Data Ethics in the Race of Artificial Intelligence Technology Development between China and the U.S.

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ABSTRACT
In the dawn of the age of Artificial Intelligence (AI), there are several concerns on human welfare through individual agency and cultural spheres. AI technology continuously evolves, hence criticality on the checks and balances of ethical AI adoption should be taken into action. In imagining a normalized AI world, one cannot help but to consider its positive and negative implications as it impacts human beings and life. This comparative analysis of AI cases in China and the U.S. looked at the AI genesis and waves and their impact on the data ethics and agency of individuals. This paper examined the AI landscape in China and in the U.S. who are the leaders in AI technology. AI as an evolving integral communication system in the global community was evaluated through Rogers' Diffusion of Innovation Theory (1983). Putting China and the U.S. side by side allowed for a critical analysis on the emerging challenges of AI adoption, particularly regarding data privacy, unwarranted surveillance, and the proliferation of synthetic media. Dissemination of AI adoption should be regarded in terms of innovation, communication channels, duration, and social systems.

Keywords: Artificial Intelligence (AI), China vs. USA, data ethics, diffusion of AI innovation

INTRODUCTION: UNDERSTANDING THE GENESIS AND WAVES OF ARTIFICIAL INTELLIGENCE

Tracing the genesis of artificial intelligence (AI) is tied through its applications as an automated opponent in chess match, Jeopardy, and Go games (Martinez 2019). Automated and so-called intelligent machines made their way through invention and use of industrial robots, responsive Siri and Alexa, and even self-driving cars. The first wave of developed AI contact on a global scale occurred through social media and its profiling system and algorithms. Social media platforms have presented themselves with positive slogans of expression and connecting humans. Unknowingly, social media users and their data have been used as the product for harvest and analysis for the benefit of propagandistic schemes, which targets communication systems through trend control on local context and even global scale (Prier 2017). Digital consumers have been captives of social media addiction, disinformation and mal-information, impacted mental health, and fueled polarization (Amer & Noujaim 2019). Social media as platform capitalists (Srnicek 2017) are powered by first generation AI, or more known as algorithms, permeating various aspects of life, notably in politics, economy, national security, media and journalism, social engagement, and cultural progression.

AI emergence and surge are expected to be exponential (Center for Humane Technology 2023). Tristan Harris, a former Google ethicist and lead founder of the Center for Humane Technology, underscores the exponential growth of AI as of the year 2023. He highlighted essential considerations, including the revelation of new responsibilities with each technological innovation, the initiation of a competitive race when technology imparts power, and the potential for tragic consequences without coordination. Generative Large Language Model (GoLLeM) class AI entities, such as OpenAI's ChatGPT, Google's PaLM and Bard, Meta's LLaMA, and others, should prioritize transparency in their data collection, processing, and release. Media and technology ethicists must persist in advocating for transparency with the deployment of extensive language models, particularly regarding data harvesting, processing, and utility.

Despite the exponential innovation and implementations of AI developments, there are heedful warnings on the possible catastrophic outcomes of unethical use and lack of coordination among global characters such as the People's Republic of China and the United States of America competing for AI leadership. AI key players and stakeholders still inadequately define what AI is; because AI is not just a technology—it is evolving. The lack of universal AI definition (Wang 2019) still remains a pending crucial task that needs to be addressed. In an attempt to do so, AI is described as: "a machine-based system that is capable of influencing the environment by producing an output (predictions, recommendations or decisions) ... It uses machine and/or human based data and inputs… to formulate options for outcomes designed to operate with varying levels of autonomy" (Jochheim 2021, 2). According to Martinez, autonomy is crucial in AI technology to act and think humanely and to act and think rationally (2019). In order to do this, machine learning through data input is a vital step in AI development and autonomy. In the context of the U.S., according to the National Artificial Intelligence Act of 2020, AI is defined as "a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments" (U.S. Department of State n.d., 3).

