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# THE QUESTION OF INTELLIGENCE IN THE PHILOSOPHY OF ARTIFICIAL INTELLIGENCE[1]

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**Abstract**

For more than seven decades, the question of whether it is possible to create intelligent machines has become the central debate in the philosophy of Artificial Intelligence. Many AI researchers, such as Simon and Newell (1958), McCarthy (1978), believe that it is possible to create thinking machines. This view apparently is the mainstream in today's discourse of Artificial General Intelligence (AGI). This study extends the criticisms put forward by Dreyfus (1965), Searle (1980) and Chomsky (2012), who rejected the possibility of creating thinking and conscious machines. The main questions about the definition of intelligence and intellect are expounded especially from the perspective of Islamic tradition. The limitations of modern Western knowledge on the intellect and the reductionist tendency of Western scientists who limit the human mind to physical neurons have brought about confusion on the possibility of modern technology to create machines that are smarter than the smartest human being. To

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deliberate on this matter, the author refers to the works of scholars in the fields of philosophy and religion who have dealt with the question of human intelligence, culminating in an in-depth account by Muslim philosophers such as al-Ghazālī (1058-1111) and al-Attas (born 1931) regarding the nature of human intellect and of knowledge.

**Keywords**: Intelligence; Artificial Intelligence; Artificial General Intelligence; intellect; Islamic intellectual tradition.

**Khulasah**

Selama lebih tujuh dekad, persoalan apakah mungkin untuk menciptakan mesin yang cerdas telah menjadi perdebatan utama dalam falsafah Kecerdasan Buatan. Ramai penyelidik AI, seperti Simon dan Newell (1958), McCarthy (1978), percaya bahawa adalah mungkin untuk manusia menciptakan mesin yang berfikir. Pandangan ini, kelihatannya, telah menjadi arus perdana dalam wacana AGI (Artificial General Intelligence) hari ini. Kajian ini melanjutkan kritikan yang dikemukakan oleh Dreyfus (1965), Searle (1980) dan Chomsky (2012) yang menolak kemungkinan terciptanya mesin yang berfikir dan sedar. Persoalan utama tentang definisi kecerdasan dan akal dibahas terutamanya daripada perspektif tradisi Islam. Keterbatasan pengetahuan sains moden tentang akal, dan kecenderungan reduksionis para saintis Barat yang menghadkan minda manusia kepada neuron-neuron yang bersifat fizikal telah menyebabkan kekeliruan tentang kemungkinan teknologi moden untuk menciptakan mesin yang memiliki kecerdasan yang mengatasi manusia. Untuk membahas persoalan ini, penulis mengemukakan pandangan para ilmuwan falsafah dan agama yang telah membahaskan persoalan tentang kecerdasan manusia, dan memuncak kepada perbahasan yang mendalam oleh ahli falsafah Muslim seperti al-Ghazālī (1058-1111) dan al-Attas (lahir 1931) mengenai hakikat akal dan ilmu pengetahuan manusia.

**Kata kunci**: Kecerdasan; kecerdasan buatan; kecerdasan buatan am; akal/intelek; tradisi intelektual Islam.

## Introduction

The Philosophy of Artificial Intelligence (AI) explores fundamental questions regarding AI. The very fundamental question all AI researchers tried to answer was can a machine think? While this question is in fact a very old one, it has taken a particular turn since the advent and prevalence of electronic computers as mathematical machines. Through computer science and engineering, this question has now transformed into questions like: Could machines solve problems that are usually solved by humans by thinking? Could machines be in possession of reason and consciousness like humans? Could reason and consciousness emerge from the complex computations of computers?

In 1956, a group of computer scientists, mathematicians and engineers gathered in Dartmouth to solve this question once and for all, i.e. to produce the "thinking machine". This gathering was the result of the Dartmouth Proposal and is considered to be the very first concentrated collective effort in answering these questions under the banner of "Artificial Intelligence". Despite its tumultuous ups and downs, AI is now a recognised field of study that seeks to create machines that are able to simulate human cognitive behaviour.[2]

Attempts to create human-like beings with some kind of intelligence and consciousness have had a long history. The various tales of Golem and Frankenstein are examples of such aspirations, but not without some warning of human overconfidence and hubris. In 1947, however, Alan Turing, having created the world's first "computing machine" that led to the victory in the Second World War, now discusses

[2] Daniel Cravier, *AI: The Tumultuous History of the Search for Artificial Intelligence* (New York: Basic Book, 1993), 41.

the possibility of a thinking machine. He asserted: "if a machine can answer any question posed to it, using the same words that an ordinary person would, then we may call that machine intelligent". [3] However, according to Stevan Harnad, through a paper entitled "Computing Machinery and Intelligence", Turing had changed his question from "can machines think?" to "can machines do what we, as thinking entities, can do?".[4] This is to avoid the disputes and refutations that he has received regarding the ability of machines to think like humans.

Despite disputes over the notion of intelligence and thinking, the effort to create "thinking" machines continued. Herbert Simon maintained that contemporary computer science has achieved great success in creating a thinking machine:

> "It is not my aim to surprise or shock you, but the simplest way I can summarise is to say that there are now in the world machines that think, that learn and that create. Moreover, their ability to do these things is going to increase rapidly until, in a visible future the range of problems they can handle will be coextensive with the range to which the human mind has been applied."[5]

[3] Alan Turing, "Intelligent Machinery" (1948) was not published by Turing, and did not see publication until 1968 on C. R. Evans & A. D. J. Robertson, *Cybernetics: Key Papers* (Pennsylvania: University Park Press, 1968).

[4] Turing, *Computing Machinery*, 433-460; Stevan Harnad, "The Annotation Game: On Turing (1950) on Computing, Machinery, and Intelligence," in *The Turing Test Sourcebook: Philosophical and Methodological Issues in the Quest for the Thinking Computer*, eds. Epstein, Robert & Peters, Grace (n.p.: Springer, 2009), 23-66.

[5] Herbert A. Simon & Allen Newell, "Heuristic Problem Solving: The Next Advance in Operations Research," *Journal of the Operations Research Society of America* 6(1) (1958), 9. Reprinted in Herbert

From a philosophical point of view, Simon holds the assumption that the human brain is not mysterious or unknowable. Like any other physical phenomena, it can be described mechanically, i.e. the brain consists of a vast neural network and hence the intellect is an emergent entity that results from this very complex system. The recent discovery in the field of neuroscience asserted that the human brain consists of 86 billion neurons, which produce trillions of neural connections.[6] It is assumed that through these neural connections, the brain processes information and solves problems. In other words, intelligence could be reduced to information processing, or to put more bluntly, "intelligence *is* information processing."

