

ARTIFICIAL INTELLIGENCE AND HUMAN INTELLIGENCE: A PHILOSOPHICAL INQUIRY

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Abstract

This study explores the philosophical distinctions between Artificial Intelligence (AI) and Human Intelligence (HI), critically examining their nature, capabilities, and limitations through a qualitative analysis. While AI has made significant advancements in performing tasks traditionally requiring human cognition, such as learning, decision-making, and

problem-solving, it remains fundamentally different from HI. Unlike humans, AI lacks consciousness, self-awareness, and emotional depth, which are central to human experience and intelligence. The study delves into philosophical perspectives on AI's potential for self-awareness, examining key concepts such as the Turing Test, the Chinese Room Argument, and the Hard Problem of Consciousness. Besides, the epistemological limitations of AI, particularly in relation to knowledge and subjective experience, are analyzed through qualitative frameworks. The ethical and existential implications of AI's integration into society are discussed, focusing on autonomy, moral responsibility, and the future of human identity in a world where AI may surpass human intelligence in certain domains. The study concludes by emphasizing the need for responsible AI development that preserves human dignity and agency while addressing the profound societal and philosophical challenges AI presents.

Keywords: Artificial Intelligence, Human Intelligence, Turing Test, Chinese Room Argument, Epistemology.

Introduction

Artificial Intelligence (AI) and Human Intelligence (HI) represent two distinct forms of cognitive processing, each with unique attributes and limitations. AI refers to the development of machines that can perform tasks traditionally requiring human cognition, such as learning, problem-solving, and decision-making. These systems rely on complex algorithms, vast data sets, and computational models to simulate aspects of

human intelligence. In contrast, human intelligence is a product of biological evolution, deeply intertwined with emotions, consciousness, creativity, and self-awareness. Unlike AI, human cognition is not merely about processing information but involves subjective experience, intuition, and moral reasoning (Okpara, 2023). The study of intelligence has been a central concern in philosophy, psychology, and computer science for centuries. Philosophers such as Plato and Aristotle debated the nature of knowledge, reasoning, and the mind's relationship with the body. Aristotle introduced the concept of "nous" (intellect), distinguishing between passive and active intelligence, a framework that continues to influence contemporary debates (Neubauer, 2021). René Descartes, in his *Meditations on First Philosophy*, famously proposed *cogito, ergo sum* ("I think, therefore I am"), emphasizing self-awareness as a defining feature of human intelligence. In the 20th century, Alan Turing revolutionized the discussion by proposing the Turing Test, a method for determining whether a machine could exhibit behavior indistinguishable from human intelligence. His work laid the foundation for modern AI research, shifting the debate from the nature of thought itself to whether intelligent behavior can be computationally replicated. The advent of machine learning and neural networks has further complicated these discussions, as AI systems now perform tasks once thought to be uniquely human such as language processing, pattern recognition, and strategic

decision-making (Han et al., 2021). However, despite AI's remarkable advancements, fundamental philosophical questions persist, Can AI truly "think," or is it merely simulating intelligence?

The Nature of Intelligence: Artificial Intelligence vs. Human Intelligence

The distinction between artificial intelligence (AI) and human intelligence (HI) is foundational to understanding the philosophical implications of AI's development. While both involve problem-solving and learning, they differ fundamentally in their underlying mechanisms, adaptability, and capacity for subjective experience. Human intelligence is deeply rooted in biological and neurological processes, shaped by millions of years of evolution. It is not merely about logical reasoning or computational efficiency but also involves emotions, intuition, and creativity. The ability to engage in abstract reasoning, moral considerations, and social interactions makes human intelligence highly adaptive and complex. Unlike AI, which relies on pre-programmed rules or learned patterns, human intelligence is fluid, capable of integrating diverse experiences and making judgments based on incomplete information. A defining feature of HI is consciousness, the subjective awareness of thoughts, emotions, and surroundings. This self-awareness allows individuals to reflect on their experiences, recognize personal identity, and make ethical decisions. Philosophers such as John Locke and David

Hume have long debated the nature of consciousness, but one thing remains clear human cognition is inseparable from emotions, memories, and a sense of self. Again, HI is deeply influenced by social and cultural contexts. Unlike AI, which functions independently of societal norms and personal experiences, human intelligence is shaped by history, relationships, and shared human experiences, giving it a unique depth and richness (Markauskaite et al., 2022).