As humanity shifts towards the AI epoch, it is important to examine not just the speed of AI technology roll out but the ethicality of generative AI proliferation and integration into human life. Data as the fundamental fuel block for human interaction and automated machine learning computation through generative AI models must be managed properly and organized conscientiously. Data ethics is the moral obligation of data management agencies in collecting, processing, and protecting the rights of data sources and their personally identifiable information (PII)—in this case, human data subjects (Cote 2021, 12). Data ethics should be the paramount concern in AI adoption as it cuts across various social domains and global spheres.

The global AI market is estimated to be 207 billion U.S. dollars (Thormundsson 2023). World data reveal that over the past two decades, AI has exponentially increased its performance in domains such as reading comprehension, image recognition, and language understanding; to a point better than human capabilities (Giattino et al. 2023). With the emerging AI development comes the imminent competition among nation superpowers such as China and the U.S. on who will lead the AI race. Hence, it is vital to examine the direction and trajectories to which these countries are heading towards the AI age.

The main objective of this paper is to explore and explain the technological phenomenon of generative AI race between the People's Republic of China and the United States of America as nuanced in upholding ethics in data privacy, surveillance, and data authenticity. In particular, the paper seeks to describe the development, use, and deployment of AI technologies in both China and the U.S., while identifying key ethical issues in communication systems during the AI era, particularly in relation to data privacy, surveillance, and authenticity. Additionally, the paper aims to analyze these comparative cases through the theoretical framework of Everett Rogers' Diffusion of Innovations (1983).

This paper centers on data ethics particularly privacy, surveillance, and authenticity. Data is everywhere particularly in the digital age and space. An individual emits, transmits, and consumes big data through the daily use of smartphones and the internet (Canaria 2023, 3–8). One's personal and sensitive personal data through digital footprints are readily available in the digital world. Data is the underlying sustenance for generative AI models. There should be an immense emphasis and pressure on data privacy and processing particularly on the aspects of collecting and processing sensitive personal information, consent explanation and even translation for inclusivity, and raising consciousness on data privacy in the dawn of the AI epoch. Rigorous checks and balances in digital spaces should be afforded for users when it comes to content authenticity and of media content and its provenance.

DIFFUSION OF AI INNOVATION

Through the lens of Rogers' Diffusion of Innovation Theory (1983), AI as a technological innovation in the cases of Chinese and American context are conceptualized and analyzed. Rogers (1983) stated that not all innovations are successfully adopted. It should be noted that the inherent benefits of an innovation will not automatically sell itself to diffuse and be adapted by the public. Culture plays a crucial role in the failure or success of the diffusion of an innovation. "An important factor affecting the adoption rate of any innovation is its compatibility with the values, beliefs, and

past experiences of the social system" (4). Hence, safe, secure, and trustworthy AI adoption in the U.S., China, and other countries should consider context and culture as crucial factors of data ethics in AI adoption. Conceptualization of AI adoption in China and the U.S. through the lens of Rogers' Diffusion of Innovation Theory has four elements which are: (1) innovation, (2) communication channel, (3) time, and (4) social system.

AI as a technological innovation has its hardware aspect which is its semiconductor chips while its software aspect consists of the algorithmic coding that enables automated machine learning and output generation. The versions of innovation may be forwarded through re-invention. Information about the innovation and its reach to the possible adopters and stakeholders is crucial in the decision making of innovation adoption. The U.S. is keener in applying AI innovation evaluation through information dissemination to its stakeholders than of China, in which AI adoption seems to be more of a mandatory adoption than of natural adoption as observed in a democratic process.

Innovations have five characteristics, which are: (1) relative advantage, (2) compatibility, (3) complexity, (4) triability, (5) observability. Zoning in on the characteristic of compatibility—context and culture is a vital component in compatibility. Hence, through the analysis of this comparative case study, the paper proposes a non-binary view of the AI adoption cases in China and the U.S. One can not fully say that AI adoption is better than the other for AI diffusion is culture bound. In terms of complexity, inclusive AI innovation information dissemination should be accounted for through considering adopters' characteristics such as: demographics in terms of culture, age, gender; technological adeptness; and even digital accent (Prensky 2001, 2). In terms of triability characteristic of an innovation, AI trial deployments should be ethical as with data privacy, surveillance, and authenticity.

