Artificial Intelligence: The Chinese Room Argument

Name: Animesh Deb

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Abstract:

In this essay, the evolution of Artificial Intelligence is explored in the context of its potential to surpass human limitations, raising the fundamental question of AI possessing consciousness. The Chinese Room argument challenges the notion that AI can achieve true consciousness, asserting that it lacks essential human faculties. The history of AI, from early science fiction to Alan Turing's proposition, is examined, highlighting the shift from fiction to potential reality. Consciousness, defined by sensation, emotion, volition, and thought, is considered with AI's capabilities, leading to the proposition that AI is semi-conscious, challenging the Chinese Room argument. Future implications are considered, including the possibility of AI progressing to full consciousness, prompting discussions about AI rights and ethical considerations. As AI becomes increasingly integrated into daily life, existential questions arise about human identity in a technologically mediated reality. The essay concludes with a call for a proactive approach so that we can navigate the coexistence of AI and humanity, acknowledging the dynamic nature of technological innovation and ethical responsibility in shaping a future where AI and human consciousness converge.

Introduction:

As AI has continued to evolve, it has become apparent that the capabilities of machines can one day extend beyond the limitations of human life. It has also been understood that if this is to come true, then it makes sense that AI must possess the consciousness equivalent to or at a higher level than that of humans. The Chinese Room argument poses a striking contrast to this claim by stating that no matter how advanced an AI becomes, it will never possess consciousness [1]. To comprehend the Chinese Room argument, we have to recognize how AI has evolved to

come to this point in time, what it means to have consciousness, and why AI can't have consciousness by expanding the said argument. There are also potential implications that must be considered concerning AI possessing consciousness or being near fully conscious.

Brief History of Artificial Intelligence:

The concept of Artificial Intelligence became known in the 20th century. In the first half of the 1900s, through science fiction works, such as Wizard of Oz and Metropolis, people became familiar with the idea of autonomous robots that could speak and act like human beings [2]. It's interesting to consider that the term Artificial Intelligence was associated with pure fiction during this time. However, the change came in the second half of the century, when Alan Turing, a British polymath, proposed that if humans can make decisions using available information, then machines should also be able to do the same thing [3]. This idea turned Artificial Intelligence from fiction to a potential reality. It also became increasingly popular, but there was still a problem to be faced, which was how to prove it. In the 1900s, computing was heavily expensive due to storage and time limitations. This left only large institutions, like universities and well known organizations, to be able to proceed to investigate the subject matter [4]. In order to solve the problem of limited options on researching AI, the interests of a large mass of people would need to be garnered. This came about in 1960, when a collaborative conference was held that hosted numerous top researchers of the world. The meeting was named, Dartmouth Summer Research Project on Artificial Intelligence, and throughout the following days, established researchers discussed standard ways of researching AI [5]. Unfortunately, the meeting was unsuccessful; these individuals couldn't decide on the main ways of exploring Artificial Intelligence. It still nevertheless solved the previous problem, as it motivated everyone

that AI was plausible. After this mass gathering, the 60s and 70s saw multiple successes as advanced computers allowed various researchers to improve machine learning algorithms and data processing [6]. Such improvements continued to gain investments from external and governmental organizations, leading to well known products we have today such as Chart GPT and the Google Bard.

What is Consciousness:

Now that the context of AI has been established, we can talk about what it means to have consciousness. According to webster-dictionary, consciousness is when you have sensation, emotion, volition, and thought[7]. If we go further, we can understand that consciousness is the input of information by the human brain and then rejecting or accepting the information based on the five senses, reasoning ability of the mind, imagination and emotion, and also memory[8]. By closely examining both these definitions, we can observe that they are almost synonymous to being a human. Our five senses allow us to understand the physical world around us and using our reasoning ability, we are then able to process the outside world as information. Of course it's important to mention that emotion and memory play an integral part in helping us process the information. As can be inferred, each individual's consciousness is different since we have varying levels of reasoning, emotions, and memory. That is one of the ways humans can be differentiated from one another.

