Zuleica Urrutia

Professor Corbally

English 103

4 May 2020

Artificial Intelligence

Technology has advanced at an unprecedented rate and is being used in innovative ways all over the world. One such phenomenon happens to be artificial intelligence, a system that was largely obscure until one day it became a hot topic of public conversation. Artificial intelligence, or AI, is projected to reach new levels of intelligence, it may even surpass human intelligence, and there are many who are excited by this prospect while others find the idea more daunting. Those who believe that there is value in AI recognize that it has already made a great impact on day to day life, the economy and health care systems, but those who question its benefits only see a system that is too unpredictable and ethically ambiguous. The cost and benefits to AI are heavily contended among experts and the arguments tend to lean towards a gratefulness for its existence or to an extreme apprehension towards its progress and expansion.

Unless directly posed a question on artificial intelligence, most people do not really know much about the subject, the prospect of AI existing seems far-off into the future, but the reality is that “in a limited capacity, artificial intelligence already exists” (Klosterman 124) in the day to day lives of many and it has for some time. For example:

Every day most [people] will send an email (or several). Tools such as Grammarly and spell check activate when you compose your email to help you draft messages free from errors. These tools use artificial intelligence and natural language processing. On the receiving end of your messages, spam filters use artificial intelligence to either block emails that are suspected as spam or [to] identify an email as something your recipient would like to receive in their inbox. (Marr)

In cases such as these, artificial intelligence is actively working to make life easier for many who rely on these tools. Google is a multinational technology company whose search engine algorithm helps present searchers with the best possible results, and “in order to do this, Google uses AI to try to determine the quality of content” (“16 Examples of Artificial Intelligence (AI) in your Daily Life”). The internet is riddled with articles and information on a number of subjects, but AI helps users select that which will help them with their tasks most effectively and accurately. Digital voice assistants, like Siri, Google Home, and Alexa have become members of households in a sense, they all help calculate the fastest routes to any given destination, they can set timers, give the time, they even help with translations, and this is all possible because they all “use natural language processing and generators driven by AI to return answers to you” (Marr). It is the little things, like not having to sift through dozens of spam emails or not having to struggle with finding the best answers to questions that people take for granted. Artificial intelligence plays a big role in eliminating these non-insignificant struggles from the day to day lives of people and the benefits reaped would not go unnoticed if they suddenly disappeared.

Artificial intelligence has advanced significantly from being solely mechanically capable to increasingly becoming thinking capable. AI “relies on advances in machine learning, creating value by analyzing very large data sets, and delivering insights to decision makers, thereby improving and accelerating the decision-making process” (Huang). Businesses who have adopted AI depend on these skills to maximize their productivity, tasks that were once carried out by humans can now be delegated to machines, giving people the freedom to focus on processes that are currently not capable of being managed by AI. On the surface this may seem to displace the need for human labor, but the reality is that “AI will augment human workers and create new jobs, because AI (as a form of capital) augments human capabilities (i.e., labor). Labor, thus, is upgraded, from unskilled to skilled, or from mechanical to thinking” (Huang). The Wall Street Journal even reports that:

AI could lead to a gross GDP growth of around 26 percent or $22 trillion by 2030. The major contributors to this figure are the automation of labor, which could add up to 11 percent or around $9 trillion to global GDP by 2030, and innovations in products and services, which could increase GDP by about 7 percent or around $6 trillion by 2030. (Berger)

The many facets of AI unlocks new possibilities to how businesses will be managed in the future and presents endless possibilities for economic growth, both of which provides great benefits to mankind.

Perhaps one of the most anticipated fields in which many hope to improve and advance artificial intelligence is in the medical field. AI already helps with drug development, disease diagnostics, and general health monitoring all over the world, which in turn helps to alleviate some of the load that the medical field finds itself under. Lifting the burden off medical personnel and hospitals has played an important role in the fight against Covid-19 and already AI has helped bring some relief to those hit the hardest by the pandemic. According to BBC News, “when Covid-19 was at its height in China, doctors in the city of Wuhan were able to use artificial intelligence (AI) algorithms to scan the lungs of thousands of patients”(Baraniuk), enabling a rapid response reaction that has had positive effects across the city. Curbing mortality rates from a range of diseases is very likely to happen if AI technology further progresses in the future, in fact supercomputers, like the IBM Watson, have already begun to explore treatment plans for diseases like lung cancer. AI tools can even help improve and polish computational health care systems that are currently operating at a minimal level. For example, Merantix is a German company:

that applies deep learning to medical issues. It has an application in medical imaging that detects lymph nodes in the human body in Computer Tomography (CT) images. According to its developers, the key is labeling the nodes and identifying small lesions or growths that could be problematic. Humans can do this, but radiologists charge $100 per hour and may be able to carefully read only four images an hour. If there were 10,000 images, the cost of this process would be $250,000, which is prohibitively expensive if done by humans. (West)

Artificial intelligence can operate quickly and at a massive scale; these benefits help save money but most importantly it is a system that can help save lives.

Of course, AI also comes with some drawbacks. Smartphones and digital voice assistants, though helpful have raised valid concerns about privacy among AI devices. In order to use some of the services that artificial intelligence has tapped into, personal data has to be mined and privacy is compromised as a result. Personal information has been collected without consent from AI devices: “Bloomberg [revealed](https://venturebeat.com/2019/04/15/why-companies-like-amazon-manually-review-voice-data/) that Amazon employs contract workers to annotate thousands of hours of audio from Alexa-powered devices, prompting the company to roll out user-facing tools that quickly delete cloud-stored data”. (Wiggers).