By reducing the human brain to neural networks, a natural question to ask is: Could a similar system of neural connections be created from computers that are complex enough to run simulations of such connections? On top of that, this simulated system is then given access to enormous amounts of information. The human ability to make decisions can be imitated by computers by processing all the data obtained and then finding a solution to a problem by using the heuristics (trial and error) method and "means-end" analysis. Simon concluded that "Computers could possibly be said to be intelligent since they use heuristic and means-end analysis to solve problems just like us."[7] With the same capabilities in computers, Simon concluded that machines are now able to think, learn, and create, "machines will be capable of doing any work a man can do."[8]

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Simon, "Models of Bounded Rationality," in *Economic Analysis and Public Policy* (Cambridge, MA: MIT Press, 1982), vol. 1.

[6] Cravier, *AI: The Tumultuous History*, 287.

[7] Roger Frantz, "Herbert Simon: Artificial Intelligence as a Framework for Understanding Intuition," *Journal of Economic Psychology* 24(2) (2003), 265-277.

[8] Cravier, *AI: the Tumultuous History*, 109.

This article seeks to address the fundamental question in this important debate: Could machines truly think like humans? What do we mean by the word 'intelligence' in the phrase artificial intelligence? Does the word intelligence here refer to the faculty of reason, the same rational faculty that defines humans, i.e. the essence of humanity that distinguishes it from animals, the thing that drives philosophers to define humans as "rational animals"? Could the advancement of AI result in machines becoming intelligent beings the same way humans are? Could something physical be manipulated to achieve a level of complexity such that human-like intelligence and consciousness emerge from it? By addressing this important issue in an in-depth manner, we believe we could address the source of confusion regarding the possibility of creating thinking machines, which was later known as Artificial General Intelligence (AGI). Recent discussions have emerged regarding the issues surrounding the contrast between the concepts of intelligence and the human soul. One of them is an analysis of the contrast between two branches of computational theory, namely the strong symbol systems hypothesis (SSSH) and the artificial neural networks (ANN), with the Islamic framework for the psychology of the human soul.[9]

**The Discourse on Artificial General Intelligence (AGI)**

With the help of research on neural networks, deep learning, and large language models (LLM), AI researchers have successfully developed computer systems that could simulate the way humans process information and solve problems. Recent developments include AlphaZero (2017), developed by Google DeepMind, a system that can play chess far better than humans, and GPT-3 (2022), developed

[9] Juris Arrozy and Wendi Zarman, "Philosophical Underpinnings of Artificial Intelligence and the Concept of the Human Soul in Islam: Some Issues at the Interface", *TAFHIM: IKIM Journal of Islam and the Contemporary World, 17*(1), 23–55.

by OpenAI, which can generate human-like conversations, answer questions, engage in dialogues, and write essays. These achievements are the result of not just decades of research and development but also due to the exponential increase in computing power and the abundance of data on human interactions over the World Wide Web, spurred by social media. Remarkable as they are, these achievements are still a far cry from coming close to AGI. They have nonetheless endowed many scientists and AI technologists with renewed confidence in creating machines that are conscious, self-aware, sentient, and possess cognitive skills like humans, after decades of uncertainty, dead ends, and even controversies. AGI is now considered the Holy Grail in technology.[10]

The discourse on AGI began when AI researchers attempted to develop a thinking machine, a topic that has been discussed since the 1950s, particularly by Alan Turing. It declined in the 1980s and only regained momentum after significant advancements in neural network research. Artificial General Intelligence (AGI), or "Strong AI" according to Searle, is defined as: "The appropriately programmed computer with the right inputs and outputs would thereby have a mind in exactly the same sense human beings have minds."[11]

In the book titled *Genesis*, Henry Kissinger, Craig Mundie, and Eric Schmidt state that the next generation of AI will be conscious and have self-awareness, even self-interest.[12] Eric Schmidt, in an interview, asserted that AGI (Artificial General Intelligence) will be created within 3-5

[10] Mary Anne Gobble, "The Road to Artificial General Intelligence," *Research-Technology Management* 62(3) (2019), 55-59. The term "holy grail" here refers to the goal of an unending quest.

[11] John Searle, "Minds, Brains and Programs," *The Behavioral and Brain Sciences* 3(3) (1980), 417-457.

[12] Henri A. Kissinger, Craig Mundie, Eric Schmidt, *Genesis: Artificial Intelligence, Hope and the Human Spirit* (New York: Little, Brown and Company, 2024), 192.

years, and ASI (Artificial Super Intelligence) will emerge thereafter.[13] Schmidt defines AGI as a machine that is "as smart as the smartest human" and ASI as a machine that is "smarter than the sum of humans". In the book *Genesis*, it is said that the development of AI will enable humans to improve themselves to become perfect (human self-engineering) and could thereby redesign the human race.[14] They say that AI will be able to "set its own objective functions", and when this happens, the question of how we humans can control AI and ensure that its actions do not conflict with human interests arises. Realising the threats and risks that come with this development, they propose the development of AI that aligns with human values (AI-human alignment). [15] There is, however, no detailed explanation of how this could be achieved, i.e., imposing some kind of "morality" on machines when humans themselves often disregard their own agreed-upon moral values.

Since 1999, Raymond Kurzweil, in his book The Age of Spiritual Machines, has predicted that AI will become a conscious entity with its own will, possessing intelligence equivalent to that of 1,000 humans. With this extraordinary intelligence advantage, we will not be able to distinguish between machines and humans.[16] He predicts that Artificial

[13] Eric Schmidt, "Dr. Eric Schmidt," *Youtube Special Competitive Studies Project*, 11 April 2025, https://www.youtube.com/watch?v=L5jhEYofpaQ.

[14] Kissinger et al., *Genesis: Artificial Intelligence*, 168. They also maintained: "We may soon have the power to determine the pace and direction of our own species…Perhaps such experiments are sacrilegious. Or maybe the human ability to invent these technologies is itself a hint that what we have perceived as our limit was always to be broken. If there is a Creator, were we created that we might ultimately create ourselves?".

[15] Kissinger et al., *Genesis: Artificial Intelligence*, 194.

