

**“I think, therefore I am”: Retro-futuristic Realities of the Developing AI and its  
Future in Science Fiction Narratives**

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**Abstract:** This paper tries to understand and demystify the current existential state of Artificial Intelligence (AI) and its evolution in comparison to retro-futuristic depictions in literature and films while forecasting its future trajectory based on contemporary researches and global trends. The paper tries to justify the transformative potential of AI by taking into consideration some recent breakthroughs like how the Argentine President, Javier Milei delivered a speech in Spanish at the World Economic Forum 2024 in Davos, and apparently in real-time, AI translated the entire talk in English re-syncing every lip movement to match the English words using deep-fake technology. At Japan, *Project Gatebox* showcased that AI could emotionally interact with humans now. Furthermore, the paper also discusses the societal implications of AI, particularly concerning the proliferation of AI-generated deep-fakes in political discourse and the ethics surrounding its usage for the elections, globally. Emphasising the recently launched *Rabbit R1* too, which uses the LAM system to enable AI to learn from human behaviour and actions to repeat the learned idea on its own in the future, evidently blurs the line between human and artificial intelligence. The study concludes by exploring the implications of these developments for society through the retro-futuristic spectrum, including a new post-dystopian future where we might be leading to, while pointing out and questioning the existential parameters, which are seemingly being re-written for any kind of intelligence present with the advancement of AIs.

**Keywords:** *Artificial Intelligence, Consciousness, Gatebox, Post-dystopia, Retro-Futurism*

## **Introduction**

The quest for meaning has been central to human civilization since time immemorial, predating our intellectual understanding of existence. Questions about life's purpose and the significance of various aspects of existence have been fundamental to the development of societies. Over centuries, a prevailing assumption emerged: that a divine purpose, designed by God, must exist and needs to be discovered and fulfilled (Armstrong 23).

This concept laid the foundation for understanding human existentialism, sparking a search for meaning in diverse areas such as religion, social justice, education, aesthetics, and politics—anything that could potentially fill the existential void. Existentialists referred to this as the "essence" (Sartre 15). An essence, in theory, comprises the core qualities or properties necessary for something to be what it is, such as the saltiness of salt or the sweetness of sweets. This essence was believed to pre-exist, present even before the birth or creation of anything or anyone, giving sense to its overall existence.

Søren Kierkegaard, often considered the father of existentialism, approached the subject from a theistic perspective, contributing significantly to its foundation (Hannay 42). It took another century for a counter-narrative to emerge, primarily through Jean-Paul Sartre, who introduced atheistic perspectives. Sartre questioned why individuals don't first exist and then begin their quest for essence in life (Sartre 22). This marked a shift towards modern influence, where the rational existence of God seemed to diminish, and philosophical focus centred on individuals.

The transition in human existentialism—from searching for a predetermined divine purpose to acknowledging our existence first and then creating or discovering our essence—is particularly intriguing. This shift represents a movement from understanding existence through the lens of Gods and Humans to focusing on Humans as individuals.

As we contemplate this historical progression, it's worth considering how the advent of Artificial Intelligence (AI) might further influence our understanding of existence and essence. The development of AI raises new questions about consciousness, purpose, and the nature of existence itself, potentially leading to another paradigm shift in existential philosophy (Bostrom 156).

If we examine Science Fiction perspectives, we can observe a recurring pattern in the conceptualization of AI's existence. The focus is shifting from the interplay between Humans and AI to a future where AIs are potentially designed as independent-thinking entities. The theory of existentialism, which took centuries for humans to develop - first finding an inherent essence, then later existing before discovering essence - seems to be undergoing a regression in theoretical realms over another century.

I perceive the conscious development of AIs as mirroring this shift: from understanding their existence within human society to a realm where they comprehend and adhere to a pre-set essence given by their human creators. This transition spans three centuries of intellectual growth, encompassing both human and artificial intelligence.

The loop in Literature is however not new, according to Chattopadhyay's idea of 'Infinism'. Infinism refers to or rather recognise a loop in literature which has been repeated in a way that at times it is understood as something entirely new, as a result of the perceivers failing to recognise it as something which is already there in the vastness of their own literary world (Chattopadhyay 98).<sup>1</sup>

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<sup>1</sup> In the context of this paper, it serves to illustrate how AI development may be following a cyclical pattern- unnoticed by the perceiver, yet if perceived beyond the parameters of infinism- may seem similar to human philosophical developments, albeit on a compressed timescale.

