The GCAS
REVIEW

What the West Can Learn from China: The Pros and Cons of Artificial Intelligence

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Abstract: *As a catch-all term for the most recent revolutionary leap in human civilization, artificial intelligence has gained widespread acceptance. It is employed in almost every aspect of life. However, any revolution must have an impact on the society in which it occurs. The most current developments in the field of artificial intelligence are discussed and analyzed in this paper. The paper also investigates the impact of these advances on human society. It touches on both the positive and negative elements of AI's effect on society. It also makes predictions about what artificial intelligence may bring in the future. It goes into great depth about China's amazing advances in artificial intelligence. It delves deeper into what it implies for the Chinese people. Finally, it talks more about how the west can learn from the AI story of China giving an overview of how AI could be used and misused in a number of different fields.*

Keywords: Artificial Intelligence; Data; Ethics; Self-driving Cars; Machine Learning

Introduction

In a very short period, the trip of Artificial intelligence (AI) has already passed through two paradigmatic stations: GOFAI (good old-fashioned artificial intelligence) and expert system. Machine learning (ML) is now the focus of AI research and development. If we imagine a technological development analogous to the rise of self-driving cars, the question of whether vehicle drivers will continue to be humans after general intelligence, or whether passenger AI equipped with general intelligence will overtake the vehicle as super-intelligent beings, or whether human agents and AI will merge for the journey is a source of intense debate and trepidation. AI is rapidly advancing and on its path to revolutionizing human civilization. AI has already permeated every aspect of human existence, from communication, transportation, and pharmaceuticals to defense.

The AI revolution accelerated with the introduction of a new model of computation known as machine learning.[1] Current AI and machine learning are based on the connectionist paradigm, which replicates the processes of the human brain.[2] In humans, information is processed as a consequence of about 100 billion neurons communicating with each other via almost a trillion synaptic connections. Information processing is the result of impulses traveling between these synaptic connections. In the same way, AI mimics a digital neural network to analyze data and learn. This AI paradigm has proven to be highly effective since, instead of scripting for every step and outcome, programmers are now designing algorithms that can learn on their own from the dataset supplied to the algorithm. There has never been a scarcity of data on the internet and the digital era. As a result, AI is learning quickly on its own with input from a vast data collection. With the correct quantity of data with programmers coding the right programs, AI can be taught in anything.

Deep Blue's chess victory over Kasparov in 1997 was a watershed point in AI history.[3] On the other hand, the victory of AlphaGo, a computer program built by Google DeepMind, against board game Go world champion

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[1] Jeff Dean, David Patterson, and Cliff Young, "A new golden age in computer architecture: Empowering the machine-learning revolution," *IEEE Micro* 38, no. 2 (2018): 21.
[2] Jonathan Pillow and Maneesh Sahani, "Editorial Overview: Machine Learning, Big Data, and Neuroscience," *Current Opinion in Neurobiology* 55 (2019): iii.
[3] Feng-hsiung Hsu, "Ibm's Deep Blue Chess Grandmaster Chips," *IEEE Micro* 19, no. 2 (1999): 70.

Lee Sedol, has a bigger social influence on AI development.[4] AlphaGo, an AI software, trained itself by using a historical record of Go games and a mixture of game rules. This was the first time that the general public and the rest of the world were made aware of a type of AI that can learn on its own using machine learning and deep learning. In the course of beating Lee Sedol, the AlphaGo AI devised and executed unique moves that humans had never considered. Deep Blue's victory against Kasparov was an example of a machine overcoming a person in a very intricate game. The victory of AlphaGo was an example of one sort of intelligence defeating another. AI has demonstrated that it cannot only manage massive amounts of data but also learn from it and anticipate the conclusion better than any human. The victory of AlphaGo helped individuals and governments appreciate the strength of artificial intelligence. It heralded the beginning of a new era for AI, one that holds the potential for both wealth, progress, and creativity, as well as societal hazards. The article will assess the different benefits and drawbacks of AI and its influence on society.