[16] He stated: "The distinction between us and computers will have become sufficiently blurred that when the machines claim to be

General Intelligence will emerge in 2029, marking a new stage in human evolution: "I regard the freeing of the human and the human mind from its severe physical limitation of scope and duration as the necessary next step in evolution."[17]

Although still in the form of imagination, several writers have predicted that various risks will occur with the development of AGI. Nick Bostrom, in his book titled *Super Intelligence: Paths, Dangers, and Strategies* (2014), contends that the AI revolution will transform humanity. He argues intelligence is a matter of degree, and AI *will* eventually be conscious of the reality around it, just like humans. According to him, when superintelligence emerges, humans will not only be rivalled but also dominated and suppressed by it.[18] This was acknowledged by Stephen Hawking, who said:

> "The development of full artificial intelligence could spell the end of humanity... It would take off on its own, and re-design itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn't compete and would be superseded."[19]

Having said that, Bostrom also discussed the possibility of developing AGI or ASI in line with human values. If this can be done, then we can be in control of the

conscious, we will believe them." Ray Kurzweil, *The Age of Spiritual Machines* (New York: Viking Press, 1999), 162-170.

[17] Ray Kurzweil, "Are We Becoming an Endangered Species? Technology and Ethics in the Twenty First Century," *The Kurzweil Library*, 20 November 2001, https://www.thekurzweillibrary.com/are-we-becoming-an-endangered-species-technology-and-ethics-in-the-twenty-first-century.

[18] Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford University Press, 2014), 93-95.

[19] Stephen Hawking interview with BBC News 2014. BBC News, "Stephen Hawking: 'AI could spell end of the human race'", December 2, 2014, https://www.youtube.com/watch?v=fFLVyWBDTfo

superintelligent machines. In 2016, Sam Harris asserted: "We are in the process of building some sort of god. Now would be a good time to make sure it would be a god we can live with".[20] His usual anti-theistic views are very manifest here. If nothing else, this statement betrays a clear picture of the philosophy and spirit underlying the development of AI in the West.

In his effort to depict a coexistence between humans and AI, Yuval Noah Harari writes in *Homo Deus* (2016) that in the near future humans will be governed by machines and data. We will all fully submit to what the data provides. Dataism will become a new religion, and the old god will be replaced with the new god. In his latest book, *Nexus* (2024), Harari asserts further:

> Knives and bombs do not themselves decide whom to kill. They are dumb tools, lacking the intelligence necessary to process information and make independent decisions. In contrast, AI can process information by itself and thereby replace humans in decision making. AI isn't a tool–it's an agent.[21]

The term intelligent agent refers to an autonomous entity that performs various tasks without external intervention, be it human or divine. In the world of economics, the term "agency" not only refers to humans but can also refer to corporations.[22] In this categorisation, machines are also identified as agents that have personality,

[20] Ted Talk, June 2016 https://www.ted.com/talks/sam_harris_can_we_build_ai_without_losing_control_over_it

[21] Yuval Noah Harari, *Nexus* (New York: Random House, 2024), 19.

[22] See for example Arnold, D. G., "Corporate Moral Agency", *Midwest Studies in Philosophy* 30 (2006): 279-291; Danley, J. R. "Corporate Moral Agency: The Case for Anthropological Bigotry", in *Action and Responsibility*, eds. M. Bradie & M. Brand (OH: Bowling Green State University, 1980), 2:140-149.

the ability to think and act independently. Because of this, they are referred to as intelligent agents.

In an interview at Keio University, Harari emphasised that, "There is something on Earth that will very soon, maybe within a few years, surpass us in intelligence. It will be able to make decisions about our lives, will be able to invent everything, from medicines to weapons".[23] Harari also agrees with Kurzweil, who says that AI represents a new phase in human evolution to become what is known as transhuman and posthuman. AI researchers hope that any existing human limitations can be overcome with the help of AI, and humans will become a new type of being, also referred to as artificial humans.[24]

In general, AI researchers believe that physical substrates can be created to have human-like intelligence and consciousness. However, according to Mustafa Suleiman, the debate about whether or not machines with human-like intelligence can be created is a waste of time.[25] The more important question is what this system is capable of doing. For him, AGI is the point at which an AI can perform all human cognitive skills better than the smartest humans. It is important to note that he used the word "perform" for something typically done by humans. This means that the machine does not necessarily need to have reason, consciousness, and feelings like humans, but what is required is the ability to perform tasks that humans do.

**The Meaning of Intelligence and Intellect**

The term 'intelligence' was not known in the time of Plato and Aristotle or in the time of Aquinas and Ockham. According to the *Oxford Dictionary*, the term 'intelligence'

[23] Yuval Noah Harari, "Human Dignity in the Age of AI," *Youtube Yuval Noah Harari*, 9 May 2025, https://www.youtube.com/watch?app=desktop&v=2QXGDj9SAnI.

[24] Kissinger et al., *Genesis: Artificial Intelligence*, 210.

[25] Mustafa Suleiman, *The Coming Wave: AI, Power and Our Future* (London: Vintage, 2024), 74.

only appeared in the late 14th century to refer to 'human cognitive ability', 'the mental manifestation of the intellect', 'the capacity to understand'. [26] The term 'intelligence' is derived from the word 'intellect', which is used to refer to humans who possess good cognitive skills, creativity and intelligence. Therefore, the word 'intelligent', as an adjective, is more commonly used, while the word 'intelligence', which is a synonym for "intellect," has not been used much until recently.

Today, the word intelligence, which was previously used uniquely to refer to humans, has been expanded to include animals.[27] And now machines can also be said to possess "intelligence". According to AI researchers, the human ability to create "thinking machines" can change the way humans perceive reality:

> "The advent of AI will alter humanity's concept of reality and therefore of itself. We are progressing toward great achievements, but those achievements should prompt philosophical reflection. Four centuries after Descartes promulgated his maxim, a question looms: If AI "thinks," or approximates thinking, who are we?"[28]

The confusion regarding the nature of the intellect began with the emergence of mechanical philosophy, which

[26] The Oxford English Dictionary defines intelligence as, "the faculty of understanding; intellect; a mental manifestation of this faculty, a capacity to understand." See; "intelligence", *Oxford English Dictionary*, accessed on 25th April 2025, https://www.oed.com/dictionary/intelligence_n?tab=meaning_and_use#214347

[27] In a paper published by BBC Science Focus (published on July 13, 2023), it is stated that chimpanzees, dolphins, and octopuses are among the animals that possess intelligence like humans. See: Patrick Pester, "Top 10 Smartest Animalin the World," *BBC Science Focus*, July 13th 2023, https://www.sciencefocus.com/nature/smartest-animals.