The second element of diffusion of AI innovation reinforces the goal of shared understanding about AI innovation. In achieving such understanding, interpersonal communication channels through face-to-face information exchange is perceived to be better when it comes to persuading innovation adoption. According to Rogers (1983), "one of the most distinctive problems in the communication of innovations is that the participants are usually quite heterophilous" (19). How can the ideal safe, secure, and trustworthy AI adoption mantra as articulated by the U.S. AI plans be applied in China, and vice versa, given the distinct natures of the two countries and their socio-cultural contexts.

Rogers pointed out that time is a crucial element in the diffusion of an innovation process (1983). Adopters may be categorized as innovators, early adopters, early majority, late majority, and laggards. However, despite the importance of time, this is the element that is mostly ignored or overlooked due to the criticality of time and duration dimensions. Dimensions of understanding the time variable in the innovation decision process are: knowledge, persuasion, decision, implementation, and confirmation. In leading the AI race, being the first does not guarantee success—quality of AI adoption through the aspect of data ethics must be accounted for as well. The temporal aspect of AI diffusion both in China and the U.S. is an unfolding aspect that can serve as an extension of this paper. An identified research gap in utilizing Rogers' Diffusion of Innovation Theory is the clockwork of AI innovation diffusion as a possible thrust for extensive discussion.

Another element in the diffusion of an innovation is the structure of the social systems. China and the U.S. have different social structures as observed through political, economic, and socio-political aspects. Social system norms are vital factors in the adoption or rejection of an innovation. High and low context cultural differences (Hall 1981, 105–16) should be considered in AI adoption evaluation of different countries such as China and the U.S.. It is notable that socio-cultural norms are not easily altered. Despite the foreseen possible repulsiveness due to established homophily cultural norms, AI adoption in China and the U.S. are considered to be authority innovation-decisions, in which, the greater public and stakeholders are pushed to converge with the AI adoption. Though similarities between China and the U.S. in terms of social system and structure of AI adoption, collective consensus and individual innovation adoption decisions are more afforded to American systems. This is indicated in the AI Blueprint of AI Bill of Rights and the eight guiding principles indicated in the Executive order on the safe, secure, and trustworthy development and use of Artificial Intelligence, which advocates for responsible and healthy innovation competition as nuanced to social equity and civil rights of its citizens. In the case of China, based on the details of China's AIDP 2030 goals, there is a robust and forceful development and implementation of AI integration in key social aspects as part of its national strategic plan in terms of economic development and international competition (Webster et al. 2017).

Consequences of AI innovation should be accounted for in terms of: desirable and undesirable; direct and indirect; and anticipated and unanticipated consequences. As Hasselbach (2019) emphasized, data ethics protection and policy making corresponding to it should recognize the context and culture in making legal reforms, in particular policy makers and involved stakeholders should "recognize these initiatives as open-ended spaces of negotiation and cultural positioning" (13).

THE AI RACE BETWEEN CHINA AND THE U.S.

When China released its Artificial Intelligence Development Plan (AIDP) in 2017, it was outlined to attain the national strategy of positioning the country in three temporal milestones. First was in 2020, which is to catch up with the West; second will be in 2025, which is to overtake the West; and third is to become the lead in the AI race in 2030 (Fischer 2018, 2). AI technology based on the AIDP 2025 and 2030 milestones situates China in an advantageous position in terms of AI development and application. AI is considered to be China's leapfrog technology in advancing against the US in the so-called AI race or as Roberts et al. labeled it as China's trump-card (2021, 62–63).