I.   Meteoric Rise of AI in China and its Implications for Chinese Society

China was among the first countries to make grandiose goals in the field of AI, inspired by AlphaGo. The Chinese government used it as a "Sputnik Moment" to compete with US AI development.[5] China, which has a significant population of young, smart people, has invested extensively in the domestic AI revolution. Within two years of implementing a new strategy in 2017, China surpassed the United States in AI patent filing in 2019 and has maintained its lead over the United States since then.[6] The impact of AI on Chinese society reflects both the good and bad that AI can achieve. In terms of AI implementation, no country has made as much progress as China in the last five years. China is distributing groceries through drones in villages; it has bypassed the whole credit card phase by moving to online and mobile payments; it is using face recognition for automatic equipment and stores without human cashiers; there is an ever-increasing number of billion-dollar Unicorn AI businesses.[7] Young

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[4] Tanguy Chouard, "The Go Files: Ai Computer Wraps up 4-1 Victory Against Human Champion," *Nature* (2016).
[5] Bingchun Meng, "This Is China's Sputnik Moment": The politics and poetics of artificial intelligence.," *Interventions* (2021): 2.
[6] Daitian Li, Tony W. Tong, and Yangao Xiao, "Is China Emerging as the Global Leader in Ai?" *Harvard Business Review*, Feb 18, 2021, https://hbr.org/2021/02/is-china-emerging-as-the-global-leader-in-ai.
[7] Nina Xiang, "China's AI Industry Has Given Birth To 14 Unicorns: Is It A Bubble Waiting To Burst?" *Forbes*, October 5, 2018, https://www.forbes.com/sites/ninaxiang/2018/10/05/chinas-ai-industry-has-given-birth-to-14-unicorns-is-it-a-bubble-waiting-to-pop/?sh=91f224d46c36.

Chinese university graduates with innovative ideas are being funded by the Chinese government and a new generation of Chinese venture capitalists. China's outstanding work ethics, confidence, and entrepreneurial spirit have helped dispel the idea that China is a nation of knockoff items.

China is a vast country and a large market, making it an ideal scope for AI. China has the highest penetration and use of mobile phones and applications of any country in the world.[8] It has three times the number of mobile users as the US, fifty times the number of mobile payments, ten times the number of food deliveries, and over three hundred times the number of bicycle trips.[9] Far more data is available not just in contrast to the United States but also to any other country globally.[10]

Data is critical to the current AI revolution. A large amount of data is required for machine learning and AI. Emphasizing the importance of data and China, Chief Executive of the Bahrain Economic Development Board Khalid al-Rumaihi said, "If data is the new oil, then China is the new Saudi Arabia."[11] The deep-learning algorithm refines the conclusion by having access to a large data collection. With a larger dataset, prediction gets more accurate. A Chinese loan officer can make a loan decision in less than eight seconds due to the availability of vast amounts of personal data. The information used for loan applications includes details such as how frequently people charge their batteries. Such information aids in a person's risk assessment.

Facial recognition is another domain where Chinese companies and government use AI extensively.[12] Surely, they are great for preventing and solving crimes. With just one smile, one can pay one's bill in KFC of Beijing. The government is using facial recognition to change social behavior, like discouraging jaywalking. In collaboration with private companies, the Chinese government is in the process of developing an experimental

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[8] Aaron Klein, "China's Digital Payments Revolution," *Brookings* (April 2020), https://www.brookings.edu/wp-content/uploads/2020/04/FP_20200427_china_digital_payments_klein.pdf.

[9] Aaron Klein, "China's Digital Payments Revolution".

[10] Aaron Klein, "China's Digital Payments Revolution".

[11] Staff writer, "Bahrain's Edb Chief: If Data Is the New Oil, Then China Is the New Saudi Arabia,"*Al Arabiya English*, April 7, 2019, https://english.alarabiya.net/business/technology/2019/04/07/Bahrain-s-EDB-chief-If-data-is-the-new-oil-then-China-is-the-new-Saudi-Arabia.

