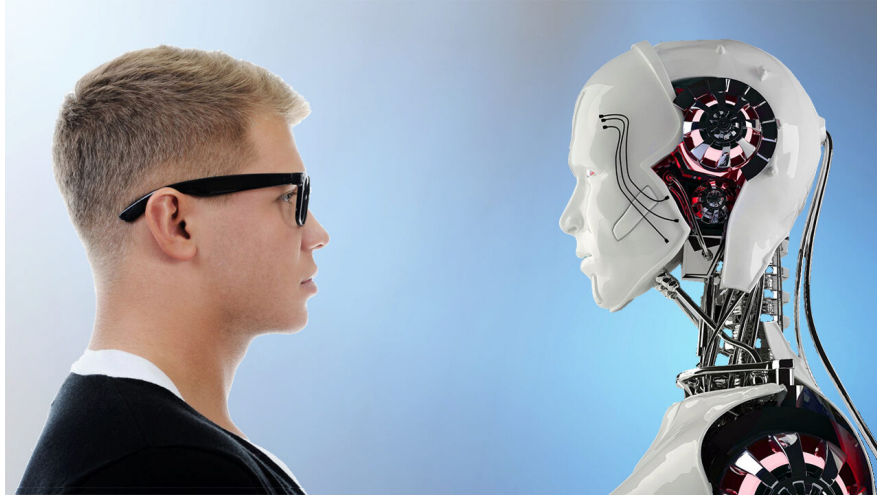


Conquering Our Intelligent Machines

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72:5.12 These people are also beginning to foster a new form of social disgust—disgust for both idleness and unearned wealth. Slowly but certainly they are conquering their machines. Once they, too, struggled for political liberty and subsequently for economic freedom. Now are they entering upon the enjoyment of both while in addition they are beginning to appreciate their well-earned leisure, which can be devoted to increased self-realization.

Abstract: In this essay the following are discussed:

- The control problem;
- Recent developments in artificial intelligence;
- Long-term risks in developing artificial general intelligence (AGI);
- Limitations of Deep Learning
- The power of narrow AI;
- ChatGPT;
- A potential misinformation apocalypse;
- The problems of instantiating human values;
- Using AI to control AI;
- Programming human values in AI; and
- Prospects of slowing or stopping AI progress

The control problem of artificial intelligence can be immediately and easily highlighted with some current occurrences. For example there was a deep fake "news" item that showed the US president announcing that all twenty to twenty-two year-olds would be called up for military duty for the war. It appeared completely believable from the audiovisual viewpoint: it looked and sounded like the president speaking (deep fake), and included AI images supporting the announcement. It was all fake. So, this sort of thing is now upon us. The problem of control has to do both with technologically identifying deep fakes, and also how the viewing public will develop their own powers of "reality response" recognition, a spiritual attribute.

[\(16:6.4 \[191.7\]\)](#) There exists in all personality associations of the cosmic mind a quality which might be denominated the "reality response." It is this universal cosmic endowment of will creatures,,,This reality sensitivity of the cosmic mind responds to certain phases of reality just as energy-material responds to gravity. It would be still more correct to say that these supermaterial realities so respond to the mind of the cosmos.

Conquering the Machines

As students of the revelation we have the rare and unusual insight into the activities of governance on a neighboring planet. That sphere has proceeded to some good achievements: their struggle for political liberty and economic freedom has now culminated in an era of greater personal leisure and self-realization. Yet, still they are only "slowly conquering their machines." [\(72:5.12 \[814.2\]\)](#)

Did their machines get out of hand?

There is room for discussion on what these machines are, but I don't think they are self-guided lawn mowers or vehicles that continue to present such a problem. In my opinion these are intelligent machines—artificially intelligent machines and neural networks. The term "conquer" self-evidently evokes a sense of battle to overcome.

Some Definitions

Artificial General Intelligence (AGI) refers to a level of AI that in some respects mimics the broad human body of knowledge. It is a goal of information scientists but is largely unrealized at this time.

