

Militarisation of AI and the U.S.-China Competition: The Future Frontlines

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Abstract

Emerging technologies like Artificial Intelligence (AI) are now considered to be fostering the military strategies and national security of major powers. China and the United States (U.S.) are at the forefront, having incorporated these cutting-edge technologies into their defence strategies as well as civil purposes to gain maximum economic gains. However, their hostile relations in the wake of these emerging technologies have implications for global power dynamics. The U.S. and China have been compelled to improve their military capabilities by using AI as a deterrent against potential aggression from enemies in a world, dominated by geopolitical turmoil. Concerns regarding potential future conflicts between these two military powerhouses have been raised due to the critical role that AI-centric mechanisms and capabilities have taken in their strategic policies. This study being exploratory research, examines how the U.S.-China tech competition, particularly in the field of AI, may or may not influence the present political landscape unravelling the future global power dynamics. The paper concludes that Sino-U.S. relations in the exploration of AI has ignited a competition between the two giants having profound implications for the global balance of power.

Keywords: China, United States, Artificial Intelligence, U.S.-China Competition, Major Powers.

Introduction

Modern technologies like Artificial Intelligence (AI), is being used more often by countries to strengthen their internal security and worldwide

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dominance.¹ China and the United States (U.S.) are at the forefront, having incorporated these cutting-edge technologies into their military strategies.² Concerns regarding potential future conflicts between these two military powerhouses have been raised in the context of their deepening geopolitical competition — a trend that is increasingly being driven by the adoption of AI-focused defence capabilities into their doctrines.³ These circumstances impact the global power balance because it inhibits cooperation in these new fields between these important global actors. These emerging technologies are gradually transforming into the foundation of modern warfare.⁴ These technologies — including Artificial Intelligence (AI), Quantum Computing (QC), and Machine Learning (ML) have been found to have both positive and negative effects on security at the national, regional, and global levels. This study examines the adoption of AI in military platforms in the U.S. and China, assessing how these technologies will influence strategic competition and define the geopolitics of the modern world. It further evaluates the double-edged sword aspect of civilian AI technologies and their effects on national security.

AI has been helpful and possibly detrimental for military uses, just like the dual-faced god Janus.⁵ While simultaneously stimulating rivalry within the defence industry and in their peaceful applications for economic progress, this duality provides opportunities for future collaboration. The AI market between the U.S. and China is constantly expanding and changing.⁶ AI will radically reshape the nature of war by augmenting current network-centric and ‘informatised’ war. It will facilitate speedier, autonomous decision-making and accuracy operations, expediting the shift

¹ Greg Allen and Taniel Chan, *Artificial Intelligence and National Security* (Cambridge, MA: Belfer Center for Science and International Affairs, 2017).

² Brian Seamus Haney, “Applied Artificial Intelligence in modern warfare and National Security Policy,” *Hastings Sci. & Tech. LJ* 11, no.1 (2020): 61.

³ Graham Allison and Eric Schmidt. *Is China Beating the US to AI Supremacy?* (Cambridge, MA: Harvard Kennedy School, Belfer Center for Science and International Affairs, 2020).

⁴ Haney, “Applied Artificial Intelligence in Modern Warfare.”

⁵ M. A. Nikitha et al., “The Future Warfare with Multidomain Applications of Artificial Intelligence: Research Perspective,” in *Proceedings of Second International Conference on Sustainable Expert Systems: ICSES 2021* (Singapore: Springer Nature Singapore, 2022), 329-341.

⁶ Loren Brandt, Trevor Tombe and Xiaodong Zhu, “Factor Market Distortions Across Time, Space and Sectors In China,” *Review of Economic Dynamics* 16, no. 1 (2013): 39-58.

towards algorithmic and ‘intelligentised’ conflict.⁷ The strategic use of big data, AI, robots, autonomy, and sophisticated computers is expected to be a part of this new warfare. However, AI should not be taken as a weapon in itself. Instead, it acts as an amplifier or enabler from a military perspective. China and the U.S. have a fast-growing interest in AI and have emerged as essential players in AI defence applications, notably in the fields like aviation, maritime and ground systems, “real-time intelligence integration,” unmanned aerial vehicles (UAVs), cyber warfare, and nuclear warfare.⁸ China and the U.S. use AI’s predictive capabilities to foresee possible military crises.⁹ Additionally, the U.S. believes that China has launched a hybrid war against it through an information operation driven by AI that makes false claims about it on social media.¹⁰ However, Chinese authorities have always condemned such charges as politically motivated and unsubstantiated. In reaction to the same, China’s Ministry of Foreign Affairs has announced that it does not support the fabrication and spread of disinformation in any form.¹¹

The U.S. and China have been compelled to improve their military capabilities as deterrence against potential aggression from enemies in a world dominated by geopolitical turmoil. Both have established solid military systems to protect their domains of influence.¹² However, when these powers try to exert as much influence as possible, they unavoidably endanger rivalry, particularly when their interests are endangered in places

⁷ James S. Johnson, “China’s Vision of The Future Network-Centric Battlefield: Cyber, Space And Electromagnetic Asymmetric Challenges to the United States,” *Comparative Strategy* 37, no. 5 (2018): 373-390.

⁸ Zaman Majed Auda and Sameer Jasam Radhi, “Artificial Intelligence and Evolution of the Global System,” *IPRI Journal* 22, no. 1, 56-78, (2022).

⁹ Shuxian Luo, “Addressing Military Ai Risks In U.S.-China Crisis Management Mechanisms,” *China International Strategy Review* 4, no. 2 (2022): 233-247.

¹⁰ Pepe Escobar, “China Locked in Hybrid War with U.S.,” *Asia Times* 17, no. 03 (2020).

¹¹ “China Urges U.S. Media to Stop Spreading Disinformation against China,” Xinhua, September 18, http://en.chinadiplomacy.org.cn/2023-09/19/content_116693918.shtml

¹² James Johnson, “The AI-Cyber Nexus: Implications for Military Escalation, Deterrence And Strategic Stability,” *Journal of Cyber Policy* 4, no. 3 (2019): 442-460. Also, these are robust, sophisticated, and coordinated technologies that enhance a nation’s defensive capabilities. They consist of surveillance and attack drones, missile defense systems such as the Iron Dome, radar and satellite targeting, secure communications networks, and AI-guided command systems.

where their spheres of influence diverge. In this tumultuous strategic environment, the primary objective of these powerhouses (major global powers) is their existence which is inextricably linked to their ambition for dominance. The U.S. and China naturally tend to increase their supremacy. They use resources to strengthen their military might in this effort. Both countries have built up sizable national wealth over the past 50 years by bolstering their power which has caused a change in their capacity for development strategies. To strengthen their national security capabilities and worldwide influence, China and the U.S. are now pursuing cutting-edge technologies, including AI, QC, nanotechnologies, and ML.¹³ This investigation into the strategic integration of next-generation technologies especially AI by world powers may result in a war for resources and a battle for market share in the global economy. However, it would be naive to completely rule out the prospect of collaboration in these fields, given the mutually beneficial potential of these technologies. Even though bilateral cooperation might be difficult, it is not impossible.