The fear of companies accessing private conversations, or any personal information for that matter, has unsettled people enough that laws have been passed to ensure privacy remains a top priority, the California Consumer Privacy Act chief among them. Strong data privacy rights are needed, but not every state is championing these rights with the same gusto, which leaves so many people vulnerable. Until there is a certainty that AI will not help enable companies to buy a person’s data without their consent, the value of AI remains compromised.

Artificial Intelligence has the potential to surpass human intellect meaning that there is no way that mankind can predict how it will behave. The idea that one day a machine or robot could become fully sentient seems like a ludicrous suggestion best left to the Marvel franchise, but according to Elon Musk, a tech giant, AI is “improving at an accelerating rate, far faster than people realize” (Dowd). Someone right now, with who knows what kind of intentions, could be building their own Ultron simply because no one can really gauge how far the technology has advanced. Even Ray Kurzweil, a futurist who views an AI world as a Utopia, concedes that Musk is right to be concerned. In an interview with *Vanity Fair* he states that: “Musk’s bête noire could come true. He notes that our A.I. progeny ‘may be friendly and may not be’ and that ‘if it’s not friendly, we may have to fight it.’ And perhaps the only way to fight it would be ‘to get an A.I. on your side that’s even smarter’” (Dowd). Far from being comforting, Kurzweil’s words only serve to highlight just how much experts are downplaying the uncertainties of AI. In a worst-case scenario where AI machines are a physical threat, it is dangerous to rely on the fight-fire-with-fire strategy, because all that equates to is a whole lot of destruction. The fact of the matter is that AI could be weaponized if it is not accurately regulated and unfortunately AI software seems to go largely unregulated since there is no single organization that is focused on controlling what AI is doing. Different fields regulate how AI operates within their purview, “the Federal Aviation Administration oversees drones, the Securities and Exchange Commission oversees automated financial trading, and the Department of Transportation has begun to oversee self-driving cars” (Dowd), but they do not work together as a cohesive force to oversee and help avoid possible catastrophes.

The possibility of creating human level cognitive thinking machines raises complex ethical questions. If AI powered machines reach (maybe even surpass) human intellect will they cease to be objects? Would they even be allowed to have autonomy, or would they simply exist to do mankind’s bidding? Who decides which behaviors these machines will be allowed to possess? There are a range of arguments that make these questions impossible to answer, and the more people ponder them the more companies want to appease the public’s concern. However,

“building ethical artificial intelligence is an enormously complex task. It gets even harder when stakeholders realize that ethics are in the eye of the beholder” (Metz) and that not everyone will be satisfied with whatever conclusion is reached. Ethical issues have also been raised among journalists and researchers who have voiced concern “over the rise of artificial intelligence, warning against biased, deceptive and malicious applications” (Cade) that may disproportionally affect people of color.

Artificial Intelligence can help people in small and large capacities, from filtering emails to helping health care workers handle the strains of their professions. If AI continues to advance it could greatly benefit the well-being of mankind and the economy. However, the unpredictability of AI, the lack of regulation, and the ethical issues it raises poses a risk to mankind as well.

Works Cited

“16 Examples of Artificial Intelligence (AI) in Your Everyday Life.” *The Manifest*. 26 Sep

2018.[themanifest.com/development/16-examples-artificial-intelligence-ai-your-everyday-life](https://themanifest.com/development/16-examples-artificial-intelligence-ai-your-everyday-life).

Baraniuk, Chris. “The Groundbreaking Way to Search Lungs for Signs of Covid-19". *BBC News*.

4 May. 2020. [www.bbc.com/news/amp/business-52483082](https://www.bbc.com/news/amp/business-52483082)

Berger, Irving. “The Impact of Artificial Intelligence on the World Economy”. *The Wall Street*

*Journal*. 16 Nov. 2018. blogs.wsj.com/cio/2018/11/16/the-impact-of-artificial-intelligence-on-the-world-economy/

Dowd, Maureen. “Elon Musk’s Billion-Dollar Crusade to Stop the A.I. Apocalypse”. *Vanity*

*Fair*. 26 March. 2017.www.vanityfair.com/news/2017/03/elon-musk-billion-dollar-crusade-to-stop-ai-space-x

Huang, Ming-Hui, et al. “The Feeling Economy: Managing in the Next Generation of Artificial

Intelligence (AI).” California Management Review, vol. 61, no. 4 Aug. 2019, pp. 43–65. EBSCOhost, doi:10.1177/0008125619863436.

Klosterman, Chuck. *But What If Were Wrong?: Thinking about the Present as If It Were*

*the Past*. Penguin Books, 2018.

Marr, Bernard. “The 10 Best Examples of How AI is Already Used in Our Everyday Life”.

*Forbes*. 16 Dec. 2019. www.forbes.com/sites/bernardmarr/2019/12/16/the-10-best-examples-of-how-ai-is-already-used-in-our-everyday-life/#64b79a2d1171.

Metz, Cade. “Is Ethical A.I. Even Possible?”. The New York Times. 1 March. 2019.

[www.nytimes.com/2019/03/01/business/ethics-artificial-intelligence.html](https://www.nytimes.com/2019/03/01/business/ethics-artificial-intelligence.html)

West, Darrell M. et al. “How Artificial Intelligence is Transforming the World”. *Brookings*. 24

April. 2018. [www.brookings.edu/research/how-artificial-intelligence-is-transforming-the-world/](http://www.brookings.edu/research/how-artificial-intelligence-is-transforming-the-world/)

Wiggers, Kyle. “AI Has a Privacy Problem, but These Techniques Could Fix It”. *Venturebeat*.

12 Dec. 2019. [venturebeat.com/2019/12/21/ai-has-a-privacy-problem-but-these-techniques-could-fix-it/](https://venturebeat.com/2019/12/21/ai-has-a-privacy-problem-but-these-techniques-could-fix-it/)