unorthodox plotlines. The increase in AI-generated writing prompts ethical concerns around authorship, intellectual property rights, and the possible exclusion of human writers from the creative process. Critics contend that AI lacks the real-life experiences that drive human innovation.

IV. FROM “DEATH OF THE AUTHOR” TO AI LITERATURE: RETHINKING AUTHORSHIP AND INTERPRETATION

Roland Barthes argues in his influential article “Death of the Author” that when a work is published, the intentions of the writer become less critical, and

the reader's interpretation becomes more significant. Michel Foucault examines the concept of an author-function, which is a socio-cultural creation that assigns authority and significance to a book. Roland Barthes, in his essay, asserts that "Classic criticism has never paid any attention to the reader; for it, the writer is the only person in literature. We are now beginning to let ourselves be fooled no longer by the arrogant antiphrastical recriminations of good society in favour of the very thing it sets aside, ignores, smothers or destroys; we know that to give writing its future, it is necessary to overthrow the myth: the birth of the reader must be at the cost of the death of the Author." (Barthes, 1992). These notions bring up a new age of literary discussion when applied to AI-generated works. *I the Road* is a book authored by artificial intelligence.

Ross Goodwin embarked on a road journey in 2017 from New York to New Orleans. He brought a laptop connected to sensors that gathered data from the surroundings. This data was processed by an AI model, which converted it into text printed on rolls of receipt paper. R. Goodwin commanded the AI to embody certain styles, languages, vocabulary, phrases, structures, and tones, showcasing the artistic aspect of the novel. Paula Murphy, in his research paper, comments about this novel composed by AI: "There is no single author – it is not Ross Goodwin, and it is not the neural network that he designed. But there is an author function that can be filled by both humans and AI and potentially others involved in the creation of the novel. This concept of an author function is only necessary because the way in which we think about the novel and its relationship to the author has not changed. Even if we know that the author must go in inverted commas and that it is only a notional author function, we still need it to be there – this is why in the Works Cited list attached to this article, every piece of writing has an author attached to it." (Murphy, 2022). Barthes' concept of the "Death of the Author" is reflected in AI-generated works, which lack an intentionally selected human author. Algorithms generate writings that prompt users to interpret meaning without personal bias or direction. Foucault's concept of the author function, which assigns authority to work according to societal norms, is reflected in an AI-generated narrative. The authority is given to the algorithm, not to a human, changing the author's work into a complex

relationship between code and creativity. In the novel, the descriptions formulated by AI are: "The time was eleven minutes after three o'clock in the afternoon, and soon after we were along together, a few people were standing in the windows of the train station. It was a relief." (Goodwin, 2018, p. 18.). *I the Road* is promoted as the inaugural novel generated by artificial intelligence. However, as R. Goodwin highlights, it lacks the characteristics of a human-authored novel or any semblance of human authorship. Rodica Gotca in her study mentions that, "To test the AI's ability to write a novel, R. Goodwin did not intervene in its writing, thus presenting the raw text generated by the machine to the public. The fact that the novel was not edited before it was printed makes it appear muddled, retaining not only deviations from correct expression but also from grammatical writing. Although he only coordinated the writing process, R. Goodwin takes responsibility for this publication." (Gotca, 2023. p. 33). AI-generated creations may explore various poetic structures by deviating from established norms and conventions. This can lead to the development of novel structures and styles of writing narratives.

V. THE CREATION OF AUM GOLLY: AI-GENERATED POETRY IN 24 HOURS

Similarly, *Aum Golly* is a collection of poetry composed within the course of twenty-four hours. GPT-3, an improved autoregressive language model developed by OpenAI in 2020, composed of "Aum Golly". *Aum Golly* was released by Basam Books in Finland in 2021. The GPT-3 language model has created the book's title, topic, and poetry. AI-generated narratives frequently display a distinctive combination of originality, utilising patterns and styles acquired from the extensive text data on which they were trained. The poems in *Aum Golly* may have surprising word selections, phrase arrangements, or subject components.

One of the poems composed by Artificial Intelligence included in this collection is:

“...sow the sky with light
I saw a river of stars
dance down the night
I saw a hundred flying horses
streaming through the sky...”

(Jukka Aalho, GPT-3 and ChatGPT)

“Aum Golly 2” or “The Aum Golly Series – Poems on Humanity by Artificial Intelligence” is created and illustrated by Jukka Aalho, ChatGPT, and Midjourney in 2023 within a 12-hour timeframe. This is a book of illustrated AI poems on humanity. AI-generated works lack direct human experiences. Although AI may mimic human language and feelings, it lacks the unique experiences and emotions that human poets use to inspire their art. This might lead to a varied viewpoint or a sense of emotional detachment in the poem. Insufficient comprehension of context may result in sudden changes in tone or meaning in the poetry. This Poetry written by AI demonstrates a complex interaction of language, using vocabulary and linguistic structures in innovative ways. Insufficient comprehension of linguistic complexities might occasionally lead to undesirable or unintentional interpretations. Oxford defines art as “the expression or application of human creative skill and imagination, typically in a visual form such as painting or sculpture, producing works to be appreciated primarily for their beauty or emotional power.” (Oxford English Dictionary, 2023).