Modern innovations like AI has transformed the usage of ‘instruments of war’ in the modern world. There have been breakthroughs in systems that may be used for military and civilian objectives due to the broad Research and Development (R&D) activities in several scientific domains. These technological advances have revealed its two-edged nature, impacting society, the “character of conflict,” and people’s lives.¹⁴ The postmodern world characterised by fractured authority, hybridised boundaries, and the breakdown of linear technological advancement. Innovation is decentralised, accelerated, and morally ill-defined. Technologies such as AI and QC have been developed in advance of regulation, with their civilian and military applications ever more proximate. Such a chaotic environment is not a defect but an aspect of postmodernity where complexity, disputed accounts, and calculative uncertainty shape the global technological contest. Wide-ranging technical developments have revolutionised fields, including Physics, Electronics, Chemistry, Biology, etc. The Revolution in Military Affairs (RMA), sparked by this revolutionary wave, has considerably modernised

¹³ Vinod Khobragade and Avneet Kumar Nim, “The U.S.-China New Cold War,” *World Affairs: The Journal of International Issues* 25, no. 2 (2021): 70-83.

¹⁴ Can Kasapoğlu and Barış Kırđemir (eds.), *Artificial Intelligence and the Future of Conflict* (Belgium: Carnegie Endowment for International Peace: Europe, 28 November 2019).

and strengthened state's national defence through AI, ML, and QC advancements.¹⁵

The character and doctrinal and systemic architecture of the warfare have changed over the years. Even if the fundamental nature of conflict has not changed, many of its aspects have. As a result, security-related issues are still a problem for humanity. However, the unprecedented development of warfare from first generation to the decentralised, networked dynamics of modern-day battlespaces has enhanced national defence for technologically advanced states, its effect is still uneven across the world. Emerging Disruptive Technologies like AI, cyber technologies, and autonomous systems have increased strategic depth but brought new vulnerabilities as well. The phrase “fifth-generation warfare,” while not officially acknowledged in military strategy, is already widely used to define information warfare-driven, non-kinetic conflict fuelled by psychological influence and cognitive manipulation — representing a transition from dominance of the battlefield to perception battles, narrative battles, and control battles of the informational environment. Although tedious and lengthy, this development process has lasted over 200 years. States have made extreme efforts over the ages to safeguard their national security goals and interests, covering the military and the economy. AI is guiding this scientific and defence revolution at the cusp of this revolutionary period.¹⁶

The convergence of AI, ML, and QC shows that these fields are essential for unleashing breakthroughs that can advance human growth and strengthen national security. AI and ML are primary enablers in their respective technological ecosystems, fuelling cross-disciplinary innovation and holistic advancements. If used in the civil sector, the combination of AI, ML, and QC is expected to provide transformational results, revolutionising the industries like healthcare, finance, and energy. At the same time, their dual-use character carries immense potential for

¹⁵ Colin Ijebor, “Artificially Intelligent Warfare and The Revolution in Military Affairs,” (Master’s dissertation, The University of Manitoba, 2020). 92-110.

¹⁶ Brendan McCord, “Taking Up the Revolutionary Call: Principles to Guide a Purpose-Driven AI Future,” *Harvard Data Science Review* 1, no. 1, 167-180, (2019).

national defence advancements.¹⁷ On the other hand, their use in the defence industry may produce smarter, more autonomous, and precision-guided weapon systems with the ability for quicker decision-making and adaptive targeting that fundamentally alter future battlegrounds. By experimenting with AI and ML across several areas, the U.S. and China stand on the verge of enacting significant changes in their civilian and defence sectors.¹⁸ Even as the efforts persist to foster cooperation in the peaceful uses of these technologies, their strategic significance also drives competition — orchestrating the international balance of power.¹⁹

The U.S. and China, two major military powers, have planned to deploy particular weapon systems²⁰ based on AI.²¹ Additionally, they use AI and ML in their command-and-control frameworks to make it easier to conduct in-depth data analysis and have a sense of the situation for making decisions²². Future decision-making in military operations and strategic planning is predicted to depend increasingly on AI and ML-based systems, with varied amounts of human involvement.

The U.S. Approach to Artificial Intelligence and Emerging Technologies

The U.S. has embarked on an active and multi-faceted strategy towards AI, aware of the pivotal role that it plays in determining the future of

¹⁷ Zachary Davis, “Artificial Intelligence on The Battlefield,” *Prism* 8, no. 2 (2019): 114-131.

¹⁸ Dennis J. Blasko, “Technology Determines Tactics: The Relationship between Technology and Doctrine in Chinese Military Thinking,” in *China's Emergence as a Defence Technological Power* (London: Routledge, 2013), 61-87.

¹⁹ Suisheng Zhao, “A New Model of Big Power Relations? China-U.S. Strategic Rivalry and Balance of Power in the Asia-Pacific,” *Journal of Contemporary China* 24, no. 93 (2015): 377-397.

²⁰ Like autonomous drones (e.g., the U.S. MQ-9 Reaper with AI-enabled target recognition), loitering munitions like Israel's Harpy, and AI-assisted missile defence platforms such as the U.S. Aegis Combat System

²¹ Michael C. Horowitz et al., *Strategic Competition in An Era Of Artificial Intelligence* (Washington DC: Centre for a New American Security, 2018).

²² For instance, U.S. Project Maven and JADC2 use AI for real-time ISR, China has developed AI-based C2 for PLA joint operations, Russia's Zaslon C2 system uses AI to automate battlefield data processing and air defence coordination, and Israel's AI-enabled C2 in the Fire Weaver system allows real-time sensor-to-shooter connectivity.

national security and geostrategic power. AI technologies are being rapidly absorbed within the defence, intelligence, and civilian domains, and they are becoming a necessity in strategic planning, operational superiority, and technological excellence. This concentration reflects a larger global pattern: per the OECD's 2021 AI report, almost 60 nations have already put policy in place to incorporate AI into civilian and military systems.²³ The across-the-board application of AI — from civil society to systems of war — highlights its revolutionary influence, but the magnitude and velocity of the U.S. progress are of particular importance²⁴.