[12] Xiao Qiang, "The Road to Digital Unfreedom: President Xi's Surveillance State," *Journal of Democracy*30, no. 1 (2019): 58.

national database for social credit programs.[13] The database is supposed to collect individual data of a person of all sorts to predict and control a person's behavior using the carrot and stick model of motivation. A person with a high credit score would be awarded preferences in jobs, restaurants, and travel. Similarly, a person with a low credit score would be punished with loss of jobs, ban on travel, and so on so forth. The system is yet to be implemented, but the glimpses are enough to tell the possibilities of such a system on social structure. Cities in China are flooded with CCTV cameras, recording every move of citizens. Some Chinese cities like Shenzhen have a smart city control system equipped with AI that monitors interconnected datasets from all over the city.[14] The data include personal data combined with data of schools, water supply, and power supply. The AI system compiles and evaluates the data to give a complete picture of city events. So the Control Center keeps track of the availability of hospital beds and patient count. It can scan the entire city for illegal constructions which are identified and demolished. It keeps updated on the cleanliness in the restaurants.

Such developments are like science fiction, but it is not. All this is done in the name of making the life of Chinese people easier and prosperous. Such development for the sake of efficiency in a transparent way seems great. However, in practice, there is always a danger of data dictatorship. AI has equipped the Chinese government to scan for any kind of unrest or voice against the government. The Chinese government is expanding its surveillance even to villages with their Sharp Eye project. The advancement of AI and data availability is converting China into a total surveillance state.[15] An autonomous region of Xinjiang in China has become a test lab for total surveillance. The region has a population of almost twenty-five million, and half are Turkic speaking Muslims knowns as Uyghurs. After tensions between Han Chinese and Uighurs led to violence and protest in 2009, the Chinese government deployed more police and army. Now AI has given the government a new way to monitor the activities of Uyghurs. Xinjiang is subject to high-tech surveillance. Each movement and moment of Uyghurs are being recorded using scans, cameras, and installing apps on mobiles. The data from such surveillance is analyzed

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[13] Xiao Qiang, "The Road to Digital Unfreedom: President Xi's Surveillance State," *Journal of Democracy* 30, no. 1 (2019): 58.
[14] Jelena Große-Bley and Genia Kostka, "Big Data Dreams and Reality in Shenzhen: An Investigation of Smart City Implementation in China," *Big Data and Society* 8, no. 2 (2021): 1.
[15] Qiang, 58-58.

and is used to determine individuals prone to terrorism. Based on the language one speaks, people one contacts, how often one prays, if AI decides a person to be prone to terrorism, the person is sent to camps for re-education. There have been reports of torture in the name of re-education, and some Uyghurs have died. Xinjiang has become an open-air jail due to surveillance powered by AI. Many Uyghurs diaspora living outside China have lost contact with their families back home.[16]

Totalitarian surveillance is a nightmarish application of the AI revolution. This application has a market in other nations, and China is promoting its technology. Pakistan, Venezuela, Sudan, and other countries are already in line to sample technologies that may be used to combat rebellions, political anger, or unrest.[17] AI, like infrastructure spending, is part of China's plan to become a superpower and influence the rest of the world. China's Belt and Road Initiative (BRI) is a massive global infrastructure initiative in about seventy nations across the world.[18] Along with the infrastructure project, China exports surveillance and other technology to have all-encompassing shared resources, shared telecommunications systems, shared infrastructure, shared digital systems, and even shared mobile-phone technologies.

II. Potentialities of Use and Abuse of AI

China is not the first country to use and abuse breakthroughs in artificial intelligence. Western multibillion-dollar corporations initiated this tendency. Google was the first to recognize the huge value of digital traces left by users when searching.[19] Recognizing the usefulness and profitability of such data, Google integrated machine learning capabilities to forecast user behavior. With the additional data, AI was able to fine-tune its predictions of human behavior. If advertising and marketing are about reducing uncertainty due to customer

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[16] ANI. "Chinese crackdown on Uyghurs in Xinjiang is being felt abroad, says report" *The Times of India* November 7, 2021, https://timesofindia.indiatimes.com/world/china/chinese-crackdown-on-uyghurs-in-xinjiang-is-being-felt-abroad-says-report/articleshow/87567103.cms.

[17] Michael Raska and Richard A. Bitzinger, "Strategic Contours of China's Arms Transfers," *Strategic Studies Quarterly* 14, no. 1 (2020): 95.