AI operates on fundamentally different principles. Instead of biological processes, AI relies on algorithms, statistical learning, and data-driven decision-making. Through machine learning and deep learning models, AI systems can identify patterns, optimize decisions, and solve problems with remarkable precision. However, while AI can analyze massive amounts of data far beyond human capacity, its "intelligence" is ultimately limited to predefined objectives and learned associations. Unlike humans, AI lacks consciousness and subjective experience. It does not "understand" in the way that humans do—it processes information but does not "know" or "feel" anything. While AI can generate human-like responses in language models or create artistic works, it does so without genuine comprehension, intent, or emotional investment. AI can analyze millions of paintings to create an artwork, but it does not appreciate beauty, nor does it have an artistic vision (Han et al., 2021).

Furthermore, AI's general intelligence remains an open challenge. While it excels in specific tasks such as chess, medical diagnosis, data analysis, it struggles with general intelligence the ability to transfer knowledge across different domains, think abstractly, and adapt to entirely new situations. Humans, by contrast, exhibit common sense reasoning and situational awareness, allowing them to navigate uncertainty, interpret nuanced information, and engage in creative problem-solving. While AI has made impressive strides in areas like natural language processing, pattern recognition, and autonomous decision-making, it still lacks key elements that define Human Intelligence self-awareness, emotional depth, and an intrinsic understanding of the world (Okpara, 2023).

Can Artificial Intelligence Be Considered "Intelligent"?

One of the core debates in AI philosophy is whether intelligence should be defined by behavior or by understanding. Alan Turing proposed the Turing Test, suggesting that if a machine's responses are indistinguishable from a human's in a conversation, it can be considered intelligent. This functionalist view shifts the focus from internal consciousness to observable behavior, arguing that outward performance is sufficient to attribute intelligence. However, this position has been heavily critiqued. John Searle's Chinese Room Argument presents a compelling rebuttal, suggesting that even if a

machine can convincingly simulate understanding by manipulating symbols according to a program, it does not actually comprehend the meaning behind them. The machine behaves as if it understands, but there is no genuine understanding taking place no intentionality or semantic grasp of the information it processes. This raises a critical question, is intelligence merely about producing the right output, or must it involve internal states of awareness and meaning? Searle's critique implies that intelligence, at least in its richer human sense, requires more than behavior it involves mental content, understanding, and experience (Nikitenko, 2024).

The distinction between symbolic AI and connectionist AI deepens this philosophical inquiry. Symbolic AI, based on logic and explicit rules, attempts to emulate human reasoning in a structured and transparent way. It reflects a top-down approach, mapping intelligence to a system of rules and symbols. On the other hand, connectionist AI like neural networks and deep learning takes a bottom-up approach, learning from data by adjusting internal weights through experience. These systems can perform complex tasks such as image and speech recognition, language translation, and strategic gameplay. However, despite their sophistication, they often operate as black boxes, lacking explainability and a true grasp of the concepts they manipulate. Moreover, connectionist systems, while effective in specific contexts, still lack

general intelligence the ability to transfer knowledge across domains, understand context, and reason abstractly. They can outperform humans in narrow tasks but are brittle when faced with novel or ambiguous situations. Unlike humans, who can learn from a single experience or apply moral reasoning to unexpected dilemmas, AI requires vast amounts of data and training to handle even mildly altered inputs (Markauskaite et al., 2022).