AI is an essential component in the U.S. National Defence Strategy (NDS), which sees it as one of the significant technologies essential to the U.S. capacity to conduct and prevail in future conflicts.²⁵ The Pentagon's AI strategy's foundation²⁶ is to expedite AI development in military contexts, particularly logistics, command and control, intelligence, surveillance, reconnaissance (ISR), and cybersecurity. To combine and utilise cutting-edge advancements, the Pentagon is also including autonomous combat vehicles in its entire AI plan.²⁷ The U.S. leads AI, as seen by the significant number of AI businesses, major ventures, and a larger talent pool than China. This is due to the U.S.'s massive scientific expertise and strong market power. As a result, the current AI capabilities of the U.S. have enormous potential to improve national security. The U.S. military's AI activities are centralised at the Joint AI Centre, launched in June 2018.²⁸ It speeds up the implementation of new AI-enabled abilities and encourages R&D for military missions.

The U.S. believes sophisticated AI would comprise a “human-machine” relationship in which humans exert command and control while utilising

²³ Daniel S. Schiff, “Setting the Agenda for AI: Actors, Issues, and Influence in United States Artificial Intelligence Policy,” (PhD diss., Georgia Institute of Technology, 2022).

²⁴ Horowitz et al., *Strategic Competition in An Era of Artificial Intelligence*.

²⁵ Kelly A. Grieco, “The 2018 National Defense Strategy: Continuity and Competition,” *Strategic Studies Quarterly* 12, no. 2 (2018): 3-8.

²⁶ Kareem Ayoub and Kenneth Payne, “Strategy in the Age of Artificial Intelligence,” *Journal of Strategic Studies* 39, no. 5-6 (2016): 793-819.

²⁷ JS. Hurley, “Fitting the Artificial Intelligence Approach to Problems in DoD,” *Journal of Information Warfare* 20, no. 1 (2021): 110-23.

²⁸ Sydney J. Freedberg Jr., “Joint Artificial Intelligence Centre Created Under DoD CIO,” *Breaking Defence*, June 29, 2018.

autonomy, automation, and customised AI development methodologies.²⁹ While focusing on long-term growth, this strategy strives to improve military operations. It is projected that developments in AI will impact the U.S. national security by causing changes in military superiority, information authority, and economic supremacy. The U.S. established the Third Offset Strategy (TOS)³⁰ in 2014 to maintain its military supremacy against prospective threats from Russia and China. The idea of giving decision-making authority to “AI-augmented weapon systems” that can react at superhuman speeds is at the heart of this plan. The National Artificial Intelligence Research and Development Strategic Plan³¹ was announced in 2016 by the U.S., an early adopter of AI. With “Defending America in the AI age”³² and “Winning the Technology Competition” as its two main goals, this strategy resulted in the establishment of the National Security Commission (NSC) on AI. The U.S. military and the “Defence Advanced Research Projects Agency (DARPA)” launched several AI-related initiatives in response to these strategic changes.³³ Over the previous five years, the financial expenditures for initiatives focused on AI have steadily increased, reaching a high of US\$840 million in 2021³⁴. However, the U.S. Department of Defence spent US\$1.8 billion in FY 2023 on AI projects, including JADC2, Project Maven, and C2 systems that incorporate AI.³⁵ Moreover, for FY 2024, requisition contained increased funding under the Chief Digital and Artificial Intelligence Office (CDAO).³⁶

²⁹ Jurriaan van Diggelen, “Designing for Meaningful Human Control in Military Human-Machine Teams,” *arXiv preprint arXiv:2305.11892*, (2023).

³⁰ Lisa Aronsson, *What Next for the Third Offset Strategy?* (Washington DC: Congressional Research Service, 2017).

³¹ *The National Artificial Intelligence Research and Development Strategic Plan* (n.d.: National Science and Technology Council, Networking and Information Technology Research and Development Subcommittee, 2016).

³² Eliot A. Cohen, “Defending America in the Twenty-First Century,” *Foreign Affairs* 79, no.6 (2000): 40-56.

³³ Sophie-Charlotte Fischer, “Military AI Applications: A Cross-Country Comparison of Emerging Capabilities,” in *Armament, Arms Control and Artificial Intelligence: The Janus-faced Nature of Machine Learning in the Military Realm* (Cham: Springer International Publishing, 2022), 39-55.

³⁴ “2020-2024 Progress Report: Advancing Trustworthy Artificial Intelligence Research and Development,” <https://www.nitrd.gov/pubs/AI-Research-and-Development-Progress-Report-2020-2024.pdf>

³⁵ “2020-2024 Progress Report: Advancing Trustworthy Artificial Intelligence Research and Development.”

³⁶ U.S. Department of Defence Budget Justification, FY 2024.

The U.S. Strategic Vision in Artificial Intelligence

The AI Strategy, which was announced in February 2019, is centred on some essential pillars:³⁷

- a. **Maintaining Military Superiority:** The development of AI technology is viewed as a method to open up new capabilities and make already-existing ones available to a broader range of players, maintaining the U.S. military dominance.
- b. **Achieving Information Superiority:** It is widely acknowledged that AI is a potent technology that will dramatically improve data generation, gathering, and analysis capabilities, underscoring its crucial role in achieving information superiority.
- c. **Achieving Economic Superiority:** The plan acknowledges that the development of AI technology may spark a new industrial revolution, strengthening the U.S.'s position as the world's economic leader.
- d. **Fostering the Benign Use of Technology:** The approach emphasises fostering the benign use of technology, emphasising the relevance of utilising AI developments for peaceful ends.
- e. **Managing Risks:** The plan emphasises the necessity of reducing risks that can have disastrous results, reiterating the significance of competent risk management in AI.

Significant Advancements

The Department of Defence uses the Cross-Functional Team for Algorithmic Warfare, popularly known as Project Maven (started in April 2017), as a critical hub for assimilating AI from Silicon Valley for military goals.³⁸ The use of AI for potentially coercive purposes has caused debate in the commercial sector. There have also been other significant developments in this area, such as:

³⁷ Lynne E. Parker, "Creation of the National Artificial Intelligence Research and Development Strategic Plan," *AI Magazine* 39, no. 2 (2018): 25-32.

³⁸ Adam Frisk, "What is Project Maven? The Pentagon AI Project Google Employees Want Out of," *Global News*, 5 April 2018.

- a. Nearly 98 per cent of the U.S. internet users are impacted by the use of AI to identify patterns and abnormalities associated with spyware within cyberspace.³⁹
- b. Information relating to the military's use of AI is still private. Nevertheless, high-ranking military officials have emphasised the need to improve drone autonomy and ISR capabilities for near-term applications, precision targeting, and effective decision-making.