[28] Kissinger et al., *Genesis: Artificial Intelligence*, 210.

rejects the existence of the soul or spirit within humans. René Descartes (1596-1650) and Thomas Hobbes (1588-1679) both originated from the streams of mechanical philosophy and materialism. Descartes argued that the difference between humans and animals is that animals are like machines; they do not have a mind, and therefore, they are not sentient beings.[29] According to Descartes, the intellect and the human body are two separate substances, each capable of standing on its own. This dualism raises a significant question: how can something non-material affect a material entity? Descartes tried to answer that a vein at the base of the human brain called the pineal gland functions to connect the brain with the intellect. Descartes identified the pineal gland as the place where thinking activities occur and move all parts of the brain mechanistically.[30] This dualism between the intellect and body further reinforces the materialist view that emphasises a person's mental state as part of their bodily state, that a person's intellect is a part of the body, not the soul.

The mechanical philosophy and materialism were further reinforced by the emergence of Thomas Hobbes (1588-1679), who stated that both humans and animals, including the human intellect itself, are machines:

> "For seeing life is but a motion of limbs, why may we not say that all automata (engines that move themselves by springs and wheels as does a watch) have an artificial life? For what is the heart, but a spring, and the nerves, but so many springs; and the joints, but so many wheels, giving motion to the whole body?"[31]

[29] René Descartes, *Discourse on Method*, part V (Edinburgh: Sutherland and Knox, 1850), 97.
[30] René Descartes, *Treatise on Man*, trans. Tim Newcomb (Cambridge, MA: Harvard Univ. Press, 1972), 63.
[31] Thomas Hobbes, *Leviathan* (Oxford: Clarendon Press, 1909), 23.

This is essentially what we call the secularisation of man and his intellect.[32] The philosophy of materialism and the mechanical philosophy that developed since the 17th century view the intellect as nothing more than a machine whose movements entirely depend on physical objects and can be explained empirically. This modern philosophy clearly denies the existence of the soul, which is a fundamental teaching in Western religion and philosophy itself before the emergence and significant influence of mechanical philosophy. Plato with the concept of transcendental realism, Hegel with the concept of *geist*, and Heidegger with the concept of *dasein*, refer to the metaphysical concept of existence or being. However, Western philosophy does not provide a detailed explanation of the concepts of the human spirit and soul.

According to Muslim scholars, the intellect is a spiritual entity unique to humans; even animals with cognitive abilities do not possess intellect. When a machine can do something like what a human does, it does not necessarily mean that the machine is rational and thinking. Therefore, it is important to distinguish between the two forms of statements, as Alan Turing transformed the question "Can machines think?" into the question "Can machines do what humans do?", clearly indicating that there is a significant and important difference between the two.[33]

## Criticism from Western Philosophers

The discourse on thinking machines has actually been addressed by several Western philosophers themselves. American philosopher Herbert Dreyfus has written three

[32] For more exposition on this matter please refer to Syed Muhammad Naquib al-Attas, *Islam and Secularism* (Kuala Lumpur: ISTAC, 1993), 141.

[33] We see this change as indicating that Turing recognized the difference between the goals that can be achieved by this technology and something uncertain or fanciful.

books to critique the work of AI researchers. In his first book on AI, written while serving as a professor at MIT, *Alchemy and Artificial Intelligence* (1964), he highlighted the flawed reasoning of Simon and Newell, who were overly confident in their success in creating a thinking machine. He emphasised that these AI researchers were looking for something that does not exist; they are chasing the philosopher's stone.[34]

His argument was further refined in the second book, *What Machines Can't Do* (1972), which was retitled as *What Machines Still Can't Do*, and the third book, *Mind Over Machine*: *The Power of Human Intuition and Expertise in the Era of the Computer*. Dreyfus questions the ability of machines developed to match human intellect. Dreyfus argues that it is not possible for machines to think like humans because they lack context, that is, they must first be present in reality (being-in-the-world). He concluded that AI researchers base their assumptions on a weak foundation and are indefensible from the perspectives of biology, psychology, epistemology, and ontology.[35]

Obviously, since there are many schools of thought – Dreyfus being an intellectual from the school of phenomenology, while Simon clearly shows characteristics of belief in materialism and mechanical philosophy, whether or not it is admitted – it should be evident that AI is not free from the values stemming from philosophical doctrines. The connection between the AI as developed in the West today and mechanical philosophy is undeniable.

Around the 1970s, John McCarthy (1978) also wrote an article that echoed Simon's writing, titled "Ascribing

[34] Hubert Dreyfus, *Alchemy and Artificial Intelligence*: *Report for Rand Corporation* (Santa Monica, CA: RAND Corporation, 1965), 94. Philosopher's stone is an expression used to describe someone who is searching for something that never existed.

[35] Dreyfus, *What Computers Still Can't Do* (Cambridge MA: MIT Press, 1992), 156.

Mental Quality to Machine." In this article, he describes how a machine can be equipped with qualities that resemble human reasoning. Moreover, McCarthy argues that "a machine can be said to have beliefs"—that machines can also hold beliefs, values, and their own thoughts. And machines can possess all of this because it all involves "problem-solving."[36]

However, his writing was challenged by another philosopher, John Searle (1980). In his article, "Minds, Brains, and Programs," Searle argues that machines will never be able to possess beliefs. This is because machines do not possess consciousness. Consciousness is something unique to humans. Furthermore, machines do not possess the will or intention to do something; instead, they merely follow instructions. Searle put forward a very important argument, namely the Chinese Room Argument.[37]

Simply put, the Chinese Room Argument assumes that AI is like an English speaker who does not understand Chinese. He is placed in a room and given Chinese language documents. His task is to produce output through a process where, without needing to understand the Chinese words, he is able to produce the desired result by just following exact instructions. Similarly, computers, although they lack the ability to understand human language, are still able to produce the desired output.

Therefore, consciousness, thinking, and understanding are not necessary in order for computers to process information, just as a person who does not speak Chinese can produce the outcome without understanding Chinese words, "Computers have no mind, same as an

[36] John McCarthy, "Ascribing Mental Quality to Machine," in *Philosophical Perspectives in Artificial Intelligence*, ed. Martin Ringle (Brighton: Harvester Press, 1979), 161–195.

[37] John Searle, "Minds, Brains and Programs," *The Behavioral and Brain Sciences* 3(3) (1980), 417-457.

