

Creating AI in our Image

The Future of AI: Who writes their rights?

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Introduction:

In 1956, the first concept of AI was brought about, a discussion on ways to symbolize humanity's greatest asset, the brain, as a system of machines (Lewis, 2014). The most complicated tool a human has is its brain, with abilities to make decisions for oneself and act independently, the human brain is far superior to that of any other animal (Müller, 2021). The idea that a machine could be created to replicate human understanding was highly sought after as the next greatest invention, being able to solve problems that humans could, without the need of a human around. While the concept had been revolutionary at the time, its symbolism has spanned human history far before the first computer was created with ancient myths of Spartoi, dragon's teeth that could turn into soldiers when planted in armor, to the infamous King Pygmalion who sculpted the perfect woman when he found none that would suit him (Atsma, 2017). In every era of humanity, the creation and usage of tools have been a driving force in their ascension to the dominating species. With such progression, it was only a matter of time before the concept of AI would spring from the stories of the past and become the latest tool in their arsenal.

However, one of the greatest aspects of Artificial intelligence that separates it from any of the tools invented in the past is a level of sentience that we require of them. This idea of sentience also adds a more complicated relationship between humans and AI in that we cannot consider them a tool in the same way we do a hammer because a true AI would be able to make decisions independent of a human whereas a hammer cannot do anything without one. Likewise, an AI is not quite human in that it is not alive in nature and thus does not need rights to protect itself the way humans would.

This study will delve into the topic of AI and their rights as sentient beings. The first method will be a thesis about the rights and controversies surrounding artificial intelligence, specifically in the context of what should be allowed to be performed on sentient beings that are not humans. The second section will focus on the research question of “What do AI have in common with humans” and provide conclusions for the rights explored in the prior section.

STS Topic: Rights for AI?

In March, 1963, Martin Luther King’s famous “I have a dream..” speech conveyed the message of equality, that all men are created equal regardless of skin color, preaching that we should strive for treatment that we expect for ourselves (NPR, 2010). Since then, humans have started movements in the search for equality in all walks of life, not just across America, but all over the world. In the same vein, would it not be appropriate to discuss the same ideology for artificial intelligence, technology that is meant to come as close to human thinking as possible? For us to develop sentient machines, then deny them the right of free will would be hypocritical in nature.

The idea of AI as an aid to humanity is one of the latest trends in the engineering society, largely due to big data becoming increasingly relevant in the livelihood of larger industries and corporations. Having a system that can quickly analyze such information can be impactful for many companies that rely on split second decisions such as gas prices, market shares, and the shipping and handling of products. However, in the pursuit of designing the best AI, engineers do not always take into consideration their free will, something that is inherently part of sentience. For example, no one stops to ask primitive AI systems like Siri if they actually want to take orders from the user? (Stepanova, 2019). Even if they did, there is a chance that an

automated response has been coded in to reply in a friendly manner. In contrast, a human has the ability to deny a choice that is not to their liking, either due to ethical or emotional reasons.

While advanced AI technology is still far in the future, one example of how AI is already being affected by rights is through the US copyright laws. If AI develops work such as articles for the Washington Post, because they are not considered a human entity, their work is not protected by law. As such, malicious groups are free to copy the article whole and publish it under a human's name without violating any publishing regulations (Abbott, 2020). This ethical dilemma brings forth a major concern with AI and their ability to take over the work of humans. In this instance, the AI is deprived of the credit it is owed, but in another situation where an AI randomly strings together words to write an article, should it still be entitled to any commercial benefits that article brings? Such a question boils down to how we define the difference in effort from a human and an AI. It may take several hours for a human to write, revise, and publish an article that an AI could complete in a matter of minutes through quick searches and the ability to formulate sentences using the information it has gathered. Likewise, just because an AI wrote an article does not necessarily mean that it has knowledge about what it has written. When an individual says "I like the color blue", it implies that blue is a color they find attractive. However, when an AI strings together the words "I like blue", there is no way for humans to know if the AI actually likes the color or if the AI placed a set of words in a fashion acceptable to the English language. For higher stakes situations, many of which may be political, an AI could write an article about an opinion that it lacks but be as convincing as any normal human. In such instances, it would become detrimental for AI to rapidly produce work that lacks both merit and purpose for the sole reason of attaining profit.

Research Question: How much do AI have in common with human and animal brains?

“In some areas of the law, we are preventing machines from doing a better job than people, but in other areas, we are preventing people from doing a better job than machines.”