U.S. Air force (USAF)

The United States Air Force (USAF) is now putting its Multi-Domain Command and Control (MDC2) system into place.⁴⁰ To provide a practical real-time operational illustration, this system is meant to synchronise the preparation and execution across several domains, including space, air, sea, cyberspace, and land. This particular AI application has the potential to improve the standard of military judgment significantly, thus speeding up warfare momentum. The 5th generation aircrafts in the USAF like F22 raptor F35 lightening stand a remarkable illustration of how AI is assisting states in improving their efficiency and capabilities. Loyal Wingman Programme has also undergone multiple testing to combine an older unmanned F-16 with a manned F-22 or F-35.⁴¹ Currently, it is also displaying its AI enabled UAV's like MQ-9 reaper, setting the battlefield on fire. Swarm drones are considered to be another pertinent area that the U.S. is working on. The integration of AI in aerial platforms have considerably strengthened the network-centric warfare capabilities of the militaries. AI is currently acting as a force multiplier in USAF and its inculcation has opened new avenues for states to engage with each other crossing all boundaries blurring the lines between war time and peace.⁴²

³⁹ Antonio João Gonçalves de Azambuja, "Artificial Intelligence-Based Cyber Security in the Context of Industry 4.0 — A Survey," *Electronics* 12, no. 8 (2023): 1920.

⁴⁰ August Capiola, "Swift Trust in Ad Hoc Teams: A Cognitive Task Analysis of Intelligence Operators in Multi-Domain Command and Control Contexts," *Journal of Cognitive Engineering and Decision Making* 14, no. 3 (2020): 218-241.

⁴¹ Tim Fish, "Uncrewed Ambitions of The Loyal Wingman," *Airforce Technology*, November 1, 2022.

⁴² Fish, "Uncrewed Ambitions of The Loyal Wingman."

U.S. Navy

AI-driven swarm boats with vast clusters of inexpensive drones and small detachments of remotely piloted aircraft systems (RPAS) may launch electronic attacks, assist firepower, and set up localised communication and navigation networks.⁴³ These cutting-edge technologies have potential opportunities for adaptation in land-based military deployments, submarine tracking operations, maritime security, and reconnaissance for larger navy vessels. One classical example stands the U.S. project on underwater Swarm drones.

U.S. Army

By 2035, the U.S. Army might create a variety of Remote Combat Vehicles (RCVs).⁴⁴ These vehicles will have AI features, including self-driving navigation, surveillance, and IED elimination. These AI-powered military vehicles are expected to first appear on the battlefield as early as 2030.⁴⁵ A workforce with high AI expertise must be developed, recruited, and kept in place to achieve military success. The U.S. has delayed the development of Lethal Autonomous Weapon Systems (LAWS) because of ethical concerns.⁴⁶

Chinese Technological Advancement in AI and Emerging Technologies

China has created a solid basis for the progress of AI by using an indigenous approach.⁴⁷ China has four times as many surveillance cameras as the U.S.,

⁴³ “Introduction to Remotely Piloted Aircraft Systems (RPAS),” *Skybrary* (blog), <https://skybrary.aero/articles/introduction-remotely-piloted-aircraft-systems-rpas>

⁴⁴ *The Army’s Robotic Combat Vehicle (RCV) Program* (Washington DC: Congressional Research Service, updated April 3, 2022).

⁴⁵ *The Army’s Robotic Combat Vehicle (RCV) Program*.

⁴⁶ Ángel Gómez de Ágreda, “Ethics of Autonomous Weapons Systems and its Applicability to any AI Systems,” *Telecommunications Policy* 44, no. 6 (2020).

⁴⁷ Meia Nouwens and Helena Legarda, “Emerging Technology Dominance: What China’s Pursuit Of Advanced Dual-Use Technologies Means For The Future Of Europe’s Economy And Defence Innovation,” *International Institute for Strategic*

uses face recognition and AI in law enforcement to monitor and track its 1.4 billion residents⁴⁸. By 2024 this figure was raised to 600 million. Similarly, Baidu, a leading Chinese AI company, has created AI software superior to human language recognition ability⁴⁹. Microsoft accomplished a comparable feat in 2016. At the prestigious international competition for computer vision mechanisms, the Large Scale Visual Recognition Challenge, Chinese teams won the top honours in 2016 and 2017. AI robots were employed at the Qingdao 18th Shanghai Cooperation Organisation (SCO) meeting to help visitors and increase security.⁵⁰

Moreover, AI has been classified as a “strategic technology of the future” by the Chinese State Council⁵¹. With more than US\$150 billion in government funding, it reaffirmed China’s resolve to “secure the strategic initiative” through a centrally coordinated effort to develop “world-leading levels” of AI businesses by 2030⁵². The State Council unveiled a three-step strategy for developing and deploying AI as part of the 2030 objective (Next Generation AI Development Plan-2017)⁵³. China wants to catch up to the top AI economies in the world by 2020. By 2025, significant AI advancements that will accelerate industry change are anticipated⁵⁴. China wants to become the world’s top AI power by 2030, establishing an intelligent society and economy.

China’s Military Initiatives in Integrating AI

China’s military is pursuing an AI-driven revolution to outperform American accomplishments in this field. China wants to have a clear advantage over its rivals in the area. Open-source intelligence data

Studies/Mercator Institute for China Studies China Security Project, Report no. 12, 2018.

⁴⁸ Jinghan Zeng, “China’s Authoritarian Governance and AI,” *Springer*, 67-103, (2022).

⁴⁹ EconoTimes Report, “Baidu Unveils Ernie 4.0 AI, Challenges OpenAI’s ChatGPT-4 in Beijing Event,” (2023), <https://www.econotimes.com/>

⁵⁰ ECNS.CN Report, “Smart robots to serve SCO Qingdao Summit”, <https://www.ecns.cn/news/cns-wire/2018-06-06/detail-ifyuyvzv3224252.shtml>

⁵¹ “China’s ‘New Generation Artificial Intelligence Development Plan’ (2017)”, <https://digichina.stanford.edu/>

⁵² ⁵² “China’s ‘New Generation Artificial Intelligence Development Plan’ (2017).”,

⁵³ “China’s ‘New Generation Artificial Intelligence Development Plan’ (2017).”