Narrow AI refers to the ability to do a certain task, like reading handwritten numbers on a bank check, or playing the game of chess. ChatGPT is a form of narrow AI that in its current version 4 utilizes a data set that is more broadly connected to the internet than previous versions. Art can be created similarly using the programs Midjourney and

DALL-E, and music is also being composed with the aid of AI. Although ChatGPT was just recently released, it already has millions of users worldwide. It can write essays, news items, poetry, and fairly sophisticated computer code in mere seconds in response to text given to it by the user. Although its roll out was met with great acclaim, growing problems of bias, uncertainty, and unreliability are now seen.

Limitations and Future Possibilities

Information scientists Stuart Russell and Gary Marcus make clear the current limitations of AI, and give the example of the AlphaGO program that plays the complex board game of GO. It has been superseded by AlphaZero and MuZero that are self-taught. After one-hundred percent wins against human players, weaknesses have been found that allowed human gamers recently to beat it using exploits that the program seems unable to assess. This shows the limitation of deep learning by AI at this time.

Russell and Marcus attribute this to the mechanical logic employed by the machines that, as they say, do not really have a model of the world as it is. Further, the programming methods are not built upon earlier engineering concepts that compartmentalize functions. Rather, the coding has grown to the point where the information scientists do not actually know how these systems are operating; they continually add more features to deal with problems, and they admit that such an approach would eventually reach the point where there would not be enough atoms in the universe to reach the goal of reliable narrow AI, much less Artificial General Intelligence.

An example of this would be a self-driving car that doesn't recognize a jet airplane as an object, and so drives into it. So, a patch is made for that. But then, others will continually be needed.

However, they put some stock in the potentials of Probabilistic Programming (PP):

Probabilistic programming (PP) is a [programming paradigm](#) in which [probabilistic models](#) are specified and inference for these models is performed automatically.^[1] It represents an attempt to unify probabilistic modeling and traditional general purpose programming in order to make the former easier and more widely applicable.^{[2][3]} It can be used to create systems that help make decisions in the face of uncertainty.¹

Programming languages used for probabilistic programming are referred to as "probabilistic programming languages" (PPLs). https://en.wikipedia.org/wiki/Probabilistic_programming

¹

"Probabilistic Programming". [probabilistic-programming.org](https://en.wikipedia.org/wiki/Probabilistic_programming). Archived from the original on January 10, 2016. Retrieved December 24, 2013.

Pfeffer, Avrom (2014), Practical Probabilistic Programming, Manning Publications. p.28. ISBN 978-1 6172-9233-0

PP could take them to the promised land, incorporating more human-like decision making, but that of course begs the question: Is that the land humankind wants to go to?

A Potential Information Apocalypse

Even before this new specter of deep-fakes and AI generated misinformation, we have always had the problem of humanly important facts and information presented convincingly in partial, biased, curated, and manipulated manners. It's just that now the game has been upstepped, and is proceeding at light speed by the day and hour.

We needn't think about the deadly in the futuristic terms of the movie *Terminator*, because, as Elon Musk and others have recently pointed out, a group of small, armed drones—quadcopters outfitted with facial recognition cameras—could identify and attack an individual, using current off-the-shelf machines, today.

An example of current AI that we come in contact with has to do with internet sites that recommend the next video, music, podcast, or information page. This technology analyzes millions of users to see what next places they go to. These generated suggestions *seem* transparent to the user, but after repeated iterations can result in a sort of brainwashing of the user, guiding them down paths that will maximize the platform's business model to keep the user online, clicking, buying, or binging.

It becomes potentially apocalyptic when warfare, elections, news, philosophies, and beliefs are designed by malevolent or self-interested forces, or beyond that, by machines whose functions we do not understand or control.

AI is already programming AI, because of the efficiencies such an approach affords. What is needed now is the instantiation of human values into the programming of our intelligent machines. From my view, these battles in the information war are already being ignored or lost. The moment is coming, and is here, where we will have to conquer our machines, even as our planetary neighbors are endeavoring to do. Christ is the conqueror in every challenge that involves spiritual values and that touches upon real human need.

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ABOUT THE AUTHOR



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