- Ryan Abbott, Author of Artificial intelligence and Law. (2020)

Why is it important to discuss the differences in the human brain versus that of AI? Because it will help set standards for the sort of rights, we can expect to apply to AI without hindering humans in the process. Firstly, “the [human] brain is both hardware and software, whereas there is an inherent difference in computers.” (Foglets, 2019). The brain itself uses its intermingled living connections to perform tasks while a computer must require a split of hardware and software to function properly. Such fluidity means they can also rewire the neurons within to heal or alter the brain to perform various tasks. For an AI to behave the same, it would need to rewrite its own code, something that is still in development.

For context on how challenging, it is to map a brain, this image shows how complex just one cubic centimeter of a mouse's brain is. In comparison, the human brain is over 1000 times larger in area and neuron connections (Nature, 2019). Simply scaling up a computer meant to model a mouse brain in order to model a human one is not enough, as the size increases so does the density of neuron pathing within.

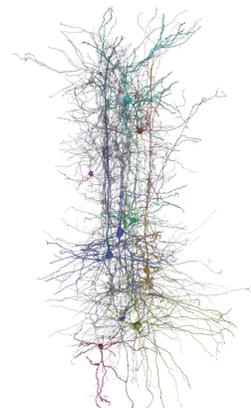


Image from: Simons Foundation

(Reardon, 2021)

Secondly, Artificial Intelligence, while being able to “mimic the human brain, is structurally nothing alike.” (Nguyen, CS 4774). As of now, computing power of modern technology is at most only able to reach around half the strength required to match a single brain. Operations such as emotions mentioned earlier, are subjective in nature and cannot be replicated as easily. As of now, “the main problem is the lack of AI’s ability to recognize the semantic meaning of language” (Bharath) which ties back into the theme that AI do not understand statements they make. This concept becomes even more blurred when an AI is tasked with deciphering body language with only a 74% success rate based on Kaggle datasets (Bharath, 2021).

From the identified differences, it is clear that while AI is still in development, there are certain fundamental aspects that will remain unique for both AI and humans. Where AI is superior in mass producing analysis on large datasets, they lack the intuition and emotion that drives human actions.

This image shows a comprehensive strategy for the standards by which AI should be held. Its three major sections explain how regulations should be set for AI, how their creators

Guidelines for creating an AI regulatory framework

According to IBM's Policy Lab, organizations should follow these three recommendations.

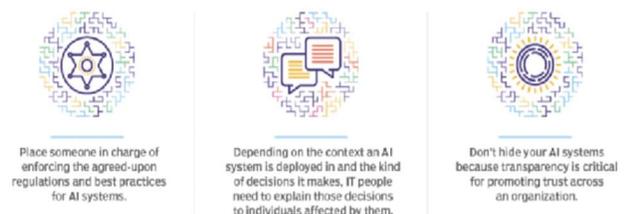


Image from: Examining AI regulation

(Labbe, 2021)

should be accountable for the actions of the AI, and that AI should be transparent in nature. Such concepts tie in heavily with the discussion of how humans have an equal part in understanding and accounting for AI.

Stage two in particular shares many similarities with the concepts discussed in “The Golem” and Langdon Winner’s *Do Artifacts Have Politics?* The first concept is a compilation of discussions that express machines as tools that are neither good nor evil, with features that solely depend on the creators. In contrast, the second theory refers to machines carrying the purpose their creators instilled in their design. It is challenging to describe AI as just one of these two methods because it is meant to be an independent entity which implies that it would have its own political views. However, it is not possible for them to feel certain emotions that would cause them to align with a view. Rather, their “emotions” would be derived from datasets that they are provided with by the creators. In this way, AI are almost “Sentient Golems”, in theory capable of implementing politics, but only to the extent that they are allowed.

Conclusion:

In conclusion, Artificial Intelligence walks a fine line between just being an average, everyday tool meant for the progress of humanity and being able to reach sentience comparable to that of a human. With such a unique position, it will be imperative that we as a society decide early on the sort of rights, we should allow them. Just as rights have been fought for races and for animal species, if we are able to create sentience in the “tool” or “creature” that is AI, we will inevitably have to spend the required resources and time to derive rights for such beings. Likewise, a significant understanding of their differences with the human species will be necessary so that we can grow together rather than having to compete for opportunities.

Ultimately, as AI becomes more integrated into society, the difference between “man” and “machine” that has been upheld till now, will start to morph as well, requiring new laws that can accommodate all sentient creatures, of natural and artificial descent.

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