⁵⁴ ⁵⁴ “China’s ‘New Generation Artificial Intelligence Development Plan’ (2017).”

suggests that China's breakthroughs and uses in AI, including both civilian and military applications, are expected to catch up to those of the U.S. soon. China, however, has obstacles when forming domestic public-private partnerships.⁵⁵

In line with the U.S. military policy, the guiding philosophy for Chinese AI research emphasises the role of AI in improving the effectiveness of combat decision-making by offering a comprehensive perspective of the fight zone.⁵⁶ Additionally, China is investing in developing autonomous vehicles for use on land, sea, air, and underwater, in missile defence systems, as well as in offensive and defensive cyber capabilities. China also leaves no stone unturned in competing with the U.S. Chinese Chengdu J-20, a 5th Gen Aircraft is one of the most prominent examples when it comes to Chinese integration of AI in its military.⁵⁷ In UAV's, the Chinese Wing Loo series is yet another paradigmatic illustration depicting its military might.⁵⁸

China's AI industry has forecasted to grow to US\$ 7.5 billion by the end of 2025.⁵⁹ The size of the market is set to demonstrate an annual growth rate (CAGR 2025-2031) of 26.89 per cent, leading to a market volume of US\$194.19bn in 2031.⁶⁰ China's approach includes acquiring AI-based military technology and reducing the gap between academic research facilities and private businesses, resulting in the government prioritising AI development. China is also trying to lessen the challenges

⁵⁵ Hunter, L.Y., Albert, C.D., Rutland, J., & Topping, K., "Artificial Intelligence and Information Warfare In Major Power States: How The U.S., China, and Russia are Using Artificial Intelligence in their Information Warfare and Influence Operations," *Defence and Security Analysis*, 40 (02), (2024): 235-269.

⁵⁶ Michael Raska, "The Sixth RMA Wave: Disruption in Military Affairs?" in *Defence Innovation and the 4th Industrial Revolution* (London: Routledge, 2022), 6-29.

⁵⁷ Liu Xuanzun, "China's J-20 Stealth Fighter Jet Flies Without Luneburg Lens, Shows Combat Readiness," *Global Times*, 2021, <https://www.globaltimes.cn>

⁵⁸ Elsa B. Kania, "Battlefield Singularity: Artificial Intelligence, Military Revolution, and China's Future Military Power," *Centre for a New American Security*, 45 (97), 33-39, (2020).

⁵⁹ "AI software market size in China 2020-2025," Statista, March 5, 2025, <https://www.statista.com/statistics/1560400/china-ai-software-market-size/>

⁶⁰ "AI software market size in China 2020-2025," Statista.

associated with massive data collection and the instruction of human resources in this area.⁶¹

China's Goals of National AI Development Plan

Major Chinese emphasis is on theories and technologies. For that purpose, China progressed in studying old AI concepts and developed technologies in the last decade. China's major focus is on getting breakthroughs in bolstering new technologies based on old and newer theories of AI.⁶² Indeed, AI was primarily studied in the West, including the U.S. But studies on computers did not remain an exclusive domain of the West, and the U.S. and experts and practitioners started emerging globally, including Russia and China. In the twenty-first century, the mental expertise in AI and emerging technologies started shifting from the West to China and Russia. Russians are experts in cyber-domain. Chinese also followed suit with the West, brought revolutionary changes in its education system, and looked to compete with the West and the U.S. in this particular domain, and for that purpose, China wants to become a powerhouse of AI till 2025.⁶³ China also wants to become an attractive place for investors in AI. In this regard, the Chinese goal in AI technologies is to become an AI innovation centre. Chinese strategy for 2030 is clear. It wants an intelligent economy based on modern technologies primarily supported and powered by AI.⁶⁴

So far, China has made progress in intelligent autonomous learning systems. Big data analysis is being extensively studied in China to develop drone swarms and autonomous intelligence systems. For that purpose, AI models and methods are studied and used to manufacture core devices and foundational software. China's ambition is to make breakthroughs in AI

⁶¹ James Johnson, "The End of Military-Techno Pax Americana? Washington's Strategic Responses to Chinese AI-enabled Military Technology," *The Pacific Review* 34, no. 3 (2021): 351-378.

⁶² Ricardo Tellez, "China's AI Plan for 2030," *The Construct* (blog), 12 November 2021, <https://www.theconstructsim.com/98-chinas-ai-plan-for-2030/>

⁶³ The State Council: People's Republic of China, "Quantum Tech, Embodied AI, Biomanufacturing -- China Doubles Down on Emerging Industries," (2024), <https://english.www.gov.cn/>

⁶⁴ Jeffrey Ding, "The Interests behind China's Artificial Intelligence Dream," in *Artificial Intelligence, China, Russia, and the Global Order*, ed. Nicholas D. Wright (Maxwell AFB: Air University Press, 2019), 1123-1167.

with autonomous learning ability to achieve a leading role as early as this year. Furthermore, China wants to develop brain-inspired autonomous intelligent systems by 2030.⁶⁵ As far as AI industrial competitiveness is concerned, China has made considerable achievements so far as it has established all basis of AI technologies at home resulting in an industrial chain. Domestically, it has surpassed a figure of US\$ 22 billion in the last two decades and the associated industry has earned US\$ 150 billion. China wants to raise the bar as it appries to enter the global high-end value chain by widening the usage of AI in its industry. The target for this year is to bring the earning within the domestic sector up to US\$ 150 billion, enabling associated technology sectors to earn US\$ 750 billion.⁶⁶ China is setting the global stage to become a global leader in AI and the associated technology sector by 2030 in production-based AI technologies. These technologies would be used in the defence and governance sectors. By 2030, the domestic earnings are likely to reach US\$ 150 billion and the associated sector to reach USD 1500 billion.⁶⁷ As far as legal and ethical issues are concerned, China wants to be a part of any initiative that builds norms, policies, and regulations concerning the safe and secure uses of AI. By 2025, China is likely to be part of global efforts to regulate the use of AI for civil purposes.⁶⁸ However, the defence side of AI is complicated as major powers including China are reluctant to prohibit the use of AI for defence purposes. By 2030, China is likely to enact comprehensive AI laws, regulations, ethical norms, and policy systems to become a leading AI technology powerhouse.⁶⁹

U.S.-China Competition

U.S.-China rivalry in AI and associated fields is on the rise. It would not be a surprise that the U.S.-China competitiveness and productivity has increased the chances of a geopolitical and military imbalance. The competition in AI between these two is now the root cause. Major Chinese

⁶⁵ Kyle Chan e tal., “China’s Evolving Industrial Policy for AI,” *RAND Report*, (2025), <https://www.rand.org/>

⁶⁶ “China’s Evolving Industrial Policy for AI.”

⁶⁷ “China’s Evolving Industrial Policy for AI.”

⁶⁸ Jing Chenga and Jinghan Zeng, “Shaping AI’s Future? China in Global AI Governance,” *Journal of Contemporary China*, 32 (143), 794-810, (2023).