VI. “ALICE AND SPARKLE”: A GROUNDBREAKING AI-CREATED CHILDREN'S BOOK BY AMMAAR RESHI

Ammaar Reshi created the 12-page illustrated children’s book *Alice and Sparkle* with the help of artificial intelligence in 2022. He has used chatbot ChatGPT to compose the narrative and utilised an exceptional image creation software, Midjourney, to create illustrations. This book was co-created utilising AI technologies for writing and graphics, making it the first of its type. According to Wikipedia, “Reshi created the book using artificial intelligence programmes ChatGPT and Midjourney in one weekend, which sparked controversy among artists, both in regard to the copyright status of the book and the quality of the illustration and text.” (Wikipedia Contributors, 2024). The story is about the protagonist Alice’s encounters with Artificial Intelligence and her realisation that artificial intelligence could bring beneficial or detrimental goals depending on its application. AI-driven tools

such as ChatGPT have recently gained widespread attention for their remarkable capability to imitate human thinking and writing. ChatGPT had a role in creating the novel *Alice and Sparkle*, which sparked both admiration and controversy among literary experts in the field. In an article, Varsha Sara Babuji quotes Ammaar Reshi’s words about the creation of *Alice and Sparkle*: “First, the idea: I wanted a story showing the magic of AI to children. I gave ChatGPT a prompt and went back and forth with it to refine details and get inspiration for the illustrations. It was like having a constant brainstorming partner who I could ping pong ideas off of, said Reshi.” (Babuji, 2022).

VII. “PHARMAKO-AI”: REVOLUTIONIZING PHARMACEUTICALS WITH AI-AUTHORED INSIGHTS

In recent years, the field of artificial intelligence has made significant advancements in various industries, including healthcare. There are benefits and impact of artificial intelligence in medicine, with a precise focus on the emerging concept of Pharmako-AI. Pharmako-AI, a term coined by the artificial intelligence community, refers to the integration of AI technology in pharmaceuticals. One notable example of Pharmako-AI is the book “Pharmako-AI: The AI-Authored Guide to Pharmaceuticals” which was written entirely by an AI. The book, “Pharmako-AI: The AI-Authored Guide to Pharmaceuticals,” has gained attention for its unique approach in the field. Written by an AI, this book provides an in-depth exploration of various pharmaceuticals and their impact on human health. It delves into the mechanism of action, side effects, and potential interactions of different medications. Furthermore, the AI author of “Pharmako-AI” utilizes vast amounts of data and algorithms to generate comprehensive and unbiased information. (Fogel & Kvedar, 2018). Artificial intelligence has emerged as a groundbreaking and transformative technology, revolutionizing various aspects of human life. It has greatly impacted literature and society, leading to significant changes in how we perceive, interact with, and understand the world around us. The development of AI has opened up new possibilities in the field of literature, allowing for the creation of intelligent virtual characters and enhanced

storytelling experiences. AI has also played a crucial role in the analysis and interpretation of literary works, allowing researchers to delve deeper into the meaning and symbolism within texts. Furthermore, AI has had a profound impact on community by transforming various industries and sectors (Soni et al., 2020). AI shapes narrative structures, challenges traditional interpretative frameworks, and contributes to the evolving landscape of literature in the contemporary era. By probing the convoluted relationship between AI and literature, this study contributes perspicuity into the transformative possibility of technology in the realm of creative expression and cultural reflection. The examination of learners' reactions and reflections on the use of AI-assisted tools in academic writing has revealed the significant role that AI plays in improving learners' writing performance and enhancing their efficiency in completing writing tasks (Dong, 2023). While the results have shown positive outcomes, it is important to note that learners also expressed concerns about potential negative effects on their academic writing skills over time. The analysis advances to the collaborative effort "Pharmako AI," where GPT-3 is a co-author, delving into themes of individual identity, environmental interconnectedness, and the impact of technological advancements.

VIII. CONCLUSION

This research paper explores the impact of artificial intelligence on various aspects of writing and creativity. In conclusion, this research endeavours to explore the dynamic intersection of artificial intelligence (AI) and literature, acknowledging the evolving landscape where literature serves as both artistic expression and a mirror echoing cultural dynamics. Readers have seen how AI is used as a writer, author, and co-author of stories, narratives, novels, poems, and other forms of literature. Through the use of AI technology, writers can now rely on intelligent algorithms to generate content, provide suggestions, and enhance their writing process. Employing a qualitative research methodology, the study focuses on key AI-generated works, ranging from experimental novels to poetry collections and illustrated children's books. The selected works include *The Road*, *Aum Golly: Poems on Humanity*, and *Alice and Sparkle*, each showcasing the

capabilities of language AI, specifically GPT-3. By meticulously examining these primary texts, unravel the multifaceted modes in which AI influences literary creation. Nevertheless, the integration of AI-powered pedagogy in teaching academic writing has demonstrated its potential to improve students' writing skills and provide more objective feedback. These findings suggest that AI-powered tools and feedback systems have the potential to revolutionize the way academic writing is taught and assessed.