Philosopher David Chalmers introduces the “Hard Problem of Consciousness” to underscore the limits of this approach. Even if an AI system could perfectly emulate human behavior, it would not necessarily have subjective experience or awareness. Chalmers distinguishes between the “easy problems” of consciousness such as processing sensory input or producing behavior and the “hard problem,” which involves explaining how and why physical processes in the brain give rise to the qualitative experience of being. This problem remains unresolved and casts doubt on the notion that machines, regardless of their complexity, could ever achieve consciousness in a human-like way. Thus, while AI systems may exhibit intelligent behavior, they fall short of the deeper philosophical criteria for intelligence rooted in understanding, intentionality, and awareness. The gap between syntactic manipulation and semantic comprehension remains wide, raising doubts about whether AI can ever be truly intelligent in the human sense. This debate has significant implications not

only for philosophy but also for ethics, policy, and the design of future AI systems. Before such systems can be trusted to make autonomous decisions or interact with humans meaningfully, it must be clear whether their "intelligence" is real or merely an illusion crafted by advanced computation (Anwar et al., 2022).

Epistemological Considerations: Can AI "Know" Things?

AI's ability to process information does not necessarily equate to knowledge. While AI systems can identify patterns, generate predictions, and even produce human-like responses, they do so without any true grasp of meaning. Epistemologically, knowledge involves more than the accumulation or processing of information; it requires understanding, justification, and often an experiential or contextual grounding. Human beings acquire knowledge through direct experience, interpretation, reflection, and social interaction. In contrast, AI operates through probabilistic models, training data, and algorithmic structures, devoid of any consciousness or lived experience. AI's "knowing" is procedural and external; it follows instructions, optimizes outputs, and updates based on new data. However, it lacks the capacity for intentionality, a concept in philosophy of mind referring to the "aboutness" of mental states, where human thoughts are about something, grounded in meaning and directed toward objects, ideas, or experiences. AI does not know about anything in this

sense; it merely processes representations of data according to programmed functions (Nikitenko, 2024).

This distinction becomes clearer when considering the difference between data processing and understanding. An AI language model may correctly respond to the question "What is the capital of France?" by stating "Paris." However, it does not know what Paris is, nor does it understand the concept of a "capital city." Its answer is the result of learned statistical associations within language patterns, not conceptual understanding or geographical awareness. A deeper epistemological issue arises when examining the concept of qualia, the subjective, qualitative aspects of experience, such as the redness of red or the pain of a headache. AI systems, no matter how sophisticated, lack the capacity for such first-person experiences. They do not see red, feel pain, or savor joy. This absence of qualia places a significant limit on their cognitive potential, as much of human knowledge is derived from sensory and emotional experience. Philosophers like Thomas Nagel and Frank Jackson have emphasized that there is something it is like to be a conscious being, a perspective that AI simply cannot access (Markauskaite et al., 2022).

Furthermore, embodied cognition, a theory suggesting that intelligence is shaped by the body's interaction with the environment, also highlights AI's limitations.

Humans learn and understand not just with the brain but through physical engagement with the world. AI, by contrast, is typically disembodied, interpreting data abstractly without tactile, emotional, or environmental involvement. Even with the development of robotic AI, such embodiment is rudimentary and lacks the emotional depth and subjective coherence that characterize human experience. Another key point is contextuality. Human knowing is deeply contextual; meaning is drawn not only from content but from culture, history, language nuances, and personal experience. AI systems may perform well in tasks with clear parameters, but they often fail when interpretation requires subtlety, ambiguity, or moral sensitivity areas where humans use wisdom, intuition, and lived understanding (Popa, 2021).

Challenges and Limitations of Artificial Intelligence

While AI systems demonstrate impressive performance in specific domains such as image recognition, natural language processing, and data analysis, their limitations become apparent when these systems are required to engage in tasks that demand understanding beyond raw data processing. AI's inability to possess consciousness, subjective experiences, or intentionality underscores its fundamental distinction from human cognition. Despite its proficiency in pattern recognition and decision-making based on statistical models, AI lacks the depth of experiential understanding that enables

humans to interpret context, nuance, and emotional significance in situations. AI's capacity to learn is dependent on pre-programmed algorithms and vast datasets, but it is unable to understand the meanings or implications of the information it processes in the way humans do. For example, while AI can translate languages with high accuracy, it cannot fully comprehend the cultural, emotional, or historical contexts that often shape the meaning of words or phrases. This gap in comprehension is particularly significant in areas that involve moral reasoning or ethical decision-making, where AI struggles to apply value-based judgments or adapt to complex and changing environments in ways that humans intuitively do (Nikitenko, 2024).