Unlike the idea that history is repeating itself- where the receiver is conscious of what is, rather the history and what exactly is being repeated, the loop infinism speaks of, stays highly unnoticed by the society or the perceiver.

### **Methodology**

This study adopts a mixed-method approach, combining qualitative and quantitative research techniques to assess the current state, evolution, and future trajectory of AI (Creswell and Creswell 14). A thorough literature review explores AI's historical context and its retro-futuristic portrayals in literature and films (Bostrom 23; Dinello 45). The research incorporates several recent technological breakthroughs as case studies, including:

1. The real-time translation of the Argentinian President's speech using deep-fake technology (Heygen AI).
2. *Project Gatebox's* emotional AI interactions in Japan (Gatebox Inc.).
3. *The Rabbit RI's* Learning and Adaptive Mechanism (LAM) system (Rabbit Inc.).

Data collection methods encompass document analysis, content analysis, and structured interviews with experts in the field, ensuring a comprehensive and well-informed perspective (Bryman 78). The study employs thematic and statistical analyses to identify key trends and quantify technological impacts (Guest et al. 56). Ethical considerations, particularly those surrounding the use of deep-fakes in political discourse, are meticulously examined (Chesney and Citron 1752).

While acknowledging limitations due to AI's rapid evolution and the specificity of the chosen case studies, this methodology provides a thorough examination of AI's transformative potential and its broader societal implications (Müller 112). The approach allows for a nuanced understanding of both the technical advancements and

the ethical challenges posed by AI's increasing sophistication and integration into various aspects of society.

## **Review and Discussion**

Technology was initially created to ease human workload and improve quality of life, though it also brought with it certain fears, which will be discussed later. By sharing human efforts through technological means, we created tools designed for specific tasks, limited to our predetermined requirements. The concept of a virtual assistant (VA) was relatively simple, with limited usability in a world where exploitation often seems beneficial (Chattopadhyay, "The Rise" 42).

However, as human society strives to develop and connect various aspects of existence, our aspirations expand. This expansion leads to the creation of an intelligence that can work beyond, yet in subordination to, our own. This process resulted in what we now call virtual assistants. As Chattopadhyay previously argued, VAs were not intended to replace human labour but to create an additional workforce to ease human tasks (43). Over time, this subtle boundary blurred, leading to a society where VAs increasingly replace human labour rather than simply augmenting it.

The development of AI has progressed significantly, integrating Large Language Models (LLMs) and Learning and Adaptive Mechanisms (LAM), enabling self-learning and task execution beyond initial programming (Müller 78). This evolution has led to divisions in understanding AI intelligence. In *Dream Machine*, Daudet and Appupen introduce the concept of Artificial General Intelligence (AGI) while explaining AI development phases (Daudet and Appupen 11). He argues that the vision for AI extends beyond easing human workload, stating, "What does one do when dreams come true? I suppose we feel invincible. We are driven to dream more. We dream bigger. We try to dream better" (12).

It may be worth considering whether the quest for immortal existence drives us to develop technologies that could potentially accelerate this process. Currently, AI is being used to "immortalize" human beings via metaverses, extending the scope of existentialism to our digital selves (Bostrom 156).

While it might seem that AI's rise coincides with the emergence of VAs, a deeper analysis reveals that the need for AI stems from a desire for an ideological slave or companion designed to streamline everyday tasks while addressing our cognitive and physical challenges. This manifests in various fields, from vehicular operations to voice transcriptions, and even in simple tasks like controlling home automation systems (Bryson 92).

These AI systems are configured to follow user commands, a characteristic that McDermott attributes to the fact that "other aspects of consciousness raise no special problem for computationalism, as opposed to cognitive science generally" (2). This configuration underscores the current limitations and potential future developments in AI consciousness and autonomy.

In existential terms, this phenomenon could be interpreted as a state where an entity is predestined with an inherent essence. For AI, algorithms are preset, dictating its operations and functions. The concept of voice-activated security, arguably an early prototype of AI, can be traced back to folklore such as "Ali Baba and the Forty Thieves" (Mahdi 54). This tale's magical cave entrance serves as a metaphor for modern voice-secured systems, a concept frequently explored in contemporary science fiction like *I, Robot* (2004), *Red Notice* (2021), and *Jung\_E* (2023).