Meanwhile in the U.S., AI plans were paused during President Trump's period (2016–2020). There was a decrease in tech personnel in vital government offices, China poaching U.S. AI talents, lack of AI strategy, and restrictive migration policy (Fischer 2018, 4). The recruitment of AI talent occurs through the Qiming program which is formerly called the Thousand Talents Program (TTP). Qiming intends to entice foreign AI talents from prestigious U.S. universities such as Massachusetts Institute of Technology, Harvard, and Stanford (Kaur 2023; Zhu et al. 2023). Through these observations, the U.S. lagged behind its projected AI development and growth as compared to its possible AI plan timeline. This made China's AI leap apparent compared to the U.S. in the AI race.

Center for Humane Technology discussed the exponential growth of AI technology calls for ethical consideration in terms of responsible use, ethical wielding and use of AI *power*, and coordinated race (2023).

China as the AI dragon

In advocating the idea of de-westernizing and reframing the lens on who is the dominant nation, China President Xi Jinping emphasized the crucial role of AI technology in geopolitics, in which he emphasized that "advanced technology is the sharp weapon of the modern state. An important reason that Western countries were able to hold sway over the world in modern times was that they help the advanced technology" (Jochheim 2021, 3). China's focus on AI is part of the call to pivot the hegemonic narratives that the West is better and bigger than of the East (Roberts et al. 2021, 63). With the bold movement towards enhancing and leading in terms of AI technology, the succeeding discussion will highlight the development, policies, milestones, and key players of the AI movement in China. The national rebranding of China would be made possible with their foreseen success of forging AI into its advanced national tool.

The Artificial Intelligence Development Plan (AIDP) is set forth from 2017 up to the year 2030. The conceptualization started as early as 2013 (Jochheim 2021). Initially, AI is just one of the aspects for technology growth in China, however, upon the release of AIDP in 2017, it became a huge focus for China. There are periodic targets in AIDP; these are 2020, 2025, and 2030 (Roberts et al. 2021, 61). AI applications in China include the focus in nine various aspects, which are: (1) core AI technologies; (2) public information service platforms; (3) smart homes; (4) smart vehicles; (5) smart unmanned transportation applications; (6) smart security; (7) AI-enabled end user applications; (8) smart wearable devices; and (9) smart robots (He 2017, 10–11).

China took a holistic approach by tapping on the various government and private entities in fulfilling the AIDP 2030 aspiration. This includes private technology company giants, PLA-People's Liberation Army, medical team and professionals, and even research institutes and universities. China established the linkage between military and education through the MCF, which is known as the Military-Civil Fusion. Huge players in China's leap towards AI 2030 aspiration include the involvement of technology companies and startups, which are dubbed as 'unicorns'. The economic jargon of 'unicorn' is defined as a privately owned start up with valuation of one billion dollars or more (Bock and Hackober 2020; Poon, Wu, and Liu 2023). China's three leading unicorns are Baidu in Beijing, Tencent in Shenzhen, and Alibaba in Hangzhou (Johansson 2022, 27–30). Aside from the three leading unicorns, China also tapped on other 12 unicorn companies and assigned respective AI development aspects that they should work on. There are incentives in being part of the AI national team, this include: preferential contract bidding, access to finance, and market share protection (Roberts et al. 2021, 61). According to analysis, China's AIDP goal of leading AI globally may come with hurdles such as lack of originality and creativity in terms brought by lack of domestic AI talent.

The U.S. as the soaring AI eagle

The U.S. remains as the leading country in the AI arms race. Silicon Valley as the primary hub for AI research, development, strategy, and investments brings the U.S. the edge over other competing nations (Keary 2023; Soni 2023; InvestGlass 2023; and Ortiz, 2023). The U.S. retains its leadership in AI in terms of the AI pillars of implementation, innovation, and investment. AI implementation covers talent acquisition, infrastructure for AI, and operating environment. AI innovation includes research and development and AI investment looks at both commercial and government strategy (Cesareo and White 2023).