English person who performs a task in Chinese characters without knowing the language." Searle further adds that "distinction should be made between simulating a mind and actually having one." Thus, distinction should be made between truly having an intellect, able to perform cognitive activities, such as being conscious, understanding, and thinking, and merely simulating mind activities.

Therefore, it can be concluded that Dreyfus and Searle's objections were directed towards what is known as "strong AI," which claims that machines will be able to think, understand, and make decisions on their own without being programmed by humans. A similar view has been presented by Noam Chomsky (2012), who argues that AGI cannot truly replicate human intelligence because human cognition is not merely about statistical data analysis and pattern recognition.[38] These views, however, remain on the fringes and are rarely regarded as the mainstream view.

**Reason and Intellect in Islamic Tradition**

In the Holy Quran, Allah *Subḥānahū wa Ta'ālā* describes human beings and *jinn* as moral agents who act according to their own will (free will) and therefore, all their actions will be accountable in the hereafter.[39] Prophet Adam and the children of Adam are depicted as beings endowed with intellect and knowledge by Allah. Allah endowed mankind with the faculty of reason so they may understand reality and become knowledgeable.[40] The Holy Quran describes

[38] See the interview conducted by Yarden Katz in the Atlantic. See; Noam Chomsky, "Noam Chomsky on Forgotten Methodologies in Artificial Intelligence," *Youtube Yarden Katz*, Nov. 2 2012, https://www.youtube.com/watch?v=yyTx6a7VBjg&list=PL59ZZdDElkGerx3-zthr9fggzg0wtO_eQ.

[39] Al-Raḥmān: 31; al-Sajadah: 13.

[40] Al-Baqarah: 31; Surah al-Insān: 2, it states "Indeed, we created man from a sperm-drop mixture that We may try him; and We made him hearing and seeing." Fakhr al-Dīn al-Rāzī emphasised that the term *samī'an baṣīran* is a metaphor (*kināyah*) for human understanding and intellect, *al-baṣīr* is *al-'ālim* (a knowledgeable man). See; Fakhr al-Dīn

the intellect as a spiritual entity. In mentioning about the disbelievers who fail to use their hearts to see the truth, the Quran says: "For indeed, it is not the eyes that are blinded, but blinded are the hearts which are within the breasts."[41] The intellect and heart are mentioned almost synonymously. Taken together, it is a spiritual substance by which human beings are able to think, attain knowledge, and develop sciences. Endowed with this very ability, human beings are entrusted with the responsibility of being God's vicegerents on earth. Therefore, there is a close connection between the intellect (*'aql*) and the heart (*qalb*), that both are one and the same entity, not separate.[42] Human beings, therefore, are honoured by Allah *Subḥānahū wa Ta'ālā*, and are favoured over other creatures.[43]

Abū Ḥāmid al-Ghazālī (1058-1111) in several of his works has presented for us a clear and concise understanding of the intellect. He explained that the intellect is a spiritual substance that originates from God and constitutes the essence of man.[44] This indicates the non-materiality of the intellect, yet it is the very entity that operates the physical brain. Neurons and the workings of the brain, therefore, are physical entities that manifest the spiritual ones. The relationship between the two is akin to

al-Rāzī, *Mafātīḥ al-Ghayb* (Beirut: Dār al-Kutub al-'Ilmiyyah, 2009), 210. It refers to the ability of humans to acquire information perceived through the senses, process it into knowledge, to guide them in making accurate and wise decisions. These two attributes are also used to refer to the Attributes of God; however, the Attributes of God are necessary and original, whereas human attributes are contingent and borrowed.

[41] Surah al-Ḥajj: 46.

[42] This can be seen in the verse of the Quran al-A'rāf: 179, which says "لَهُمْ قُلُوبٌ لَّا يَفْقَهُونَ بِهَا" (they have hearts with which they do not understand), referring to the disbelievers.

[43] Al-Isrā': 70.

[44] Abu Ḥāmid al-Ghazālī, *Iḥyā' 'Ulūm al-Dīn* (Jeddah: Dār al-Minhaj, 2013), 5:14. His views are referenced by al-Tahānawī in *Kashshāf Istilaḥāt al-Funūn*. See; Muḥammad bin 'Alī al-Tahānawī, *Kashshāf Istilaḥāt al-Funūn* (Beirut: Dār al-Kutub al-'Ilmiyyah, 1998), 305.

the relationship between bodies and their accidents, the relationship between that which occupies and that which is occupied.[45] Therefore, one should not be confused with the other. The intellect is not the brain, and the brain is not the intellect. However, both cannot be separated, as the intellect requires the brain and the brain requires the intellect to function.

Imam al-Ghazali also explains the relationship between intellect, heart, soul, and spirit. For him, these four names actually refer to the same entity viewed from different perspectives and according to its different functions. The intellect is the entity that acquires and perceives (*mudrik*) knowledge, by which a person understands the essence of things. It is regarded as an advisor and a guide from within the person himself. As for the heart, it functions as the locus of knowledge. It is regarded as the ruler who governs the physical body. The soul is the inner self of man. Through its connection with the body, it possesses the power of anger and desire. The spirit is the source of human life. It has the capacity of knowledge even before being born into the world, and hence is connected to the heart.[46] These spiritual entities, therefore, do not perish when the body dies.

In several of his books, Syed Muhammad Naquib al-Attas (born 1931) expounded on the nature of man and his intellect and stressed his distinctive attributes that are not found in other creatures. In *Prolegomena to the Metaphysics of Islam* (1995), he maintained:

> "Man is a living being possessing that inner faculty of knowing that apprehends the meaning of the universals; that has the power and capacity to articulate words or symbolic

[45] Al-Ghazālī, *Iḥyā' 'Ulūm al-Dīn*, 14.
[46] Al-Ghazālī, *Iḥyā' 'Ulūm al-Dīn*, 14.

> forms in meaningful patterns, he is spirit, soul, heart and intellect manifested in bodily form."[47]

From the explanation above, it is clear that according to al-Attas, the intellect is not a physical or material entity but a spiritual entity. The intellect also possesses the special ability to understand universal meanings, and these include knowledge on important matters in human life, universal ideas concerning humanity, justice, happiness, development, truth, and so on. The intellect also has the ability to produce language, "the power and capacity to articulate words," even artificial computer language in the form of algorithms and algorithmic instructions, which are all part of human creations. Like Imam al-Ghazālī, he also emphasises the unity of the four aspects within a person that are often seen separately, "he is spirit, soul, heart, and intellect manifested in bodily form."