[18] Md Mahmudul Hoque and Riffat Ara Zannat Tama. "China's Belt and Road Initiative: Global Politics and Implications." *European Scientific Journal* 16, no. 31 (2020): 287-288

[19] John Battelle, *The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture* (New York, NY: Penguin, 2011)

purchasing behavior, AI and data are about increasing certainty through the prediction of consumer behavior. Google reaped enormous money by using the power of prediction in advertising. Google was able to anticipate the future because of the power of data and artificial intelligence. In 2010, then CEO of Google Eric Schmidt said in an interview, "With your permission, you give us more information about you, about your friends, and we can improve the quality of our searches. We don't need you to type at all. We know where you are. We know where you've been. We can more or less now what you're thinking about."[20] Schmidt first mentioned this level of thought-reading predictability over twelve years ago. Machine learning was in its infancy at the time. The level of the dataset has increased after twelve years. The sophistication of AI algorithms has grown. As a result, a search engine now knows more about people than people know about themselves. People are often unaware of their unconscious habits and quirks; yet, with personal data, an AI can anticipate those unconscious habits and actions.

Google's business model of making money by predicting led other technology companies to do the same thing. Companies are adopting a basic strategy of providing a free service while collecting user data. For example, Facebook has integrated the usage of AI for the prediction and profitability of their business utilizing their user data. Someone liking, publishing, or sharing something on Facebook provides the firm with predictive power. Through the "Social Contagion" experiment, Facebook evaluated the predictability of AI in 2010.[21] The study was an attempt to see if messages and social media might impact real-world behavior. The project's goal was to encourage individuals to vote in the 2010 midterm elections in the United States. Facebook was able to convince 340,000 individuals to vote by adding a "I Vote" button on their site. Later, Facebook did a lot of big contagion tests and experiments. One of the trials revealed that by changing the feed a bit, they were able to influence the mood of the participants.

There were two major findings of such experiments. (1) Online ecosystem can influence real-world behavior. (2) The influence can take place without even the user's awareness. These findings motivated large tech

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[20] Derek Thompson, "Google's Ceo: 'the Laws Are Written by Lobbyists'," *The Atlantic*, October 1, 2010, https://www.theatlantic.com/technology/archive/2010/10/googles-ceo-the-laws-are-written-by-lobbyists/63908/.

[21] Johan Ugander et al., "Structural Diversity in Social Contagion," *Proceedings of the national academy ofsciences* 109, no. 16 (2012): 5962.

corporations to build corporate surveillance on their users without even user awareness. With the ever-expanding presence of smart appliances, the internet of things, and voice assistants, AI is getting more data than ever, increasing surveillance in the same proportion. For example, when one gives a command to their voice assistant, be it Alexa or Google Home, the AI along with the command, can detect changes in one's voice and predict a lot about someone's behavior and health. AI can infer with voice data if someone is having health issues, both physical like cold, or mental like having bad mood or depression. Refine AI algorithms can detect, analyze, and evaluate the micro behavior of a person and predict a detailed understanding of someone's personality. Companies with data can know if someone is a racist, misogynist, homophobe, conspiracy theorist, lazy, or gullible.

The 2018 Cambridge Analytica controversy exemplifies the exploitation of AI for societal transformation. Cambridge Analytica, a political consulting firm located in the United Kingdom, manipulated the 2016 US presidential election and the Brexit vote using data from 87 million Facebook users.[22] Mark Zuckerberg acknowledged the privacy abuses and apologized multiple times. The US Federal Trade Commission has also penalized Facebook $5 billion.[23] Despite the media attention to the Cambridge Analytica issue, little has changed. The technology utilized in Cambridge Analytica was only the first wave of data science. With the present generation of AI, machine learning, and deep learning, society may confront more challenges of opinion influence. Concerned with the misuse of AI, Yoshua Bengio, one of the inventors of AI, and Alexandra Luccioni call AI researchers to ask the following questions: [24]

1) How is the technology that I am working on going to be used?

2) Who will benefit or suffer from it?

3) How much and what social impact will it have?

4) How does my job fit with my values?