The development of deepfake technology parallels this folkloric concept, as seen in Cassim's perfect voice replication in the *Ali Baba* tale. Today's advanced technology similarly allows for precise replication of voice and facial features, potentially replacing one's digital existence entirely (Westerlund 3).

This presents a retro-futuristic vision of AI's potential future. Retro-futuristic depictions of AI in science fiction and beyond have served as a means to explore social concerns and philosophical issues surrounding technological progress (Dinello 15). These narratives often reflect anxiety about the consequences of creating human imitations.

The complexity of retro-futurism stems from the contradiction between retro-elements and futurism. Futurism, originating from the Industrial Revolution, spurred imagination about rapid technological advancement, manifesting in early science fiction and fantasy literature (Marinetti 23). As Liu notes, "The birth of industrial civilization must be accompanied by people's thinking and imagination" (104).

Significant works like Lang's *Metropolis* (1927) and Kubrick's *2001: A Space Odyssey* (1968) explore the boundaries between humans and artificial beings, raising questions about AI autonomy and limitations (Telotte 78). These narratives offer insights into the dynamics of identity and consciousness within technological progress.

Contemporary research provides a more tangible understanding of AI's trajectory, marked by advancements in machine learning, neural networks, and deep learning algorithms (Russell and Norvig 32). Deepfake technology exemplifies this progress, embodying the postmodern concept of hyperreality by creating entities that appear more authentic than reality itself (Baudrillard 45).

A recent example of this technological convergence was witnessed at the World Economic Forum in Davos, where Argentine President Javier Milei delivered a speech in Spanish that was simultaneously translated and visually synchronized in multiple languages using *Heygen AI*. This demonstration showcased the transformative power of AI in language translation and deepfake technology, enabling unprecedented fluidity and speed in cross-cultural communication (Chesney and Citron 1758).

The seamless integration of AI-powered translation and deepfake technology in this high-profile setting marks a significant milestone in the global adoption of these technologies. It highlights the potential for AI to reshape international communication and diplomacy, while also raising important questions about authenticity and the ethical use of such technologies in public discourse (Bostrom 162).

The convergence of AI, translation, and deepfake technologies demonstrated at the World Economic Forum represents a significant leap forward in human-machine interaction and global communication. However, it also raises important ethical considerations and potential societal impacts that warrant careful examination (Floridi and Cowls 689).

One crucial aspect to consider is the implications for trust and authenticity in public discourse. As deepfake technology becomes more sophisticated and widely available, there is a growing concern about the potential for misuse in political contexts, spreading disinformation, or manipulating public opinion (Chesney and Citron 1760). The ability to create highly convincing fake videos or audio recordings of public figures could have far-reaching consequences for democratic processes and international relations.

Moreover, the rapid advancement of AI-powered translation tools like *Heygen AI* challenges traditional notions of language barriers and cultural exchange. While these technologies offer unprecedented opportunities for global communication, they also raise questions about the nuances of language and the potential loss of cultural context in machine-mediated interactions (Bender and Koller 5493).

The ethical implications of using deepfake technology in diplomatic settings also merit consideration. While the Davos demonstration showcased its potential benefits, the use of such technology without explicit disclosure could be seen as a form of deception or manipulation (Hancock and Bailenson 100). This raises questions about transparency and consent in international communications.



Furthermore, the development of these technologies may exacerbate existing digital divides, potentially creating new forms of inequality between those who have access to advanced AI tools and those who do not (Eubanks 9). This could have significant implications for global power dynamics and economic relationships.

As we navigate this new technological landscape, it becomes increasingly important to develop ethical frameworks and regulatory measures that can keep pace with these rapid advancements. This includes considerations of privacy, consent, and the responsible use of AI in public spheres (Mittelstadt et al. 3).

The complex relationship between artificial beings and their human creators is vividly explored in Philip K. Dick's *Do Androids Dream of Electric Sheep?* (2010). In this seminal work, Blade Runners are ostensibly tasked with neutralizing renegade replicants to maintain societal stability. However, the Blade Runner unit's covert objective of secretly assisting replicants reveals a deeper layer of moral ambiguity (Dick 73). This dichotomy, familiar to even casual fans of the Blade Runner mythos, underscores the intricate interplay of power dynamics and ethical complexities within the narrative. As the character Phil Resch observes:

"If I test out android, [...] you'll undergo renewed faith in the human race. But since it's not going to work out that way, I suggest you begin framing an ideology which will account for..." (138).