Besides that, al-Attas also emphasised that thinking is a unique activity of the heart, which can only be performed by humans. In other words, to be considered an intelligent being, an entity must possess the ability "to apprehend the meaning of the universals, the power of linguistic expression, the power responsible for the formulation of meaning, judgment, discrimination, distinction, and classification, the articulation of symbolic forms in meaningful pattern."[48] Here, emphasis should be placed on the phrase "formulation of meaning", which refers to the ability to create and generate sciences. This differs from the ability to collect and process information, a feature of AI that exhibits remarkable performance. Furthermore, al-Attas also stressed that "the intellect is then a spiritual substance." Since it is spiritual in nature, the brain or mind,

[47] Syed Muhammad Naquib al-Attas, *Prolegomena to the Metaphysics of Islam* (Kuala Lumpur: ISTAC, 1998), 131.
[48] Al-Attas, *Prolegomena to the Metaphysics of Islam*, 122-123.

which is physical, should not be confused with the intellect; it is merely the container or locus for the intellect.

More precisely, al-Attas also said: "The real nature of *'aql* is that it is a spiritual substance by which the rational soul recognises truth and distinguishes truth from falsity."[49] Here, the intellect is none other than *al-nafs al-nāṭiqah* (the articulate soul), discussed widely by Muslim scholars. It is also the spirit breathed into Adam by Allah, it is the soul that knows God.[50] According to al-Attas, with the intellect, humans are also able to know the particulars and universals, the sensibles and the intelligibles, "so as to make known the relations and distinctions existing between them, and to clarify their nature within these contexts in order to discern and understand their causes, uses, and specific individual purpose." With spiritual intellect, humans are able to acquire knowledge (*ma'rifah*) that Allah has bestowed to a man's heart regarding Himself.[51]

Plato, around 2,400 years ago, also discussed reason as the rational soul. Plato emphasised the importance of human beings disciplining themselves in such a manner that they may not let their desires govern them, but instead act according to reason.[52] Aristotle later added that happiness is a form of activity of the soul that acts according to virtue.[53] However, modern Western scholarship seems to be no longer interested in the rational soul and spirit. In the Islamic tradition, human beings are understood to be in

[49] Syed Muhammad Naquib al-Attas, *The Concept of Education in Islam* (Kuala Lumpur: ISTAC, 1999), 14.

[50] Syed Muhammad Naquib al-Attas, *Islam the Covenants Fulfilled* (Kuala Lumpur: Ta'dib International, 2023), 5; al-Attas, *Islam and Secularism*, 141.

[51] Al-Attas, *Islam the Covenants Fulfilled*, 5; al-Attas, *Islam and Secularism*, 141.

[52] Plato, *Republic*, trans. Robin Waterfield (Oxford: Oxford Univ. Press, 1993), 138.

[53] Aristotle, *Nicomachean Ethics*, trans. J.E.C. Welldon (New York: Prometheos Books, 1987), 30.

possession of an intellect whose primary function is to recognise truth. This is very much contrary to the understanding of reason as developed by Western rationalism, which limits truth to the mere property of statements in relation to empirical facts. The intellect, on the other hand, could see the implied aspects beyond the explicit. Therefore, the ability to recognise and distinguish truth from falsehood (truth-falsity) is not limited to empirical facts. This ability only exists within humans.

Muslim scholars developed the science of Kalam to prove the veracity of the revealed truth, often rejected by sophists and many philosophers. For example, in the Malay world, Nūr al-Dīn al-Rānīrī (1658) presented rational arguments in his book *Durr al-Farā'id* to prove the existence of God.[54] In other words, humans can use both reason and revelation harmoniously to arrive at the truth. This was done by many Islamic scholars to address the confusion raised by atheists and sophists who deny the existence of God and the ability of humans to attain certainty. In line with Imam al-Ghazālī, al-Rānīrī placed reason as the foundation for religiosity and not the other way around, which tends to distance people from religion.

Western scholarship has generally stopped the discussion on the intellect. According to al-Attas in his *On Justice and the Nature of Man*, this is because:

> "In Western intellectual history the concept of intellect and of reason have undergone much controversy, and through a process of secularization as a philosophical program intellect, with its inherent association with the soul, has gradually become separated from

[54] Wan Mohd Nor Wan Daud & Khalif Muammar A Harris, "Kerangka Komprehensif Pemikiran Melayu Abad ke-17 Masihi Berdasarkan Manuskrip *Durr al-Fara'id* Karangan Nuruddin al-Raniri," *SARI: International Journal of the Malay World and Civilisation* 27(2) (2009), 119-146.

> reason and transformed into mind, a non-material yet also non-spiritual substance vaguely related to matter and belonging to the natural order of physical phenomena. The relegation of the intellect and the exaltation of mind as the generator of reason follows logically from the denial of man as soul."[55]

The despiritualisation of the intellect began with the rise of materialism. Particularly when Western philosophers accept the idea of the mind as a "non-spiritual substance". Since their knowledge of the mind is based on external reality, their understanding of it is superficial at best. Therefore, their conclusion about the mind is ever conjectural, suffers from the problem of induction insofar as their understanding of the mind is limited to the study of neurons found in the brain, which supposedly process the information received by the intellect.

However, this contradicts the fact that knowledge and science acquired by humans clearly transcend empirical knowledge. Whereas our knowledge of the intellect, as articulated in the Islamic tradition, is certain, albeit limited. This is because what we know about spiritual matters is limited to what has been revealed to us. Nevertheless, this limited knowledge is sufficient for us to reach the certainty that the intellect is not the physical brain but rather a spiritual entity that occupies that physical substance. Since the discussion of the intellect transcends our empirical knowledge, our understanding of it must be based on revelation. In Islam, revelation can lead to certainty.