Despite its competitive advantage, the U.S. strides carefully towards the AI global leadership path. The Executive Order of the U.S. President Joseph Robinette Biden Jr. advances eight principles and priorities for AI development, use, and deployment in America (The White House 2023, 1–4). There should be a developed resource guide such as AI Risk Management Framework that will guide AI developers in ensuring safe and reliable AI development, use, and deployment. This will be done through consultations with AI experts, laboratories, academia, and third-party model evaluators. The resource guide will also facilitate the evaluation of AI models and capabilities through 'red teams'; this action can be referred to as 'red teaming'.

The U.S. government adheres to safeguarding the privacy of its citizens. The development and fostering of Privacy Enhancing Technologies (PETS) intend to "mitigate privacy risks potentially exacerbated by AI—including by AI's facilitation of the collection or use of information about individuals, or the making of inferences about individuals" (The White House 2023, 40). The differentiation of private data from commercially available information is paramount in upholding data privacy of American citizens except for situations when national security is at stake.

Also, the Blueprint for an AI Bill of Rights as released by the White house underscores five principles in making AI automated systems work for Americans. These foundation concepts are (1) safe and effective systems, (2) algorithmic discrimination protections, (3) data privacy, (4) notice and explanation, and (5) human alternatives, consideration, and fall back (The White House n.d., 5–7).

The U.S. government assures its citizens an equitable AI adoption and safekeeping from algorithmic discrimination, ethics, privacy, and accountability concerns (Bundy 2017). AI automated systems and models have tendencies to be biased against certain people and communities. In fact, algorithmic discrimination manifestations were detected in AI programs in the judicial system, hiring process, and even face recognition through non detection of faces of different color. Another example, searchers for keywords of girls of different races such as 'black girls', 'Asian girls', or 'Latina girls' return predominantly sexualized content. In the documentary *Coded Bias* (Kantayya 2020), it was forwarded that AI and its algorithms must be improved; AI such as facial recognition is biased particularly on minorities—people of color and different races. Hence, the U.S. government necessitates protecting individuals from algorithmic discrimination.

Moreover, the U.S. government assures its citizens protection from abusive data (mal)practices through built-in safeguard nets and promotion of an individual's data privacy agency. This principle will be carried out through giving premium to consent requests and data access limits, particularly for commercial use and or unnecessary contexts and undisclosed misleading purposes. Consent

requests are generally lengthy and are taunting human limitations. One good example of this is the pervasiveness of lengthy terms and conditions compounded with complex and too technical language and terminologies. Citizen's data and consent approval process should be protected by ethical review and use prohibitions. Also, Americans are promised to be protected from unchecked surveillance technologies that pose possibilities of limiting their rights, opportunities, and access.

O'Neil in her book entitled *Weapons of Math Destruction* elaborated the various models utilized in machine deep learning that enables AI automated decisions to have possibilities for false positives and inaccurate verdicts. This can lead to algorithm bias of AI models that will affect job and insurance applications, credit scoring, jurisprudence of crime, and other aspects of civic life (2017). The U.S. government assures its citizens with transparency and knowledge that an automated system is used and may possibly impact them. The notice should be presented in up-to-date and comprehensible explanations bringing about awareness to American citizens that they are being subjected to AI functions.

In general, Americans are more positive with AI applications such as facial recognition technology in deterring crimes and social media companies finding false information. However, AI applications such as driverless cars and human enhancements such as robotic exoskeletons, editing baby's genes to reduce health risks, and enhancing cognitive function using computer chip implants in the brain are uncertain and unwelcome thoughts. Zoning in on social media companies' use of AI in detecting false information, Americans are more positive on this with a narrow margin of 7%. With the difference of 718 US adults, the divide brings forth uncertainty on Americans' perception on integrating AI in one's daily life. In fact, 45% of the American-participants shared that they are equally concerned and excited with the increased use of AI in daily life (The Pew Research Center 2022, 5–16).