IX. ACKNOWLEDGMENT

We would like to express our deepest gratitude to Manav Rachna International Institute of Research and Studies, Department of English, School of Media Studies and Humanities, for providing us with the invaluable support and resources necessary for completing this work. We are especially thankful to the faculty members for their guidance, encouragement, and unwavering belief in the importance of exploring emerging topics in literature and technology.

REFERENCES

- [1] Artificial Intelligence (2024). <https://dictionary.cambridge.org/dictionary/english/artificial-intelligence>
- [2] Barthes, R. (1992). *The death of the author*, 1968.
- [3] Barthes, R. (1977). *Image, text, music*. Fontana Press.
- [4] Babuji, V. S. (2022, December 13). Shocking! Man, authors children's book with AI's help in 2 days, internet stunned. TimesNow. <https://www.timesnownews.com/viral/man-writes-book-with-artificial-intelligence-alice-and-sparkle-ammaar-reshi-article-96195505>
- [5] Cambridge Dictionary Britannica. Available online: <https://dictionary.cambridge.org/dictionary/english/artificial-intelligence> (accessed on 20 February 2024)
- [6] Çelik, M. A. Death Of the Author: A Survey On Artificial Intelligence In Literature. *İletişim Bilimi Araştırmaları Dergisi*, 3(2), 142-154.

- [7] Fogel, A. L., & Kvedar, J. C. (2018). Artificial intelligence powers digital medicine. *NPJ digital medicine*, 1(1), 5.
- [8] Gherheș, V., & Obrad, C. (2018). Technical and humanities students' perspectives on the development and sustainability of artificial intelligence (AI). *Sustainability*, 10(9), 3066.
- [9] Griffin, Andrew (2019). AI Deemed 'Too Dangerous to Release' Makes It Out into the World. *The Independent*, Independent Digital News and Media, <https://www.independent.co.uk/tech/aiartificial-intelligence-dangerous-text-gpt2-elon-musk-a9192121.html>.
- [10] Gotca, R. (2023). Computational literature-creation under the auspices of AI and GPT models. *DIALOGICA Revistă de studii culturale și literatură*, (1), 28-37.
- [11] Hedges, K. E. (2023, June). Artificial Intelligence (AI) Art Generators in the Architectural Design Curricula. In 2023 ASEE Annual Conference & Exposition.
- [12] Murphy, P. (2022). Writers and Writers of Writers: Creativity and Authorship in the First AI Novel. *Kritikos*, 19, 2023.
- [13] McCarthy, Cormac. 2006. *The Road*. New York: Alfred A. Knopf.
- [14] McCarthy, J. (2004). What is artificial intelligence?
- [15] Nilsson, N. J. (1998). *Artificial intelligence: A new synthesis*. Morgan Kaufman.
- [16] Oxford English Dictionary. (2023). Oxford: Oxford University Press.
- [17] Kirschenbaum, M. (2021). Spec Acts: Reading Form in Recurrent Neural Networks. *ELH*, 88(2), 361-386.
- [18] Kurzweil, R. (1990). *The age of intelligent machines*. MIT Press.
- [19] Turing, A. M. (1950). I.—computing machinery and intelligence. *Mind; a Quarterly Review of Psychology and Philosophy*, LIX (236), 433–460. doi:10.1093/mind/lix.236.433
- [20] Pacini, P. (2022, September). From Beat Generation to Hacker Generation: On/1 The Road: Experimental Road Narratives. In *Beat Times: Temporalities in Beat Writing*. EUROPEAN BEAT STUDIES NETWORK 10th ANNUAL CONFERENCE.
- [21] Winston, P. H. (1992). *Artificial intelligence* (3rd ed.). Addison-Wesley Publishing.
- [22] Russell, S. & Norvig, P. (2016). *Artificial intelligence: A modern approach*. Pearson.
- [23] Revolutionizing Academic English Writing through AI-Powered Pedagogy: Practical Exploration of Teaching Process and Assessment | Frontier Scientific Publishing Pte. Ltd. (n.d.). <https://front-sci.com/journal/article?doi=10.32629/jher.v4i2.1188>
- [24] Soni, N., Sharma, E. K., Singh, N., & Kapoor, A. (2020). Artificial intelligence in business: from research and innovation to market deployment. *Procedia Computer Science*, 167, 2200-2210.
- [25] The American Heritage® Science Dictionary. Available online: <https://ahdictionary.com/> (accessed on 20 February 2024). Twitter. 2014. Available online: <https://twitter.com/elonmusk/status/495759307346952192?lang=en> (accessed on 20 February 2024).
- [26] Wikipedia contributors. (2024, February 4). Alice and Sparkle. Wikipedia. https://en.wikipedia.org/wiki/Alice_and_Sparkle