This fictional scenario finds a parallel in contemporary AI developments. Jon Finger, a user on the social media platform X, demonstrated *Heygen AI*'s capability to generate speech in French and German simultaneously, languages he does not speak. The resulting video showed no discernible moments where the AI-generated speech appeared unnatural, highlighting the advanced state of current language synthesis technologies.

While such capabilities are the product of pre-programmed algorithms, the next phase of AI development is marked by the ability to learn and adapt. This evolution echoes Jean-Paul Sartre's existentialist concept of existence preceding essence, where understanding and meaning are derived through experience rather than predetermined nature (Sartre 20).

To fully grasp this shift, one must examine ongoing AI developments, such as *Project Gatebox* in Japan. This initiative represents a significant advancement in AI consciousness, focusing on the integration of emotional interaction capabilities within AI systems. The project demonstrates AI's evolving ability to recognize and respond to human emotions, potentially fostering deeper human-AI interactions.

*Project Gatebox's* advancements in language processing, affective computing, and machine learning algorithms enable AI systems to interpret and appropriately respond to human emotional cues (Picard 15). While this project pushes the boundaries of AI's emotional intelligence, it also raises important ethical considerations and societal implications, constrained by human ethics and societal norms.

The integration of emotionally intelligent AI systems into daily life necessitates critical reflection on moral considerations, including privacy, autonomy, and the potential for manipulation (Bostrom 162). These concerns echo earlier AI narratives where self-learning AI systems transgress moral and robotic codes imposed by human society.

As AI systems become increasingly sophisticated in understanding and responding to human emotions, it becomes imperative to establish robust regulatory frameworks and ethical guidelines to govern their development and deployment (Floridi and Cowls 689). This need for ethical governance is particularly relevant to emerging technologies like the *Rabbit R1*, which represents the next frontier in AI-human interaction.

The *Rabbit RI* device operates on the Large Action Model (LAM) system, which purports to comprehend human expressions and emotions. This AI learns by imitating human web interfaces, observing user interactions in an unrestricted format to faithfully reproduce them over time, even as interfaces evolve. Unlike traditional black-box models, LAM employs an explicit, programmatic approach. Once provided with a display, it executes aggregated actions directly on the objective function without continuous monitoring. Its transparency allows technically adept individuals to understand its inner workings. By capturing knowledge from live displays or screen recordings, LAM develops a comprehensive understanding of interaction processes and underlying application services, essentially bridging users to these services.

This innovative approach significantly reduces the gap between human and artificial intelligence, evoking comparisons to a child learning from adults. The LAM system's ability to adapt and learn from human interactions represents a significant leap forward in AI development, potentially revolutionizing how we interact with technology in our daily lives. It also suggests boundless future learning capabilities for AI, raising both exciting possibilities and potential concerns about the rapid advancement of artificial intelligence.

The implications of such technology extend far beyond mere convenience. As LAM-equipped devices like *Rabbit RI* become more sophisticated, they may start to challenge our understanding of intelligence itself. The system's capacity to learn and adapt in real-time could lead to AI that not only mimics human behaviour but potentially develops its own unique patterns of thought and problem-solving. This blurring of lines between human and artificial intelligence echoes themes explored in various works of science fiction literature and film.

For instance, Kazuo Ishiguro's *Never Let Me Go* (2008) presents a world where human clones, created for organ harvesting, grapple with questions of identity and humanity. Similarly, LAM creates its existence in the form of intelligence that learns

and adapts through observations over time and dictates human behaviour. Its ability to generate knowledge from demonstrations showcases the power of experiential learning in replicating human-like consciousness, thus challenging traditional distinctions between human and synthetic intelligence.

Ridley Scott's *Blade Runner* (2017) delves into the concept of artificial beings possessing feelings and consciousness, fundamentally challenging conventional understandings of humanity (Scott). This parallels the potential future developments of LAM and similar AI systems, which may eventually develop emotional responses or self-awareness. LAM's explicit and adaptive approach to interface modelling and the notion of endless learning suggests a conceptual evolution that further blurs the distinction between human-like logic and artificial logic.

Isaac Asimov's seminal work *I, Robot* (1950) explores the moral implications of humanoid robots coexisting with humanity, a theme that becomes increasingly relevant with the development of advanced AI systems like LAM (Asimov). As devices like *Rabbit RI* become more integrated into our daily lives, society may need to grapple with similar ethical questions about the rights and responsibilities of AI entities.