⁶⁹ Tellez, “China’s AI Plan for 2030.”

tech companies believe that the U.S. is taking lead in generative AI capable of enhancing complex cognitive tasking rapidly in response to common commands. The U.S.' efforts to encircle China's capabilities by banning semiconductor chips is a major step to enhance geopolitical and economic rivalries.⁷⁰ The U.S. legislations to ban Chinese access to the semiconductor industry especially by banning access to designing, manufacturing and research and development signals intensification of rivalry in AI and emerging technologies fields.⁷¹

Presently, the U.S. is ahead of China in AI-generative technologies and subsequent development. *ChatGPT* is a primary example of the U.S. prowess in AI generative technologies and software. ChatGPT triggered rival U.S. companies to boast their development. In comparison, China develops image recognition software as practical applications. China was initially seen to be lagging behind in generative AI after the release of models such as *ChatGPT* worldwide. This, however, is rapidly changing with major Chinese technology companies, including *Baidu* (Ernie Bot), *ByteDance*, *Tencent*, and *Alibaba*, either having announced or rolled out their own generative AI platforms⁷². Of particular note are newer models such as *DeepSeek* and *Baichuan*, which also represent China's increasing ability to build capable large language models, marking a strategic catch-up in the international generative AI race.

In AI investment field, the rivalry sees the U.S. leading comprehensively. The U.S. was drawing US\$ 26.6 billion in 2021 as compared to China only earning US\$ 4 billion in AI-based technology and development-related investment.⁷³ The gap is rapidly narrowing as far as deal flow is concerned. In 2021, the U.S. based tech giants made investments in 447 ventures⁷⁴. On the other hand, China's deals cross that

⁷⁰ Ryan Sullivan, *The U.S., China, and Artificial Intelligence Competition Factors* (n.d.: China Aerospace Studies Institute, 2021).

⁷¹ Eleonore Pauwels and Apratim Vidyarthi, *Who will Own the Secrets in our Genes?: a U.S.-China Race in Artificial Intelligence and Genomics* (Washington, DC: Woodrow Wilson International Center for Scholars, 2017).

⁷² CISSY ZHOU, "Alibaba, Tencent and Baidu join the ChatGPT rush," *Nikkei Asia*, February 10, 2023.

⁷³ Zachary Arnold, "What Investment Trends Reveal About the Global AI Landscape," *The Brookings*, September 9, 2020.

⁷⁴ Financial Times Report, "AI Frenzy Leads U.S. Venture Capital to Biggest Splurge in Three Years," (March 2025).

number in deal gap. Chinese plans by 2030 to maximise the deal counter and become the leader in AI technologies and development. Presently, Chinese research in AI based journal was 30 per cent in 2021 of the global publication.⁷⁵

The uses of AI for military and defence are a source of concern for the U.S. China is criticised by the West that it has employed a nation-wide array of surveillance apparatus to monitor its citizens⁷⁶. Consequently, those companies which are involved in development of surveillance system for polices are banned in the U.S., e.g. Sense Time Groups Inc and Hangzhou Hikvision Digital Technology Co⁷⁷. To stop China to maximise its utilisation of AI in military defence sectors, Biden Administration tightened unilateral sanctions on China to restrict the U.S. chip exports to China. The US Department of Defence released a report on military and security developments in China that detailed Beijing's vision of "intelligentised warfare," defined by the expanded use of AI and other technologies at every level of combat.⁷⁸

Both the states are investing drastically in the said domain. The tug of war extends to military competition specifically in the Asia Pacific region where the U.S. wants to maintain its off shore balancing and China leaves no stone unturned to respond to the U.S. increased military presence. Deployment of AI led UAV's and the current ongoing competition in 5th generation aircrafts stands as one of the most challenging concerns for not just the U.S. and China but also for the other states. US F35 lightening, F22 Raptor, MQ-9 reaper etc., have set the precedent of efficiency, lethality and sophistication which has a combined impact on strengthening Network Centric Warfare against its rivals⁷⁹. Such initiatives have provoked China where now it invests in military integration with AI more

⁷⁵ Kai Shen et al., "The Next Frontier for AI In China Could Add US\$600 Billion to its Economy," *Quantum Black AI by McKinsey*, June 7, 2022.

⁷⁶ Kai Shen et al., "The Next Frontier for AI In China Could Add US\$600 Billion to its Economy."

⁷⁷Financial Times Report, "AI Frenzy Leads U.S. Venture Capital to Biggest Splurge in Three Years, March 2025.

⁷⁸ *Military And Security Developments Involving the People's Republic of China 2022* (Washington DC: U.S DoD, 9 November 2022).

⁷⁹ Prakash Singh, "Redefining Deterrence: The Impact of Emerging Technologies on Nuclear and Conventional Military Forces," *Next Gen Community*, 43 (11), 78-97, (2025).

than ever, presenting Chengdu J20, J31 etc. Both states are currently working on human machine interface like the U.S.,’s Loyal wingman Project. The combined impact of a human piloted aircraft along with fully autonomous UAV’s presents a grave concern for its rivals making it more difficult to tackle the U.S. supremacy in any region. However, China has never made an official stance on the fact that they are working on the same project but they sure have announced to become AI tech super power by 2030 which might be an alarming situation for the U.S.

The U.S.’ tactic has moved slowly from directed sanctions meant at limiting Chinese growth of products that might impede the U.S. national security objectives to a wider struggle to guard the US high-tech reign. For longer term, the U.S. is evaluating whether to force controls on investment in Chinese tech firms. This would have a momentous influence as China has extended reliance on the U.S. money to expand its encouraging start-ups.

One wildcard in the race is each country’s approach to regulation, given the risk of AI platforms being overwhelmed by disinformation or becoming tools for the mass violations of privacy and content rights. China has moved first to regulate its AI industry — hardly a surprise given Beijing’s preoccupation with controlling online content. It plans to require a security review of AI services before they’re allowed to operate. The draft regulations signal the onus for training AI algorithms and implementing censorship will fall on platform providers — a fairly significant burden. The U.S. has begun to take steps toward regulation. But gridlock in Congress makes it hard to enact any meaningful AI policy.