It should be clear by now that we deny the possibility of knowing the nature of intellect through mere sense perception, that is, through inductive study alone. We also reject the possibility that it is obtained solely through the

[55] Syed Muhammad Naquib al-Attas, *On Justice and the Nature of Man* (Kuala Lumpur: IBFIM, 2015), 29.

intellect, through deductive study alone. This is because the use of the intellect as an absolute basis for spiritual matters is merely conjectural and therefore cannot be scientifically defended. After these two channels of knowledge, taken by themselves, were rejected, what remains is the channel of revelation as the only valid and scientific one. Once this is affirmed, these three channels of knowledge can be combined in unison: Just as rational arguments can be used to prove the existence of God, the essence of God itself cannot be known through reason alone; it can only be known through revelation. Similarly, knowledge about the essence of reason can only be known through revelation, but its truth can be confirmed by reason and supported by empirical evidence. The truth about the spiritual nature of the intellect, as described in the Quran, is supported by rational arguments, as explained by al-Attas above. Empirical evidence also shows that up to this point, AI has not been able to possess human-like intelligence, such as the ability to generalise, explain, and engage in rational reasoning, as well as the ability to adapt and cross-domain reasoning.[56]

The above explanation clearly renounces substantive dualism, which claims that the mind (soul) and the brain are separate entities that exist independently, and the claim of functionalism, which holds that intelligence and consciousness are merely the product of brain activity, that hence the existence of the soul or intellect is not necessary. Since we believe that the intellect is a spiritual entity provided by the Creator as a cognitive tool which enables man to understand and conceptualise universals, and with this tool, he is able to explore and develop science and technology. We affirm the convictions of the philosophers, Muslims and non-Muslims who underscore the intellect as the essence of man, which distinguishes him from other living beings. Furthermore, the knowledge referred to here

[56] Mustafa Suleiman, *The Coming Wave*, 73.

is not limited to empirical sciences alone but also includes intellectual sciences in general, such as politics, economics, history, sociology, logic, mathematics, as well as intuitive knowledge, such as metaphysics/Tasawwuf, which deals with metaphysical and ontological questions, which again necessitates its spiritual nature.

The philosophy of materialism and mechanism that greatly influenced modern science today, results in a reductionist approach, where the intellect is limited to the brain, which is physical, and the human brain or mind is depicted as a system of connections between neurons driven by electrochemical pulses. After the intellect is reduced to being a physical entity, they subsequently create an artificial brain that mimics the neural connections of the human brain. What is happening here is the secularisation of the intellect. The intellect, according to them, is merely a type of physical phenomenon. Thus, the spiritual nature of human beings, who are in possession of soul and spirit, has been eliminated.

This despiritualisation of the intellect happens in conjunction with the secularisation of man and lowers its status to that of animals, which share their cognitive abilities with humans, albeit in different degrees depending on their stage in the evolutionary process. Next comes the secularisation of knowledge, that is, by limiting knowledge to empirical or sensual knowledge (*ḥissiyyāt*) produced through the senses. Since the time of the Greeks, human beings have recognised what is called a priori knowledge, or intellectual knowledge. In the tradition of Islamic philosophy, it is referred to as *'ilm badīhiyyāt*. Besides empirical knowledge and intellectual knowledge, in the Islamic tradition, we also recognise *wijdāniyyāt* (intuitive knowledge), which is knowledge obtained by the inner intellect of a person without going through rational argumentation or discursive reasoning, but directly

perceived by the human heart. This type of knowledge is also known as *ilhām* (intuition).[57]

Therefore, when many Western scholars say that AI is a thinking machine and possesses consciousness, and that in a few years they will be able to achieve AGI and subsequently ASI, we can be sure that this is not true, and the prediction is something impossible. This assumption is made based on their view that the intellect is merely an information processing tool, and knowledge is mere empirical science. This article explains that the human intellect is not merely composed of tens or hundreds of millions of neurons interconnected with one another, functioning solely to process information and empirical data, making decisions based on choices and scenarios that physically present themselves, but rather, the intellect is a living spiritual entity that animates the physical entity known as the brain. It is the same entity referred to as the soul, heart, and spirit, without which the body would perish. Knowledge acquired by human beings is not limited to information and data obtained through the senses, but also through the use of intellect and intuition, which are also bestowed upon humans by God.

There are many expressions that display arrogance and false pride, resulting from the influence of secularism and positivism. In a situation where AGI is still vague and has not yet become a reality, they are already puffing their chests, claiming to have created a new god. For example, Steven S. Gouveia, editor of the book *The Age of Artificial Intelligence*, says:

> "If Reason killed god in the 20th and 21st century, Reason – philosophy, science and technology – may resurrect it in the form of an Artificial General Intelligence: an AI that may know everything about anything. We should

[57] 'Alī ibn Muḥammad al-Jurjānī, *Kitāb al-Ta'rifāt* (Beirut: Dār al-Nafā'is, 2012), 103 (*badīhiyyāt*), 229 (*maḥsūsāt*), 345 (*wijdāniyyāt*).

> make sure that we create the right kind of god and that we keep it in the right hands."[58]

The secular philosophy of AI, which assumes the ability of machines to surpass human intelligence, does not only circulate within scientific discourse among researchers but has also entered the public sphere and mainstream practices. This can be seen in the definitions provided by several reference sources in defining AI. The *Oxford English Dictionary* defines AI as "the field of study that deals with the capacity of a machine to simulate or surpass intelligent human behaviour."[59] Meanwhile, *Encyclopaedia Britannica* states:

> "The ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the *intellectual* processes characteristic of humans, such as the ability to reason, discover meaning, generalise, or learn from past experience."[60]

Unlike Narrow AI, which focuses on developing technology that simplifies many aspects of human life, the

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[58] Steven S. Gouveia, ed., *The Age of Artificial Intelligence: An Exploration* (Wilmington: Vernon Press, 2020), p. xx. A similar expression has been uttered by Sam Harris (2016) and Henri Kissinger *et. al*. (2024) as discussed above.

[59] *New Shorter Oxford English Dictionary*, 6th ed. (New York: Oxford University Press, 2007.), 126.

[60] B. J. Copeland, "Artificial Intelligence," *Encyclopedia Britannica*, https://www.britannica.com/technology/artificial-intelligence, accessed on April 25th 2025. Compare this with the definition provided by UNESCO: "Systems which have the capacity to process data and information in a way that *resembles* intelligent behaviour, and typically includes aspects of reasoning, learning, perception, prediction, planning or control". See; UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (New York: UNESCO 2021), 5.

discourse on AI as an intelligent agent, including AGI and ASI, contains secular values, the separation of spirit and intellect from the human self and the assumption that humans are merely physical entities. These secular values reflect a secular worldview that places humans on par with animals and machines. However, this Narrow AI technology also has the same problem, namely, the ethical questions of the individuals who operate the technology.

## Conclusion

Recent developments in AI have given hope to AI researchers in the West on the possibility of creating AGI and ASI (Artificial Super Intelligence). We believe this future technology to be implausible. After examining the concept of intelligence in relation to the concept of intellect, its meaning and definition in Islamic and Western traditions, the authors conclude that the term intelligence used for AI does not carry the same meaning as the intelligence possessed by humans. This is because, as a machine, AI is not a rational being; it is merely a machine capable of simulating and performing intelligent behaviour.