Looking at the negative perception towards AI, there are possibilities of unwarranted surveillance, which manifests the loss of data privacy, and lack of human connection through the proliferation of synthetic data that may lead to false information and possibly fragmented societal realities. With these inherent risks, there should be a balancing act of identifying and mitigating effects of synthetic data, dis and mal information and hampering freedom of information and speech. Three key groups play vital roles in setting standards for use of algorithms to find false information. These are the social media companies, users, and federal government agencies.

EMERGING CHALLENGES ON DATA ETHICS

Big data availability and unconsented use of data subjects reveal privacy breaches of various tech players in the US such as Google, Facebook, and Apple (Chen and Quan-Haase 2018; Richards and King 2014; Varley-Winter and Shah 2016). There is the looming concern of unwarranted government surveillance as a tradeoff for public service and security endowed to its citizens (Richterich 2018). The massive availability of media content calls for media literacy criticality among online media content producers and consumers. In Asia, particularly the Southeast region, AI development is looked at in various aspects such as creation and management of robust data ecosystems (Chitturu et al. 2017), urban mobility (Chong 2022), smart tourism (Ho 2022), and even robotics (Mongkol 2023) among many other aspects of AI development and application. In fact,

China turns to Southeast Asia in forging economic geopolitical alliances and syncing AI ecosystems within the region (Zhang and Khanal 2024). With this, there should be stronger observance and implementation of the ASEAN framework on personal data protection among its member nations and partners (ASEAN 2020). This analysis highlights the possible emerging ethical consequences of AI adoption in China and the US context particularly on the aspect of data privacy, surveillance, and authenticity.

Data Privacy Issues

AI works with large language computing systems fueled by data and metadata. In harnessing data, there are cases and possibilities that AI models as managed by tech giant companies may violate data privacy of sources and stakeholders such as Chinese and American citizens. In AI adoption and mass integration, proper data collection, use, access, transfer, and disposal should be observed and respected. Only necessary data should be collected. It is vital to utterly ask and respect the consent of data subjects. Consent requests should be comprehensive; should not taunt on human limitations; and should have inclusive considerations of the data subjects' background.

China lacks clear privacy regulation given that data footprints of Chinese citizens in a highly digitized society are easily accessible (Wu et al. 2011; Zhao & Dong 2017). Through Foucault's concept of 'Panopticon' in redefining power through discipline mechanisms of having knowledge about the observed and governed. Unwittingly without consent, the AI adoption through face-recognition and data collection incentivizes and pushes Chinese citizens to forsake their data privacy and be subjected to the panoptic eye and control of the Big Brother and friends, which are the Chinese government and its AI team. In example, mobile phone applications containing the so-called 'BadBazaar', which is an identified Chinese spyware tracking Uyghur citizens is an illustration of coercive data breach and inhumane treatment by disregarding respect for data privacy (Stefanko 2023; Al Jazeera 2019; Wakefield 2021). Details on data protection and hidden caveats on what particular data should be protected were unaddressed concerns in the AIDP 2017 release. Citizens' data privacy and protection should weigh in in the development and implementation of national policies such as the AI use without the tradeoff notions of economic affiliations and consumerism (Yao-Huai 2005; Calzada 2022).

In the U.S., spywares, data breaches, ransomware, and cyber-attacks are also reported to have an increased trajectory from 2013 up until 2024 (Chin 2024; Petrosyan 2024). Two of the biggest data breaches recorded were from the Discord social platform through 'Spy.pet' in April 2024 and AT&T Mobile in March 2024 which compromised users' sensitive personal information such as full names, date of birth, and e-mail addresses (Seddon 2024). There is an appeal in protecting the data rights as part of human rights on the U.S. soil.

Another example of privacy issues in Chinese AI implementation are the medical records of Chinese citizens. Tencent's program of 'WeDoctor' collects health data from Chinese rural citizens in the guise of charity work (Hawkins 2019). Accounting China's perspective on this, AI application in the health care platform will be beneficial to support health services of its citizens and can be extended in Hong Kong (Li and Benitez 2018). Despite the foreseen benefits of AI in the healthcare area, this raises concern on the value of Chinese citizens' participation and particularly data

consent. Health data includes blood pressure, electrocardiogram (ECG), urine and blood tests. The AI program claims to use medical data for analytics in epidemic prevention and control. The data collection through the form of free medical aid is a data privacy and trustworthy governance concern. The inherent idea is that the government—any trustworthy government—should provide medical care for its citizens without any conditions such as data breach and leak. This may lead to a possibility of state control through medical data of citizens.