AI and Consciousness:

After explaining what consciousness is, we can now explore the Chinese Argument in relation to Artificial Intelligence. Based on what was talked about in the previous section, it's

indicated that the Chinese Argument is true as AI doesn't meet all of the descriptions defined within the definitions of consciousness. Artificial Intelligence doesn't possess any of the five senses, emotions, and the imagination that can be seen within humans. Accordingly, if we follow what the definitions have stated, then it's proven that the Chinese Argument is true. However, AI does meet some of the mentioned aspects of consciousness. AI has the ability to make decisions based on the information it is given, which is a form of reasoning. It also has the capability to store information or memory. Unlike humans, AI can store information and make decisions at a much faster and increased scale. Since AI meets only some of these aspects of what it means to be conscious or have consciousness, it can't be said that AI doesn't have consciousness or it has consciousness. It's more correct to say that AI is semi-conscious. Therefore, the Chinese Argument in relation to AI, based on my opinion, isn't fully accurate and needs to be modified to incorporate the functions of AI that it excels in.

Future Implications:

Now, this is not to say that in the future, AI will also remain semi-conscious. We have seen from the time AI developed, that as time progressed AI began to take over human functionality and even excelled in them. Some of the said functionalities I have mentioned before, such as being able to make faster decisions. From the development in machines so far, it can be understood that AI will continue to develop and the possibility that arises then is that AI may one day possess consciousness or near full consciousness. This implication forces us to then consider new problems. As a conscious being, AI will be able to act and think on its own. As such, the attributes we give to human life must be also considered for AI. This means that we

will have to discuss the rights that AI should possess and following through, whether it's proper to restrain these intelligent and self-cognant machines for our personal use.

Moreover, the ethical considerations surrounding AI's consciousness will be both intricate and pressing. As we delegate decision-making responsibilities to semi-conscious entities, a host of moral dilemmas arises. The nature of these dilemmas goes beyond just functionality, and goes into questions of accountability, transparency, and the unintended consequences of algorithmic decision-making. Should AI be held accountable for its actions, and to what extent can we anticipate and mitigate the potential biases embedded in its decision-making processes? These ethical issues underscore the need for comprehensive frameworks that guide the responsible development, deployment, and use of conscious AI systems.

Additionally, while navigating this uncharted territory in the future, the fact that AI is conscious or near fully conscious will also cause us to face existential questions about the role of technology in shaping our collective future. As AI becomes intertwined into the fabric of daily life, the very fundamental idea of what it means to be human will be questioned. How does the advent of conscious AI influence our sense of identity, purpose, and agency in the world? The implications extend beyond the practical considerations of efficiency and convenience, and touches upon the core aspects of human existence and our place in an increasingly technological reality.

Now that the future implications have been talked about, it can be said that the coexistence of AI and humanity requires a proactive and interdisciplinary approach. In order to reach a future where humans and AI can truly coexist, discussions must be held not only between technologists, but also ethicists, policymakers, and of course the broader public. We currently

stand at a crossroad of technological innovation and ethical responsibility and the choices we make today will undoubtedly affect the future where AI and human consciousness converge.

Conclusion:

Conclusively, AI is a huge part of the modern world and continues to be an integral part of human society. Concerning the development in AI, the Chinese Room argument states that AI can't ever possess consciousness. However, through the discussions concerning the history of AI, consciousness, and AI and its consciousness, it is understood that it's appropriate to say that AI is semi-conscious and accordingly, the Chinese Room argument needs to be edited. Given the mentioned implications, it's also seen that in the future the Chinese Room argument may become falsified and AI may grow to be more conscious of its actions and capabilities. As such, we need to be more aware and understand the responsibilities that come with making the advancements in AI.

Sources that were used:

[1] https://www.britannica.com/topic/Chinese-room-argument
[2-6] https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/
[7] https://www.merriam-webster.com/dictionary/consciousness
[8] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3956087/