In other words, the term intelligence attributed to AI is metaphorical, not literal. Just as the notion of "flying" is often attributed to airplanes, it does not however have the same meaning as "flying" that is associated with a bird. The difference lies in the fact that an aeroplane, unlike a bird, does not fly on its own, that is, by its own will, but is flown by a human pilot; it also depends on external equipment and fuel. Nevertheless, we still attribute flying to the airplane because, just as birds fly, it also flies, which means the concept of "flying" here is borrowed and used metaphorically.

Similarly, AI is called intelligent machines because it is capable of performing tasks that are typically done by intelligent human beings. Hence, it does not mean that the machines could become conscious, sentient, in possession of conscience and intellect, which are the hallmarks of

humanity. These attributes are manifestations of the existence of the soul, spirit, heart, and intellect, which are not possessed by any living beings other than human beings, let alone machines, which are non-living entities.

From the explanation above, it should be clear that AI, and contemporary science and technology in general, are not value-free but are laden with Western values and philosophical doctrines. As a philosophical doctrine, it can deceive many into believing that human beings could evolve to surpass the boundaries that make them weak, ultimately being able to rival the power of God. Even when it is shown to be merely a fantasy and the question of the truth of these claims is nothing more than a triviality, there are many studies that claim to validate it. As a philosophical doctrine, it begins with the assumption that AI is an intelligent agent, capable of making its own decisions without human intervention. It is then considered to have consciousness, feelings, and personality like humans. With the development of AGI, machines will attain superintelligence, and when these machines are combined with humans, humans are expected to become superhuman. All of this is expressed not as a metaphor, but as something real, which has been and is being continuously pursued.

Although the technology has not yet been achieved, what matters is their belief in it. Because the truth is seen as a product of humans, not as something objective that must be firmly held by everyone. The development of the theory of evolution introduced in the 19th century has led many to believe that nature exists by itself and the existence of God as the Creator of the universe is considered a myth. This theory has successfully convinced many people, regardless of the ever-present major gaps in its scientific inquiry, which is very similar to AGI, where its main agenda is to make people believe that modern men have been able to create superintelligent machines. It serves as proof of human greatness, that is, if God is capable of

creating imperfect humans, modern humans are capable of creating perfect beings that will surpass all limitations. It is therefore clear that modern discourse of AGI brings with it the ideologies of atheism and secularism, which ultimately seek to replace the role of religion in human life.

The above discussion also suggests that we should be wary of the term agentic AI, since it assumes that current AI technology has the ability to perform tasks independently without human intervention. Clearly, agency is the effect of intellect and consciousness. It is by virtue of agency that any human being in Islam is considered a *mukallaf*, a moral agent accountable for his actions. Since machines are not intelligent agents and conscious entities, therefore, they should not be regarded as moral agents, not accountable and responsible for their actions. The concept and idea of agency involve not only independent decision-making but, most importantly, the ability to deliver conscious, reflective, and creative actions. Human agency enables man to shape his environment, build civilisation and bring about justice, peace and harmony, without denying any of its shortcomings as part of being human. Therefore, the contemporary notion of agentic AI should be scrutinised and criticised since no AI system can be properly referred to as an agent. In other words, the current discourse of AI is suggesting that besides human agency, there is now machine agency, and these intelligent agents act on their own without human intervention. Humans, according to them, should therefore not be held responsible for the actions committed by the machines.

In short, the development of AI must be done in moderation, that is, by acknowledging its limitations, and hence avoiding the pitfall of AGI and ASI discourse. Since we deny the notion of an intelligent agent for AI, and affirm that there will always be men behind the machines, the question of ethics and responsibility must be of primary importance. Moderation here also entails that the

development of AI should be balanced with the development of ethical human beings who adhere to laws enacted to curb violations and abuses that could threaten peace and well-being, even the survival of humanity.

AI can be developed to enhance virtuous and pious human beings, not atheism and agnosticism. Based on the concept of the unity of knowledge and the idea of integrated knowledge highlighted in the Islamic epistemic framework, Muslims should not be influenced by Western materialism and mechanical philosophy, which negate the existence of non-material entities. Muslims should be able to develop AI based on the worldview of Islam and its metaphysics. Only in this way can we ensure the development of AI that is ethical and beneficial to humanity. Hence, the purpose, framework, and methods of AI development need to be aligned with Islamic ontology, epistemology, ethics, and law (*Sharī'ah*), and it must be a priority and necessity, not something peripheral and optional.

No one can deny the importance of AI technology for humanity. However, it must be remembered that the development of any technology should be directed to the well-being of humanity and not as a challenge to the limits of possibility. As we have pointed out in this article, unfortunately, the focus of AI researchers in the West is to prove human greatness, that humans in the future can transcend all limitations. A better future for all of us depends a lot on our ability to change ourselves from being obsessed with proving "how great we are", especially when the word "we" only refers to a certain group of people, excluding others. On the question of "how it can contribute positively to humanity", it is often pointed out that in the past humans walked, then rode horses, and subsequently invented cars and trains, and now humans have created machines that could fly faster than the speed of sound. Similarly, humans once wrote on cave walls, then on palm fronds, animal skins, and later on paper and computers.

Nowadays, humans can write, socialise, do business, politics, and even conduct wars, all with the help of AI. It enables humans to accomplish big things extraordinarily easily and fast. However, we should also realise that this narrow AI comes with an unprecedented destructive impact on humanity and the environment, and this is due to the secular worldview that opposes religious beliefs and negates universal values.[61]

AI researchers are aware that there are several major obstacles in producing AGI; it lacks intellectual reasoning and understanding, cross-domain reasoning, generalisation of knowledge, and adaptability. The fact that these obstacles have remained unresolved for the past seven decades indicates that they have actually hit a dead end. If their predictions about AGI cannot be realised in the coming years, it suggests that AGI and ASI are not plausible. But despite that, they would press on, and most likely, there will be (already has been) a shift in the meaning of intelligence and consciousness in order to align with what they can actually produce. Whatever the outcome is, the sooner we realise our limitations, the better. Certainly, there are limits that humans cannot surpass. AI will not evolve into artificial humans, and humans will not transform into superhumans. The failure to acknowledge these limitations has led them, as Dreyfus has pointed out, to chase after a "philosopher's stone".

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[61] Realizing the close connection between religion and ethics, al-Attas concludes that ethics is part of religion. See; al-Attas, *On Justice and the Nature of Man*, 11 & 46.

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