In relation to data privacy is Chinese government transparency. There are transparency issues in social governance concern in terms of AI development and implementation in China is the lack of transparency in military defense and expenditure (Jochheim 2021, 9); "the absence of an effective accountability review of local government spending creates problems within this system" (Roberts et al. 2021, 62).

Unwarranted surveillance

Also, Chinese society may be deemed as an AI petri dish. There are big AI experiments in China wherein, Chinese society is considered as a "gigantic test bed for AI applications" (Fischer 2018, 3). China has implemented their face recognition AI programs for surveillance through the application of the Social Credit Score System. Chinese citizens will be graded, ranked, rewarded, and punished based on the score they will receive. The Sesame Credit under Alibaba's Alipay system is one of the companies that manages the score which ranges from 350 to 950. Alipay serves as the source and web of big data that fuels AI, this is possible through mobile payment of e-commerce or commonly termed as online shopping. The key propellant for AI machine learning and automation is the over 1 billion Chinese users that merits an aggregated big data (Campbell 2019).

There are benefits of having high social credit such as special waiting rooms in transportation services like airports and rail stations, prioritization in hospitals, and even improved foreign exchange rates. One maintains a high social credit score through social good deeds and continued Alipay use and investment. Also, 'unlawful' behavior will diminish social credit, these bad deeds may include but not limited to financial misdeeds, quarreling with neighbors, and insincere apology. Individuals with low credit scores are marked as blacklisted individuals or considered as untrustworthy persons. When someone calls a blacklisted person, one will hear a message saying "Warning, this person is on the blacklist. Be careful and urge them to repay their debts" (Campbell 2019, 11). Publicly shaming blacklisted citizens is one of the ethical concerns in the social credit system (Roberts et al. 2021, 67–68).

Western views on the social credit system are deemed draconian. Others, particularly emic-Chinese, perceive the system as an improvement and solution with Chinese moral decline, however, there might be possibilities of censorship and chilling effect to various stakeholders. This is related to Chomsky's media filter and propaganda push of China's focus on AI that may hinder citizens' freedom of speech and media's watchdog function. Another concern is the decentralized Social Credit System through the lack of uniformity with the level of measurement in social crediting counters its standard validity. Having information on China's social credit scoring and putting oneself in the shoes of a Chinese citizen, it would be hard to become a divergent in Chinese society. This leads to the possibility of a spiral of silence and groupthink. In a governing level, CCP's

draconian administration through the implementation of the social credit score system may limit its competence and credibility through the absence of opposing critical views and muting of checks and balances mechanisms through society's authentic voice.

Synthetic media

Another impending concern in the AI focus is job displacement for human workers. Almost half of the labor jobs can be possibly displaced, in fact, in the U.S., 47 percent of jobs are at risk for automation and human displacement (He 2017, 15). Low and medium skilled jobs will be immediately affected by smart automation through the help of AI. On the other hand, high-skilled technical roles will be in demand (Roberts et al. 2021, 64–65). China as an industry-focused nation may replace a huge part of its labor force with machinery and the job market will be steep with the implementation of automation in industrial manufacturing. Chinese media personnel and practitioners are no exception to this AI concern. AI in China are shifting to computer-generated endorsers, weather newscasters, and even concert performers due to practical reasons, such as easier management, less potential for involvement in scandals, flexibility, and the ageless capability (Al Jazeera English 2023). In the U.S., synthetic icons and influencers such as 'Lilmiquela' who is an AI robot living in Los Angeles, California, have amassed 2.6 million followers on Instagram. The U.S. emphasizes the importance of guarding the safety of users and stakeholders through reliable AI use. In particular, there is a call for authenticating content and tracing its provenance so that human users will be aware that they are being subjected to AI generated content exposure.