Additionally, the absence of true creativity and insight is a notable limitation of AI. AI-generated art, music, or solutions, while sometimes impressive, are the result of statistical inferences drawn from existing data, rather than original thought or emotional expression. AI systems are confined to the boundaries of their programming and training data, unable to generate genuinely novel ideas or reflect on their existence in a meaningful way. As AI technology advances, these limitations highlight essential questions about the nature of intelligence itself, challenging assumptions about what it means to "understand" or "know" something. Understanding these boundaries is crucial for determining the appropriate roles of AI in human societies, ensuring

that its use aligns with ethical standards and complements, rather than replaces, human cognition (Markauskaite et al., 2022).

Ethical and Existential Implications

As AI advances, ethical concerns surrounding its role in society become increasingly pressing. Questions arise about AI's autonomy and moral responsibility, if AI systems make decisions, who is accountable for their actions? This is particularly important in high-stakes domains such as autonomous vehicles, medical diagnostics, and criminal justice, where AI-driven decisions can have life-altering consequences. Since AI lacks intentionality and moral awareness, it cannot be held responsible in the same way humans can. Responsibility thus shifts to developers, users, and policymakers, raising complex issues of liability, transparency, and ethical design (Stadelmann et al., 2023).

Furthermore, AI's ability to create artistic and literary works challenges the traditional notion of human creativity. Algorithms can now compose symphonies, paint portraits, write poetry, and even produce screenplays. While these creations may resemble human art, they are not born of emotion, intention, or lived experience. This prompts a critical philosophical question, is creativity defined by the product or the process? If the essence of creativity lies in expressing inner consciousness and emotional depth, then AI-generated art, though impressive, may lack

authenticity. The public's increasing acceptance of AI-generated content suggests a cultural shift in how we value and define artistic expression. Perhaps the most profound question is how AI influences human identity. As AI systems begin to outperform humans in a wide range of intellectual and practical tasks, we are forced to reevaluate what it means to be human. Historically, human intelligence was seen as the defining trait that separated us from other beings. But if machines can now learn, reason, and create sometimes more efficiently than we can—then what remains distinctively human? This question strikes at the heart of existential philosophy. Human beings are not merely rational agents; we are self-aware, emotionally complex, and morally responsible. We experience the world through consciousness, form meaningful relationships, and reflect on our own existence. AI, regardless of its computational prowess, lacks this existential dimension. It does not wonder, hope, fear, or suffer. Therefore, while it may simulate intelligence, it cannot replicate the fullness of human existence (Nikitenko, 2024).

Moreover, the growing integration of AI into the workplace and daily life raises concerns about human agency. As machines automate decision-making and productivity increases, there is a risk that human roles may become diminished or obsolete in certain sectors. This could lead to psychological and societal consequences, such as loss of purpose, identity crises, and increased dependence on

machines. The ethical challenge lies in designing AI systems that enhance human capabilities without eroding human autonomy and dignity (Okpara et al., 2024).

Conclusion

Despite AI's growing capabilities, it remains fundamentally different from human intelligence (HI) due to its lack of consciousness, self-awareness, and emotional depth. While AI can mimic intelligent behavior and even outperform humans in specific tasks, it does not truly understand or experience the world as humans do. Its intelligence is based on data processing and pattern recognition, whereas human intelligence is grounded in lived experiences, subjective perception, and emotional depth. This distinction highlights the philosophical debates surrounding AI's potential for self-awareness and its ability to replicate or even surpass human cognition. Philosophical discussions on AI's potential for self-awareness and consciousness are ongoing. Some argue that AI, no matter how sophisticated, will never possess true understanding or subjective experience. Others suggest that the future may hold breakthroughs that could allow AI to approach or even mimic human consciousness. However, the development of AI that can simulate human-like cognition raises critical ethical concerns. The question of moral responsibility in AI decision-making, the implications for human creativity, and the potential for societal disruption all point to the need for

Careful, ethically informed AI development. As AI technology continues to advance, society must confront the profound implications of its integration into everyday life. While AI has the potential to transform industries and improve lives, it must be developed and deployed in ways that preserve the essence of human intelligence and dignity. By carefully navigating the ethical and existential challenges posed by AI, humans can ensure that its growth aligns with the preservation of human agency and the values that define humanity.