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[22] Vito Laterza, "Cambridge Analytica, Independent Research and the National Interest," *Anthropology Today* 34, no. 3 (2018): 1.
[23] Margaret Hu, "Cambridge Analytica's Black Box," *Big Data and Society* 7, no. 2 (2020): 1.
[24] Alexandra Luccioni and Yoshua Bengio. "On the morality of artificial intelligence [Commentary]." *IEEE Technology and Society Magazine* 39, no. 1 (2020): 17.

They also point out two approaches for the need for ethical consideration of AI.[25]

(1) Proposing principles guiding the socially responsible development of AI

(2) Raising concerns about the social impact of AI.

The need for regulation to rein in giant digital corporations like Google, Facebook, and Amazon has begun to gather traction. Concerned about such voter manipulations, Alastair Mactaggart launched a signature campaign for a California ballot measure.[26] The initiative's goal was to pass legislation to give consumers more control over their data and protect their privacy. The plan was opposed by Google, Facebook, AT&T, and Comcast. His proposition required 500,000 signatures to be placed on the ballot. He received 600,000 votes, with polls suggesting that privacy legislation is supported by 80% of the public. The measure was enacted unanimously by the state legislature. Residents of California now have the right to know how their data is used and sold as a result of this new law. They also obtained the ability to refuse the sale of their data.

Mactaggart's efforts have raised the alarm in tech companies. They seem to be supportive of privacy laws in public but lobby against them in private. They argue that AI and data are used to increase user experience, and regulation may slow down the progress in user experience. One can counterargue that many other industries like automobile, Pharmaceuticals, even food industries have a mixture of responsible companies and regulations. The existence of regulation does not necessarily mean hampering progress. Any industry can progress with responsible regulations which make people's life safe, secure, and free. Lobbyists from big tech keep on trying to have more lenient privacy laws. They are motivated by the fact that AI and tech have already become part of every walk of life and industry, from healthcare, education, criminal justice, shopping experience, and entertainment. People are still not aware about the scope of reach of AI in their lives. Phones monitor and analyze every move of a person. Hiring companies assessing the micro-expressions of the recorded interview. The criminal justice system uses AI to

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[25] Alexandra Luccioni and Yoshua Bengio. "On the morality of artificial intelligence [Commentary]." *IEEE Technology and Society Magazine* 39, no. 1 (2020): 17-18.

[26] JOHN MYERS and JAZMINE ULLOA, "California Lawmakers Agree to New Consumer Privacy Rules That Would Avert Showdown On the November Ballot," *Los Angeles Times*, June 21, 2018, https://www.latimes.com/politics/la-pol-ca-privacy-initiative-legislature-agreement-20180621-story.html.

determine the risk analysis of someone getting bail or not. Many of these AI systems are not visible in our social institutions.

It is not true that AI is just causing societal disruption. AI has benefited human and social progress in every field. It is also operating as a positive factor. It is not just enhancing human experiences in luxury, but it also enhances human health by delivering insights into pharmaceuticals. It is transforming healthcare. The level of investment in AI has also increased dramatically. Stanford University, for example, spends a huge sum of money on the AI research budget. They are making good use of this money. One of their objectives is to use artificial intelligence developments to identify illnesses. Tuberculosis, pneumonia, and other diseases may be diagnosed simply by uploading an x-ray.[27] For example, they employ a huge data collection of pathology-derived chest x-ray pictures for the probability of pneumonia diagnosis. The x-ray picture data set is utilized as input for machine learning, which produces output in the probability of illness level diagnosis. The research was also carried out to compare the diagnoses provided by AI to those provided by human radiologists. In most situations, AI diagnosis was on par with human diagnosis. In several cases, AI forecasts beat radiologists. Although viewing and analyzing X-rays is a difficult task. AI has progressed from interpreting basic pictures to outperforming humans in the interpretation of complex X-rays.