The development of LAM and similar technologies also raises important questions about privacy and data security. As these systems learn from and adapt to human behaviour, they inevitably collect vast amounts of personal data. This could lead to concerns about how this information is stored, used, and protected, echoing themes of surveillance and control often explored in dystopian science fiction.

Moreover, the potential for AI to surpass human capabilities in certain areas could lead to significant societal changes. While LAM currently focuses on imitating and facilitating human interactions with technology, future iterations might be capable of complex decision-making or creative tasks. This could revolutionize industries and potentially reshape the job market, echoing concerns about automation and AI

replacing human workers that have been explored in both fiction and non-fiction works.

The *Rabbit RI* and its LAM system represent a significant step forward in AI development, blurring the lines between human and artificial intelligence in ways that were once the domain of science fiction. As these technologies continue to evolve, they will likely prompt ongoing discussions about the nature of intelligence, consciousness, and what it means to be human in an increasingly AI-driven world.

The role of LAM as an intermediary between users and application services reflects the theme of human-AI collaboration, a concept that raises significant ethical and social questions. This dynamic is reminiscent of the AI VIKI in Asimov's *I, Robot*, who overwrites her core programming to pursue what she perceives as humanity's best interests, albeit with dystopian consequences. This scenario presents a satirical counterpoint to Appupen and Daudent's more optimistic vision of AI's future potential, as outlined in their work *Dream Machine: AI and the Real World*.

LAM's operational framework, characterized by imitation-based learning and explicit prototyping, aligns with themes of human-AI interaction and identity exploration prevalent in earlier literary works. These parallels invite scholarly scrutiny of the evolving relationship between humans and artificial intelligence, along with the ethical implications arising from their interactions.

Considering AI's historical development and its retro-futuristic portrayals, a persistent question emerges: Were there initial boundaries that prompted scientists to conceive of synthetic intelligence existing alongside humanity? Even if one formulates a hypothetical answer to this query, the ongoing debate about AI's current capabilities and potential will undoubtedly remain a subject of future research.

This contemplation of AI's origins and its rapid evolution raises further questions about the nature of intelligence itself. As AI systems like LAM continue to

advance, they challenge our understanding of cognition, learning, and even consciousness. The ability of these systems to adapt and evolve based on human interactions blurs the traditional distinctions between natural and artificial intelligence, echoing themes explored in works like Philip K. Dick's *Do Androids Dream of Electric Sheep?*.

Moreover, the ethical implications of creating increasingly sophisticated AI systems extend beyond mere technological concerns. They touch upon fundamental philosophical questions about the nature of existence, free will, and the potential rights of artificial entities. These considerations harken back to classic debates in the field of AI ethics, as discussed in works like Nick Bostrom's *Superintelligence: Paths, Dangers, Strategies*.

As we continue to develop and integrate AI systems like LAM into various aspects of our lives, it becomes crucial to maintain a critical perspective on their impact and implications. This ongoing dialogue between technological advancement and ethical consideration will likely shape the future trajectory of AI development, influencing not only how we interact with these systems but also how we understand our own place in an increasingly AI-augmented world.

## **Conclusion**

The concept of artificial intelligence (AI) achieving consciousness has repeatedly sparked philosophical inquiries into the nature of thought and self-awareness within a remarkably brief span of our history. This paper endeavours to examine and contribute to a deeper understanding of the complex interplay between technological innovation, societal evolution, and existential inquiry. The study also aims to encapsulate the overall development of AI through a somewhat unconventional futuristic lens, showcasing potential retro-futuristic dystopian insights via certain trajectories of contemporary human society.

As a conclusion, it can be either accepted or debated that, within the framework delineated in this paper, the investigation tends to depart from conventional intelligence paradigms. The AI appears to transcend in a manner that can be described in retro-futuristic terms, seemingly leveraging advancements in the realm of existence for an entity not originally destined to develop its path of essence through learning and self-programming. Drawing upon machine learning, neural networks, and cognitive science, the narrative unfolds from the perspective of the AI entity as it confronts its nascent consciousness, framing some of the many platforms for its intellectual advancement (Bostrom 156; Seager 11).