Implications for Global Power Structure

There is a need to analyse the competition between the U.S. and China in a manner that is removed from the perspective of the *AI Arms Race*. However, this statement is not designed to take anything away from the importance of the emergence of AI, yet, it is an effort emphasise on the importance and the due diligence that the U.S. policymakers in particular need to exercise while gauging the domestic AI developments taking place in China. This is chiefly because of two main reasons, firstly, a highly diverse advanced and effective AI capability would allow China to

strengthen two major components or elements of its national power i.e. its economy and military power. Secondly, those powers or nations that succeed in developing a credible AI infrastructure will be able to dictate the direction AI is employed in the social, economic, and military spheres not just by itself but also throughout the world. These reasons form the core of why the U.S. needs to be constantly engaged with China over the development and deployment of AI in the different spheres of national interests and systems, such as finance, public governance, or in the military domain.⁸⁰

At its heart is a profound difference in the way that both nations approach innovation. China's state-led model, supported by its Military-Civil Fusion strategy, allows for the quick integration of commercial technologies into national defence objectives.⁸¹ In contrast, America heavily relies on a private-sector-driven, decentralised pipeline of innovation — one that frequently operates in tension with government goals, most importantly in morally questionable areas like killer robots or spy-cams.⁸² This structural imbalance has operational consequences: while China can invoke the full spectrum of its AI ecosystem of resources to the service of longer-term national ends, America must constantly reconcile internal tension between technological freedom and strategic imperatives.

Any period of history or current scenario that is labelled as a great power competition is dominated by the factors of adapting, manoeuvring, resorting to the use of force, and the optimum utilisation of material, financial and military resources to augment national power. Factors such as research and development, industrial production and efficiency, and science and technology all play an important role in such a scenario. Apart from the criticism of China's human rights record, there are tangible concerns and fears about China as a threat to the U.S.'s national interest

⁸⁰ Pauwels and Vidyarthi, *Who Will Own the Secrets in Our Genes?*

⁸¹ Jacob Stokes, "Military Artificial Intelligence, the People's Liberation Army, and U.S.-China Strategic Competition," *Centre for a New American Security*, (2024): 02-10.

⁸² Stokes, "Military Artificial Intelligence, the People's Liberation Army, and U.S.-China Strategic Competition." 05-06.

emanating from Chinese cyber, nuclear, financial, and economic as well as cultural power projection.⁸³

President Trump in the 2019 National Security Strategy, had stated that “Great power competition returned.”⁸⁴ While this document is not without its fair share of flaws, one critic has noted that “the grim worldview at [the strategy’s] core threatens to undermine the strategies that have long made U.S. global leadership work”. The world is experiencing another great power competition was also echoed by the U.S. Defence establishment by the assertion that, “The central challenge to U.S. security is the re-emergence of long-term, strategic competition by what the National Security Strategy classifies as revisionist powers.”⁸⁵

Apart from the weakening global order, a phenomenon continuous since the end of the Second World War, the strategy implies that China is taking measures to modernise its military, exerting influence through aggressive economics and conducting subversive military operations to reorganise the Asia-Pacific region to according to their preference and hence, advantage.⁸⁶ Furthermore, the document asserts that as China speedups its economic and military strengthening, it will eventually assert its military dominance to dominate the Asia-Pacific region in the short term, while dislodging the U.S. in the long term to attain global dominance in the long term. This is, therefore, undoubtedly a classical example of great power competition which is being witnessed between China and the U.S., as was emphasised by the then Secretary of Defence General (Retd.) Jim Mattis, during the presentation of the document.⁸⁷

Artificial Intelligence will play a vital role in this great power competition and will become increasingly more important for national

⁸³ Joseph S. Nye, “The Logic of U.S.-China Competition,” in *Soft Power and Great-Power Competition: Shifting Sands in the Balance of Power Between the United States and China* (Singapore: Springer Nature Singapore, 2023), 181-183.

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⁸⁵ *National Defence Strategy of the United States of America* (Washington DC: U.S DoD, 2018), 2.

⁸⁶ Haiyong Sun, “U.S.-China Tech War: Impacts and Prospects,” *China Quarterly of International Strategic Studies* 5, no. 02 (2019): 197-212.

⁸⁷ Summary of the 2018 National Defence Strategy of The United States of America: Sharpening the American Military’s Competitive Edge, <https://media.defense.gov/>

power dynamics in the coming years and decades, as the role of AI grows in the development and advancement of economic and military capabilities. As China continues developing its AI credentials to further enhance its economic and military power, the U.S. has to be attentive to all developments to reap the same benefits for its interests.⁸⁸

A research report from the McKinsey Global Institute states that “leaders of AI adoption (mostly in developed countries) could increase their lead over developing countries,”⁸⁹ and “leading AI countries could capture an additional 20 to 25 per cent in net economic benefits, compared with today, while developing countries might capture only about 5 to 15 per cent.”⁹⁰ As the U.S. and China are currently the largest economies on the globe, the utilisation of AI in an effective manner by either one of these countries could result in massive gains in terms of not just the economy but also the associated power and influence that comes with a strong financial position. The fact that the U.S. may now possess greater brainpower and talent does not mean that it can translate these resources into effective development of AI capability and hence make such endeavours more profitable when compared to China.⁹¹

Other than deployment, another critical arena in the U.S.–China race is control of upstream supply chains. Global manufacturing of semiconductors, especially high-end GPUs, which are essential for training massive models, is still dominated by a handful of countries.⁹² While the U.S. retains dominance in chip design, China is beginning to heavily invest in fabrication capability within the country. The U.S. response, by law like the CHIPS and Science Act,⁹³ is as much about economic growth as national security. Whoever ends up with control of

⁸⁸ You Wang and Dingding Chen, “Rising Sino-U.S. Competition in Artificial Intelligence,” *China Quarterly of International Strategic Studies* 4, no. 02 (2018): 241-258.

⁸⁹ Jacques Bughin et al., “Notes from the AI frontier: Modelling the Impact Of AI on the World Economy,” *McKinsey Global Institute*, September 4, 2018.

⁹⁰ Jacques Bughin et al., “Notes from the AI frontier: Modelling the Impact Of AI on the World Economy.”

⁹¹ Evan S. Medeiros, “The Changing Fundamentals of U.S.-China Relations,” *The Washington Quarterly* 42, no. 3 (2019): 93-119.

⁹² Michael Raska, “Strategic Competition for Emerging Military Technologies: Comparative Paths and Patterns,” *PRISM*, 08 (03), (2022): 64-81.

⁹³ CHIPS and Science Act of 2022, <https://www.commerce.senate.gov/>

this hardware backbone, regardless of which country it happens to be, will dictate how and where AI is constructed.