Another inventive application of AI in the health field is data scientists using simple data like voice recording and human movements to identify Parkinson's illness. Parkinson's disease detection still lacks a full-proof test that can be used with assurance. Data scientists are working with a novel diagnostic approach. Max Little and his colleagues discovered that alterations in voice are an early sign of Parkinson's disease. They created an AI system and fed it a data set of thousands of speech recordings of persons with and without the disease. The AI was able to diagnose the ailment 99 percent of the time after a lab study of the obtained data set.[28] Max Little and his colleagues discovered a link between walking motion and Parkinson's disease. His team investigated walking

[27] Pranav Rajpurkar et al., "Chexnet: Radiologist-level pneumonia detection on chest x-rays with deep learning." *arXiv preprint arXiv:1711.05225* (2017).

[28] Max Little, "Smartphones for Remote Symptom Monitoring of Parkinson's Disease." *Journal of Parkinson's Disease* 11 (2021): S49.

behavior by collecting data on up and down movements. A mobile phone's up and down motion may be simply caught utilizing the sensors present in the device. They discovered a significant difference in walking patterns between a healthy individual and a person predisposed to Parkinson's. AI with a good algorithm and high precision sensors can be better taught to detect Parkinson's symptoms. Early detection would result in early intervention. The output diagnostic offered by AI is still in probabilities, but as the data set grows and algorithms are refined, the probabilities will become more fine-grained and accurate. Such advancements in AI are allowing doctors to collaborate with programmers and mathematicians to improve medicine and healthcare.

Hugh Herr was inspired to pursue smart prosthetics development after being involved in a horrific accident while mountain trekking. Doctors had to amputate his legs after being trapped in blizzards for three days.[29] Hugh now has AI legs that he created himself. He promotes the idea of converting disability into opportunity. His first limbs were difficult and inconvenient. He has returned to his usual life thanks to the combination of AI, sensors, motors, and computers. He can walk, run, dance, play tennis, and even climb rocks. He has seen the influence of AI on his life as both a consumer and an inventor. Hugh enables people to live regular lives by using his intelligent prosthetics. AI has streamlined the operation of such intelligent prosthetics. After some time, the user perceives these smart prosthetics to be a natural extension of their body. This type of human-machine connection has fascinating ramifications for humanity. Consider the prospect of more smart organs that can alleviate the wear and strain on the biological body. He uses his Neuro-Embodied design to bring paradigmatic change in prosthetics. According to Hugh:

> I believe the reach of Neuro-Embodied Design will extend far beyond limb replacement and will carry humanity into realms that fundamentally redefine human potential. In this 21st century, designers will extend the nervous system into powerfully strong exoskeletons that humans can control and feel with their minds. Muscles within the body can be reconfigured for the control of powerful motors, and to feel and sense exoskeletal movements, augmenting humans' strength, jumping height, and running speed.[30]

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[29] "How We'll Become Cyborgs and Extend Human Potential | Hugh Herr," YouTube, June 20, 2018, https://www.youtube.com/watch?v=PLk8Pm_XBJE.
[30] "How We'll Become Cyborgs and Extend Human Potential | Hugh Herr," YouTube, June 20, 2018, https://www.youtube.com/watch?v=PLk8Pm_XBJE.

Such possibilities can present philosophical self- and identity-related issues. Talking about such possibilities, Hugh makes some predictions about the future:

> Neuro-Embodied Design is a methodology to create cyborg function. In this design process, designers contemplate a future in which technology no longer compromises separate, lifeless tools from our minds and our bodies, a future in which technology has been carefully integrated within our nature, a world in which what is biological and what is not, what is human and what is not, what is nature and what is not will be forever blurred. That future will provide humanity new bodies. Neuro-Embodied Design will extend our nervous systems into the synthetic world, and the synthetic world into us, fundamentally changing who we are.