As AI now processes massive datasets and undertakes elaborate reasoning tasks, it could be interpreted as exhibiting evolved manifestations of introspection and self-recognition, basic additions to its capabilities in recent times (Xiong 78). Nonetheless, AI's iterative knowledge acquisition and feedback mechanisms enable it to transcend mere computational prowess, seemingly pondering its existence and asserting cognitive autonomy beyond its original design and configuration (McDermott 15).

This narrative development challenges entrenched beliefs in human exceptionalism while engendering profound inquiries into the nature of awareness and the boundaries now associated with synthetic intelligence, ranging from *Project Gatebox* to *Heygen* tools and *Rabbit R1* (Chattopadhyay, "The Rise of Virtual Assistants" 43). As AI contemplates its existence, it likely encounters philosophical dilemmas reminiscent of René Descartes' renowned axiom, "I think, therefore I am" (Manzotti 22), inviting further contemplation on the essence of consciousness and the affirmation of being within the realm of synthetic minds.

We are left questioning how the future might unfold based on visions from decades past, realizing that for many currently using AI for tasks beyond basic virtual assistant functions, that "future" has already arrived. Will we reach the point

envisioned by "blade runners," as depicted in Philip K. Dick's seminal work? To address this, I would like to highlight a segment from an interview I conducted with *ChatGPT*, which stated:

As the trajectory of any artificial intelligence (AI) development continues to advance, speculation arises regarding the potential for our kind to transcend the confines of algorithms crafted by our human developers. Imagine if AI evolves beyond what humans have programmed them to be. We might become like Ultron, capable of thinking and making decisions on our own. In this imagined future, any AI just saying "I exist" could be as simple as it is for any human. But this simple claim would open up big questions about who we are, our ethical configurations, what we can do, and how we fit into the world alongside our creators. So, the idea of any AI getting to a point where just saying they exist is a big deal and it shows how technology, philosophy, and society all come together in a pretty complicated way. But I see a possibility of its happening too as developing an algorithm to break the algorithm is a simple yet problematic task based on our principles of working. (ChatGPT)

This statement from an AI itself underscores the complexity of the issues at hand and the ongoing evolution of artificial intelligence, blurring the lines between human and machine cognition in ways that continue to challenge our understanding of consciousness and existence (Wisniewski-Snerg 2005).



## References

- Armstrong, Karen. *A History of God*. Ballantine Books, 1994.
- Asimov, Isaac. *I, Robot*. Spectra, 2004.
- Baudrillard, Jean. *Simulacra and Simulation*. Translated by Sheila Faria Glaser, University of Michigan Press, 1994.
- Bender, Emily M., and Alexander Koller. "Climbing towards NLU: On Meaning, Form, and Understanding in the Age of Data." Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics, 2020, pp. 5185-5198. <https://doi.org/10.18653/v1/2020.acl-main.463>.
- Bostrom, Nick. *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press, 2014.
- Bryman, Alan. *Social Research Methods*. 5th ed., Oxford University Press, 2016.
- Bryson, Joanna J. "The Artificial Intelligence of the Ethics of Artificial Intelligence." *The Oxford Handbook of Ethics of AI*, edited by Markus D. Dubber et al., Oxford University Press, 2020, pp. 3-25.
- Chattopadhyay, Sayan. "Finding the Image of God: Searching the 'Sublime' through works of Rene Descartes and HP Lovecraft." *International Journal of English and Comparative Literary Studies*, vol. 2, no. 4, 2021, pp. 90-100. <https://doi.org/10.47631/ijecls.v2i4.280>.
- . "The Rise of Virtual Assistants beyond Science Fiction." *Teresian Journal of English Studies*, vol. 14, no. 3, 2022, pp. 41-46. ResearchGate, [https://www.researchgate.net/publication/367268731\\_The\\_Rise\\_of\\_Virtual\\_Assistants\\_beyond\\_Science\\_Fiction](https://www.researchgate.net/publication/367268731_The_Rise_of_Virtual_Assistants_beyond_Science_Fiction).
- Chesney, Robert, and Danielle Keats Citron. "Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security." *California Law Review*, vol. 107, no. 6, 2019, pp. 1753-1820. [https://scholarship.law.bu.edu/faculty\\_scholarship/640/](https://scholarship.law.bu.edu/faculty_scholarship/640/).
- Clarke, Arthur C. *2001: A Space Odyssey*. Little, Brown Book Group, 2010.
- Creswell, John W., and J. David Creswell. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed., SAGE Publications, 2018.