On a surficial level, synthetic media forwards various benefits such as internet creativity, efficiency in mundane tasks and enriching experiences through virtual reality, gaming, and websites. However, with the lack of transparency and deliberate manipulation, synthetic media poses several concerns such as false implications, propagation of false information, and trust concern on the quality of humane-ness that may lead to trust collapse (Riparbelli 2023). Inherently, the internet as a digital space is a complicated web to navigate, with the inception of AI generated synthetic media, human data and synthetic data leads to a more perplexing task of asking which is true and which is actually human (Traylor 2023).

ONE SWORD WITH TWO PERSPECTIVES: EVALUATING THE AI RACE PLAYERS

Looking at the comparison between China and the U.S. in terms of AI development, use, and deployment, the U.S. AI deployment policies are ideal compared to China, however, could there be discrepancy with vision and its implementation. Through the juxtaposition discussions in the preceding paragraphs, one may say that the priority for China is surpassing the U.S., on the other hand, the priority for the U.S. is to deploy AI in a safe and secure manner. This is evident with China's AIDP goal of surpassing the U.S. through geopolitical, economy, and legal and ethical aspects (Roberts, et al. 2021). On the other hand, in October 2023, through the Executive Order of the U.S. President Biden, the U.S.'s AI priority emphasizes on its citizens' safety and security while strengthening American leadership abroad is in its eighth and last priority (The White House, 2023, 50–54). China is ambitious with its direction towards leading the AI race and mass deployment through giving a premium in winning the ostensible race by 2030. On the other hand, the US may

be considered to be lagging behind, however, the assurance of safe, secure, and trustworthy AI mass deployment is carried out through striding carefully with its policies and measures. Through an implied comparison, one may imagine that China perceives AI technology as a sword that is sharp in which its blades will allow the dragon to carve its way to the top. On the contrary, the U.S. sees AI technology as a sword with its sharp blades, in which delicate handling should be observed in wielding its benefits and avoiding its sword cut.

CONCLUSION

Critical checks and balances on ethical AI use and adoption should be taken into action. AI as an evolving integral communication system in the global community was evaluated through Rogers' Diffusion of Innovation Theory (1983). Dissemination of AI adoption should be regarded in terms of the elements of innovation, communication channels, time, and social system. AI technology is an authority innovation decision for both the U.S. and Chinese social systems. AI diffusion is culturally bound, and no single approach can be deemed superior, as diffusion varies across heterophilous societies. Simply being the first to adopt AI does not guarantee success; ethical considerations such as data transparency and regard for human data rights are crucial. Despite the rhetoric of safe, secure, and trustworthy AI innovation implementations, there should be a keen regard for AI innovation complexity, cultural compatibility, and triability without forsaking data ethics' notions of data privacy, unwarranted surveillance, and content authenticity. This paper examined the development, use, and deployment of AI technologies in China and the U.S., revealing the shifting dynamics of AI leadership. While China, through its AIDP 2030 milestone, is positioned for significant advancement in AI, the U.S. is struggling to meet its projected development targets, particularly in addressing algorithmic bias and protection of individual rights. The discussion highlighted vital ethical issues in communication systems, such as data privacy and its weight in the implementation of national policies and actions. Both nations are grappling to protect citizens' data without compromising personal freedoms as nuanced with unwarranted surveillance and synthetic media.

This study advocates prioritizing data ethics in AI development, emphasizing consent, transparency, and responsible technology rollouts to ensure that AI advancements align with ethical standards forwarding social justice. The AI arms race between the Chinese dragon and the American eagle should not be reduced to a perception of a blood sport. Veering away from the outlook of interspecific competition advances greater focus on the task of forwarding ethical AI development, use, and deployment. Why not consider coexistence over competition through a coordinated action in which the global human community aspires for symbiosis amidst differences in the AI ecosystems?

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