In the field of military development, AI is playing a pivotal role and the People's Liberation Army (PLA) considers the application of AI as possessing revolutionary abilities in combining civil leadership and military power. The U.S. Department of Defence has recognised the fact that the Chinese development and deployment of AI will transform society and eventually the nature of warfare. China is approaching the development and deployment of military AI in a focused and phased manner, making AI projects part of its national five-year plans. These projects are diverse, dealing with decision-making, designing equipment, training, autonomous weapons, command and control systems, munitions programming and guidance as well as unmanned systems. The Chinese President in 2017 called on the Chinese military to speed up its efforts to develop AI solutions for a future conflict. There are reports that China is recruiting highly talented teenagers to develop new AI weapon systems. In short, the Chinese government and military are striving hard to utilise AI to beef up their military power. The U.S. has followed suit and announced a US\$ 2 Billion fund for AI, DARPA's leading official described this as an effort to make AI more acceptable and trusted by military leaders.⁹⁴

But even in military language, the two powers are taking divergent doctrines. The U.S. has already been experimenting with AI-driven logistics and decision aids in exercises such as the Global Information Dominance Experiments (GIDE) that are designed to predict enemy actions before they occur.⁹⁵ China, on the other hand, is said to be using AI for real-time satellite monitoring, drone swarm coordination, and electronic warfare. These uses are not futuristic fantasy; they are a move toward "cognitive warfare,"⁹⁶ where victory no longer relies solely upon firepower, but upon whoever is able to think or calculate quickest.

⁹⁴ Piotr Grochmalski, "U.S.-China Rivalry for Strategic Domination in The Area Of Artificial Intelligence And The New AI Geopolitics," *The Bellona Quarterly* 701, no. 2 (2020): 5-25.

⁹⁵ Thomas Christian Bächle and Jascha Bareis, "'Autonomous Weapons' as A Geopolitical Signifier In A National Power Play: Analysing AI Imaginaries in Chinese And U.S. Military Policies," *European Journal of Futures Research*, 10(20), (2023).

⁹⁶ Bächle and Bareis, "'Autonomous Weapons' as A Geopolitical Signifier In A National Power Play." :

Another important factor to consider is that the Chinese government and private enterprises are far less restricted due to ethical, and legal norms while developing AI when compared to their U.S. competitors. The rapid development of AI might lead to chaos or unpredictable deployment patterns of AI, this might even lead to unethical applications of AI, this is another factor why the great power competition in the field of AI development matters immensely.⁹⁷

Technological Brinkmanship, Strategic Uncertainty and the New AI Deterrence Dilemma

Although the significance of AI for international power projection is far-reaching, what has long gone underappreciated is the way this technological change destabilises the underlying logic of international security itself. The spread of AI into defence systems does not merely remake global hierarchies but imperils to dissolve the very mechanisms that have long maintained strategic stability between great powers.

The AI competition between the U.S. and China is more than a technological race; it is turning into a test case for what security scholar Barry Buzan would refer to as a “deep transformation of the international order.”⁹⁸ The integration of AI into command and control, surveillance, and even decision-making platforms is not simply augmenting national power; it is stripping away the buffer spaces that traditionally kept conflict cold instead of kinetic. The primary risk is that the AI logics of velocity, forecast, and automation are inherently incompatible with the driven logics of deterrence, signalling and escalation control.

The ability to delay action; to hesitate, reflect, and signal, is an important stabiliser in classical deterrence paradigm. But AI-supported systems are intended for real-time analysis and automated action. China’s fielding of smart surveillance systems around disputed areas such as the Taiwan Strait and the South China Sea, combined with unmanned aerial

⁹⁷ Wang and Chen, “Rising Sino-U.S. Competition in Artificial Intelligence,” 241-258.

⁹⁸ James S. Johnson, “Artificial Intelligence: A Threat to Strategic Stability,” *Strategic Studies Quarterly*, (2022): 35-79.

and maritime systems,⁹⁹ progressively diminishes the response time the U.S. forces enjoy discerning intent before responding. On the American side, initiatives such as JADC2 and GIDE (Global Information Dominance Experiments) are bringing real-time predictive analysis to real-world operations. These systems do not only advise decisions — they might soon make or shape them.¹⁰⁰ The marriage of speed and obscurity has generated what can be termed an “automated security dilemma,” where no side has a complete idea how or when AI systems will escalate a standoff.

In strategic technology races, the line between economic logic and security gets blurred. AI is a quintessential techno-nationalist domain.¹⁰¹ Dominance over AI standards, chip supply chains (such as high-end chips), and data infrastructure is today intricately linked with grand national strategy.¹⁰² Consequently, the AI competition will hardly be limited to defence domains rather it will spill over into multilateral organisations, trade frameworks, and even development funding, with both sides trying to internationalise its AI ecosystem as a tool of soft power projection.

What adds to the uniqueness of this rivalry is not merely the absence of arms control but the absence of common language regarding AI risk. There exists no treaty clarifying autonomous escalation levels. There are no hotlines for an AI misfire or drone crash. There are no mutually defined terms for explanation, verifiability, or responsibility in military AI.¹⁰³ Strategic ambiguity, heretofore a workable deterrent in nuclear policy, can become disastrous in an AI environment where velocity is faster than strategy.

The challenge is not only technological; it is political and philosophical. There has to be formation of not only better systems but

⁹⁹ Benjamin Angel Chang, “Artificial Intelligence and the U.S.-China Balance of Power,” *Princeton University Press*, (2022): 71-92.

¹⁰⁰ Chang, “Artificial Intelligence and the U.S.-China Balance of Power,” 83-87.

¹⁰¹ Shuxian Luo, “Addressing Military AI risks in U.S.–China Crisis Management Mechanisms,” *China International Strategy Review*, 04, (2023): 233-247.

¹⁰² Luo, “Addressing Military AI risks in U.S.–China Crisis Management Mechanisms,” 240.

¹⁰³ James Johnson, “Artificial Intelligence in Nuclear Warfare: A Perfect Storm of Instability?,” *The Washington Quarterly*, 92 (11), (2024): 245-289.

better restraint frameworks. This means leading not only in capability but in creating norms, protocols, and red lines. Otherwise, the most sophisticated system on the battlefield will be the one to initiate a war neither wanted.

Conclusions

Effective utilisation of AI can make methods and processes simpler and more effective, lead to faster decisions, and make planning more forward-looking. The capabilities that the U.S. currently possesses have a huge potential impact on its national security. Further development of AI capabilities by the U.S. will impact its military dominance, information dominance, and its economic prowess. While utilising domestically developed capabilities and infrastructure, China, too, has great potential for developing advanced AI technologies. It is estimated that by the year 2030, China will achieve significant breakthroughs in the fundamentals of research for utilising AI for its industrial and economic transformation.¹⁰⁴ China also plans to be the global leader in AI-powered intelligent economy and society by the year 2030.¹⁰⁵ As the competition between China and the U.S. rages on the AI front, AI is rapidly becoming central to the defence, strategy, and national power of either country which may lead to gigantic changes in the global power structure.

¹⁰⁴ Kyle Chan and et al., “China’s Evolving Industrial Policy for AI,” RAND Report, June 26, 2025, <https://www.rand.org/pubs/perspectives/PEA4012-1.html>

¹⁰⁵ Ibid, (2025).