AI is rapidly transforming the face of mobility and transportation, much like it is changing the face of healthcare. Self-driving vehicles are no longer the stuff of science fiction. Self-driving car prototypes are already performing successfully in a controlled laboratory setting. After careful analysis of key technologies required for self-driving cars Jianfeng Zhao, Bodong Liang, and Qiuxia Chen write:

> Nowadays, more and more driving assistance technologies originated from the self-driving car have been utilized in the traditional car. It can be predicted that the realization of self-driving car will gradually develop from the assistance driving to the self-driving in special environment (such as highway), and finally to the total self-driving. In recent times, many driving assistance technologies such as lane keeping assist, adaptive cruise control and so on, have been commercialized. In the near future, the commercial self-driving car under supervision in some special sections will be developed, such as the car will self-drive in a highway, which will be the milestone of self-driving. In the future, full self-driving car will be accepted as a common driving pattern.[31]

Significant technological advances are still required to make self-driving vehicles a mainstream mode of transportation. However, with advancements in machine learning and the development of quantum computing, the idea of self-driving automobiles reaching the general public is no longer a far-fetched fantasy. Nonetheless, fully self-driving cars are already on the road. They take the shape of self-driving trucks. Inspired by the ambition to make roadways safer, Alex Rodrigues utilizes artificial intelligence to construct self-driving trucks.[32] His self-driving trucks are currently hauling cargo on Interstate 10 from California to Arizona. His company, Embark, has started operating self-driving trucks to transport freight from exit to exit. While people are limited by work hours,

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[31] Jianfeng Zhao, , Bodong Liang, and Qiuxia Chen. "The key technology toward the self-driving car." *International Journal of Intelligent Unmanned Systems* 6, no. 1 (2018): 2.

[32] Alan Ohnsman, "This 23-year-old Robotics Prodigy Is Leading the Pack in the Driverless Truck Race," *Forbes*, November 29, 2018.

self-driving vehicles may operate continuously 24 hours a day, seven days a week. Anything that becomes completely autonomous raises the question of human employment's future. Human truckers face comparable concerns about their future. According to the findings of sociology professor Steve Viscelli, truckers in the 1980s earned $100,000 a year in today's money.[33] They are now barely making $40,000 per year. He is concerned about the arrival of self-driving trucks. It will worsen the already large wage inequality among truckers and, in the long run, will render human truckers useless. He proposes:

> Policymakers should establish a framework of strong labor standards that can shape the impact of autonomous trucks, ensuring high-quality trucking jobs now and into the future. Specific policies include addressing independent contractor misclassification and wage theft; expanding early warning systems in the case of layoffs; and exploring new ways to establish good jobs in the industry and strengthen workers' right to organize. Some of these policies have long been needed; the goal is to enact them now so that low-wage business models do not become the norm in the industry's growth segments.[34]

This is not a new concern. Some argue that the fear of job loss as a result of AI is illogical, as it has been with previous waves of automation. They claim that changes in employment and labor markets are not necessarily bad for the economy. It is not true that AI will enslave humanity and eliminate all jobs. On the impact of AI capabilities on the job market, Kai-Fu Lee writes:

> Jobs that are asocial and repetitive, such as fast-food preparers or insurance adjusters, are likely to be taken over in their entirety. For jobs that are repetitive but social, such as bartenders and doctors, many of the core tasks will be done by AI, but there remains an interactive component that people will continue to perform. The jobs that will be safe, at least for now, are those well beyond the reach of AI's capabilities in terms of creativity, strategy, and sociability, from social workers to CEOs.[35]

He further warns:

> Even where AI doesn't destroy jobs outright, however, it will exacerbate inequality. AI is inherently monopolistic: A company with more data and better algorithms will gain ever more users and data. This self-reinforcing cycle will lead to winner-take-all markets, with one company making massive profits while its rivals languish.[36]

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[33] Steve Viscelli, "Policy, Worker Power, and the Future of the American Trucker," *American Behavioral Scientist* (2022): 2.
[34] Steve Viscelli, *Driverless? Autonomous trucks and the future of the american trucker.*(California: UC Berkeley Center for Labor Research and Education, 2018), vii-viii.
[35] Kai-Fu Lee, *Robotics, Ai, and Humanity: Science, Ethics, and Policy*, ed. Joachim von Braun et al. (Cham: Springer, 2021), 262.
[36] Kai-Fu Lee, *Robotics, Ai, and Humanity: Science, Ethics, and Policy*, ed. Joachim von Braun et al. (Cham: Springer, 2021), 262.