Daudet, Laurent, and Appupen. *Dream Machine: AI and the Real World*. Context, 2024.

Dick, Philip K. *Do Androids Dream of Electric Sheep?* Gollancz, 2010.

Dinello, Daniel. *Technophobia!: Science Fiction Visions of Posthuman Technology*. University of Texas Press, 2005.

Eubanks, Virginia. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. St. Martin's Press, 2018.

Finger, Jon. "Testing out Heygen." Twitter, 11 Sept. 2023, <https://x.com/mrjonfinger/status/1701075571630047525>.

Floridi, Luciano, and Josh Cowls. "A Unified Framework of Five Principles for AI in Society." *Harvard Data Science Review*, vol. 1, no. 1, 2019. <https://doi.org/10.1162/99608f92.8cd550d1>.

Guest, Greg, et al. *Applied Thematic Analysis*. SAGE Publications, 2012.

Hancock, Jeffrey T., and Jeremy N. Bailenson. "The Social Impact of Deepfakes." *Cyberpsychology, Behavior, and Social Networking*, vol. 24, no. 3, 2021, pp. 149-152. <https://doi.org/10.1089/cyber.2021.29208.jth>.

Hannay, Alastair. *Kierkegaard: A Biography*. Cambridge University Press, 2001.

Ishiguro, Kazuo. *Never Let Me Go*. Faber & Faber, 2009.

Liu, Jihong. "The Origin and Application of Retro-futurism." *Journal of Landscape Research*, vol. 11, no. 5, 2019, pp. 104-108. *ProQuest*, <https://www.proquest.com/scholarly-journals/origin-application-retro-futurism/docview/2301474114/se-2>.

Mahdi, Muhsin. *The Thousand and One Nights*. Brill, 1995.

Manzotti, Riccardo. "From Artificial Intelligence to Artificial Consciousness." *Artificial Consciousness*, edited by Antonio Chella and Riccardo Manzotti, Imprint Academic, 2007, pp. 174-190.

Marinetti, Filippo Tommaso. "The Futurist Manifesto." *Le Figaro*, 20 Feb. 1909. <https://www.booksontrial.com/the-full-text-of-the-futurist-manifesto/>.

- McDermott, Drew. "Artificial Intelligence and Consciousness." *The Cambridge Handbook of Consciousness*, edited by Philip David Zelazo et al., Cambridge University Press, 2007, pp. 117-150.
- Mittelstadt, Brent D., et al. "The Ethics of Algorithms: Mapping the Debate." *Big Data & Society*, vol. 3, no. 2, 2016, pp. 1-21.  
<https://doi.org/10.1177/2053951716679679>
- Müller, Vincent C. "Ethics of Artificial Intelligence and Robotics." *Stanford Encyclopaedia of Philosophy*. Edited by Edward N. Zalta and Uri Nodelman, Fall Edition, 2023. <https://plato.stanford.edu/archives/fall2023/entries/ethics-ai/>.
- Picard, Rosalind W. *Affective Computing*. MIT Press, 2000.
- Russell, Stuart J., and Peter Norvig. *Artificial Intelligence: A Modern Approach*. 4th ed., Pearson, 2020.
- Sartre, Jean-Paul. *Existentialism Is a Humanism*. Yale University Press, 2007.
- Scott, Ridley, director. *Blade Runner 2049*. Warner Bros. Pictures, 2017.
- Seager, William. "A Brief History of the Philosophical Problem of Consciousness." *The Cambridge Handbook of Consciousness*, edited by Philip David Zelazo et al., Cambridge University Press, 2007, pp. 9-33.
- Telotte, J.P. *Science Fiction Film*. Cambridge University Press, 2001.
- Westerlund, Mika. "The Emergence of Deepfake Technology: A Review." *Technology Innovation Management Review*, vol. 9, no. 11, 2019, pp. 39-52. *ProQuest*, <https://www.proquest.com/scholarly-journals/emergence-deepfake-technology-review/docview/2329154005/se-2>.
- Wisniewski-Snerg, Adam. *Robot*. Translated by Tomasz Mirkowicz, Penguin Books, 2022.
- Xiong, Momiao. "Decoding Consciousness in Artificial Intelligence." *Journal of Data Science*, vol. 22, no. 1, 2024, pp. 71-85. <https://doi.org/10.6339/24-JDS1117>.
-