References

- Anwar, M. R., Oganda, F. P., Santoso, N. P. L., & Fabio, M. (2022). Artificial intelligence that exists in the human mind. *International Transactions on Artificial Intelligence*, 1(1), 28-42.
- Han, S., Kelly, E., Nikou, S., & Svee, E.-O. (2021). Aligning artificial intelligence with human values: reflections from a phenomenological perspective. *AI & Society*, 23(5). <https://doi.org/10.1007/s00146-021-01247-4>
- Kanu, A. I., Addidi, T. & Kanu, C. C., "Artificial intelligence and cybercrime in Nigeria: Towards an Ethical framework". *Dialogue and Universalism*. 32(1) 143-158, 2024.
- Kanu, I. A. (2020). "Igwebuiké philosophy of science and technology". *Nnadiabube Journal of Education*. Vol. 5. No. 4, pp. 64-74.

- Kanu, I. A. and Ndubisi, J. O. E. (2022). "Artificial intelligence and socio-economic development in Africa". *OCHENDO: An African Journal of Innovative Studies*. Vol. 3. No. 1. pp. 2-21.
- Onyiah, S. C.; Ndubisi, J. O. E; Kanu, A. I. (2024). "Navigating the Ethical Implications of Artificial Intelligence through Carol Gilighan's Ethics of Care." *Aquino Journal of Philosophy*. Vol. 4. No. 2. pp. 1-12.
- Kanu, A. I. & Okpokwasili, O. A. (2025). "Artificial Intelligence and Digital Colonialism in Africa." *International Journal of Intercultural Values and Indigenous Ecoethics*. Volume 5. Number 2. 14-24.
- Markauskaite, L., Marrone, R., Poquet, O., Knight, S., Martinez-Maldonado, R., Howard, S., ... & Siemens, G. (2022). Rethinking the entwinement between artificial intelligence and human learning: What capabilities do learners need for a world with AI?. *Computers and Education: Artificial Intelligence*, 3, 100056.
- Markauskaite, L., Marrone, R., Poquet, O., Knight, S., Martinez-Maldonado, R., Howard, S., Tondeur, J., De Laat, M., Buckingham Shum, S., Gašević, D., & Siemens, G. (2022). Rethinking the entwinement between artificial intelligence and human learning: What capabilities do learners need for a world with AI? *Computers and Education: Artificial Intelligence*, 3(3), 100056.

<https://doi.org/10.1016/j.caeai.2022.100056>

- Neubauer, A. (2021). The future of intelligence research in the coming age of artificial intelligence – With a special consideration of the philosophical movements of trans- and posthumanism. *Intelligence*, 87(32), 101563. <https://doi.org/10.1016/j.intell.2021.101563>
- Nikitenko, V., Voronkova, V., Kyvliuk, O., Oleksenko, R., & Suhenko, V. (2024). Philosophical reflection on artificial intelligence and its impact on the development of society, human, and education. *Humanities studies*, 19(96)
- Okpara, G. C. (2023). Nigerian philosophy of education: An appraisal. *Nigerian Journal of African Studies (NJAS)*, 5(3). <https://nigerianjournalonline.com/index.php/NJAS/article/view/3884>
- Okpara, G. C., Ekeh, G., Abiakwu, O. F., Ezeanolue Aloysius, O., & Nwankwo, B. C. (2024). From Socrates To Screens: Examining The Evolution Of Socratic Dialogue In Online Education. *Multidisciplinary Journal of Law, Education and Humanities*, 1(1).
- Popa, E. (2021). Human Goals Are Constitutive of Agency in Artificial Intelligence (AI). *Philosophy & Technology*, 34(4), 1731–1750. <https://doi.org/10.1007/s13347-021-00483-2>

Stadelmann, T., Davison, A., & Dürr, O. (2023).
Assessing deep learning: a work program for
the humanities in the age of artificial
intelligence. *AI and Ethics*, 12(5).
<https://doi.org/10.1007/s43681-023-00408-z>