The artificial intelligence revolution is likewise akin to the British Industrial Revolution. Some claim that technical revolutions do not always result in better fortunes for the general populace. Workers are being laid off due to the advent of AI and automation to boost efficiency and production. Automation and AI jeopardize the emergence of the successful middle class and exacerbate the plight of the destitute lower income class. There are counter-arguments that there is always the chance of more human job creation with increased production. The counter-argument, however, ignores the fact that the newly generated occupations and tasks, which may again be automated, leave little room for human need. The age of AI and automation has the potential to be a quiet job killer, lowering the standard of life for the middle and lower-income classes. Apart from industries, AI-powered robots have already begun to replace people. Self-ordering, internet shopping, drone deliveries, and fast-food restaurants have already begun to proliferate worldwide. Automation and AI are no longer restricted to manufacturing but are now found in practically every industry, including human resource businesses, law firms, trading, and wherever the flow of data and information can be handled significantly more efficiently by AI than by people. Every new startup considers decreasing human costs and automating with AI to reduce costs while enhancing efficiency and productivity. According to these scenarios, AI is a key influence in increasing wealth disparity. AI may not directly cause the growing disparity between haves and have-nots, but its abuse can exacerbate it.

III. Need for Collaboration between East and West

Large financial disparities can influence the social fabric. Larger, more successful IT firms are buying smaller enterprises. AI has evolved into a tool for wealth generation and accumulation. Large, successful technology corporations are influencing the direction of human society. Because the majority of significant AI-related firms and researchers are based in either China or the United States, these two nations are competing. If such rivalry had been healthy, it would have aided in the convergence of society and AI by creating social equality and prosperity. The rivalry between the United States and China is tainted by mistrust. Such mistrust frequently leads to trade wars and uneven AI progress. China, which used to duplicate technology, is now taking the lead in

tech and AI innovation, riding the wave of data availability and machine learning. The United States is increasingly hesitant to share its AI technology for fear of falling behind the competition. Rather than cooperating in tech and AI, both countries accuse the other's tech of working for the benefit of their governments. AI and technological advancements are increasingly being used to advance national interests. Two AI superpowers appear to be on the verge of an AI cold war. Kai-Fu Lee based his work *AI superpowers: China, Silicon Valley, and the new world order* on worries about the rivalry between the United States and China in the field of artificial intelligence. He weighs in on the debate about the future of AI, writing, "AI has the potential for human flourishing been higher, or the stakes of failure been greater."[37] He believes that cooperation between the two AI superpowers is required for beneficial AI advancement and outcomes. AI has the potential to enhance people's lives by speeding up development in every industry and freeing them from monotonous employment. On the other side, AI poses risks to individual rights, privacy, and democracy. The ideal collaborative application of AI would have been for societal progress and improvement.

IV. Conclusion

The preceding sections evaluated the many pros and cons of AI and its impact on society. The rapid emergence of AI in China and the ramifications for Chinese society were examined in the article. China has made tremendous strides in the field of artificial intelligence in a very short period of time even eclipsing the United States in terms of AI patents. China's AI progress propelled them beyond a country of imitation merchandise. Riding on data availability and internet penetration, China has experimented with several applications of artificial intelligence in a variety of sectors. Some of the applications make life easier for Chinese citizens, while others use AI technology in dubious ways, posing a threat to public freedom and agency. AI's potential for use and misuse is not restricted to China. Concerns about data protection and security have begun to worry Western society as well. There has been a big rise in the use of AI, and some big tech companies have been able to influence people's opinions and choices. The threat to public freedom and privacy is rising as AI programs and data get more advanced. Despite the

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[37] Kai-Fu Lee, *AI Superpowers: China, Silicon Valley, and the New World Order* (Boston: Houghton Mifflin Harcourt, 2018), 20.

obvious dangers involved with AI, the article also explored the more positive elements of the AI revolution. AI has the ability to positively improve human society. AI may enrich society and human life with greater investment and research in the appropriate sectors such as medicine, health, and education. To attain such utopian AI consequences, a collaboration between the east and west in the field of AI is essential. In the end, AI, like any other technology, may be manipulated and abused based on the aims of the users. It is up to all of us to communicate our concerns to our representatives in order for them to develop and implement relevant AI policies.

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