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STRATEGIC CONVERGENCE OF EAST AND WEST: U.S. AND CHINA'S MILITARY DOCTRINES IN THE AGE OF ARTIFICIAL INTELLIGENCE

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Abstract:

The relationship between the United States and China has evolved through multiple phases since the Cold War era—shifting from ideological confrontation to diplomatic engagement and now entering a phase of strategic technological rivalry. Within this context, the rise of artificial intelligence (AI) has reshaped the global security landscape and challenged traditional frameworks of military planning and doctrine. This study analyzes the convergence and adaptation of military doctrines between the world's two major powers—the United States and China—considering rapidly evolving AI technologies. Through a comparative analytical approach, the paper examines how both nations conceptualize and implement AI within their military strategies, particularly in intelligence operations, autonomous weapons systems, and cyber warfare capabilities. The study also explores how differing strategic cultures between East and West influence defense policymaking and the application of AI in military affairs. Findings indicate that, despite divergent values and philosophies, both countries are moving toward strategic convergence in shaping future military paradigms centered on technological innovation. These insights are crucial for understanding great power dynamics in an era of intensifying technological competition and their broader implications for global security.

Introduction

The emergence of artificial intelligence (AI) as a pivotal military technology signifies a transformative shift in global security dynamics, reshaping core aspects of military doctrine, operational planning, and strategic competition. As AI systems advance from autonomous weapons and decision-support systems to data fusion and predictive analytics, they increasingly influence how major powers perceive and prepare for future conflicts. This is particularly evident in the evolving doctrinal shifts and strategic recalibrations of the United States and the People's Republic of China. The US and China are not merely integrating AI technologies into their armed forces but redefining military strategies to accommodate a new era of algorithmic warfare. The resulting convergence and divergence of their respective military doctrines present both unprecedented opportunities and existential risks plus highlighting the urgent need to understand AI's implications for strategic stability. Figure 1 the rapid expansion of AI-related applications within the military domain, reflecting substantial investment and increasing adoption across defense establishments worldwide.

Figure 1: Rapid Expansion Of AI-Related Applications Within The Military Domain
Source: Emergen Research, 2025.

Historically, the evolution of military doctrine has been closely intertwined with technological revolutions. Since the Cold War, the U.S. military has embraced a doctrine of technological superiority, leveraging innovations such as precision-guided munitions, stealth technology, and space-based reconnaissance to maintain strategic dominance. The "Revolution in Military Affairs" (RMA) during the 1990s epitomized this mindset, introducing concepts like network-centric warfare and information dominance. As early as the late 1990s, U.S. forces had begun developing, testing, and experimenting with several promising network-centric capabilities (Panwar, 2021). As U.S. doctrine evolved into the 21st century, its focus on asymmetric

warfare in Iraq and Afghanistan gradually gave way to renewed attention on peer competition most notably with the 2018 National Defense Strategy identifying "great power competition" with China and Russia as the primary focus of U.S. defense planning. Central to this shift has been the embrace of AI as a force multiplier. Initiatives such as Project Maven, the Joint Artificial Intelligence Center (JAIC), and the Department of Defense's AI Strategy reflect a growing consensus within the U.S. national security community that future conflicts will be influenced not solely by physical platforms but by the speed, precision, and adaptability enabled by intelligent systems (James J, 2022).

In parallel, China has charted a rapid and state-driven path toward AI militarization, closely aligning its national development strategy with its military modernization goals. The 2017 release of China's "Next Generation Artificial Intelligence Development Plan" (AIDP) signalled Beijing's ambition to become the global leader in AI by 2030 (Shaleen Khanal, Hongzhou Zhang & Araz Taeihagh, 2024, Zaigham Abbas & Fauzia Amin, 2024). This ambition is inseparable from the Chinese Communist Party's broader objectives of achieving "informatization" and "intelligentization" of its military. The People's Liberation Army (PLA) envisions AI as essential not only for operational effectiveness but also for transforming its strategic culture from a traditionally manpower-intensive force into a leaner, tech-enabled warfighting institution. Unlike the United States, where innovation is often led by private-sector actors operating within a liberal democratic framework, China's approach is highly centralized, driven by civil-military fusion and underpinned by the Party's political control over strategic sectors. Consequently, the PLA's doctrine is rapidly evolving to integrate intelligent command and control systems, swarming unmanned platforms and AI-enabled decision-making at both tactical and strategic levels.

This doctrinal transformation in both countries raises a crucial and under-explored two-question: are the military strategies of the U.S. and China converging in their response to AI? Are they charting distinct paths shaped by different political systems, strategic cultures, and operational priorities? On the surface, both powers emphasize many of the same technological enablers—autonomy, big data analytics, human-machine teaming, and information dominance. However, beneath these commonalities lie significant differences. The U.S. doctrine remains anchored in principles of ethical AI deployment, operational transparency, and alliance coordination, whereas China's doctrinal evolution is characterized by less transparent integration of AI and a top-down approach to innovation which may prioritize speed and effectiveness over accountability and ethical safeguards.

Moreover, the competitive dynamics between Washington and Beijing extend beyond doctrine into the strategic realm, where AI becomes a domain not just of innovation, but of influence and deterrence. As AI systems begin to influence nuclear command and control, early warning systems, and war-gaming simulations, the risk of miscalculation and escalation grows. Both nations are therefore not only adapting their militaries to a new technological reality but are also recalibrating their strategic postures in ways that may increase instability. Yet there are also signs of mutual learning—if not direct emulation—that suggest a form of strategic convergence, particularly in the operational use of AI for intelligence, surveillance, reconnaissance (ISR), and precision strike.

Recent data highlight the scale and pace of this transformation. In the United States, the Department of Defense's AI-related contract commitments grew from approximately USD 355 million in August 2022 to USD 4.6 billion by August 2023, representing a nearly 1,200 percent annual increase (Brookings Institution, 2023). Similarly, the global AI-military market is projected to reach approximately USD 8.28 billion by 2033, expanding at a compound annual growth rate (CAGR) of 11.3 percent from 2024 to 2033, with more than one-third of defense organizations already allocating at least USD 50 million annually to AI (WorldMetrics, 2024). On the other side of the Pacific, China's official 2025 defense budget reached 1.78 trillion yuan (approximately USD 246 billion), the second largest globally (Reuters, 2025), with AI integration supported by a record USD 500 billion R&D investment across strategic sectors such as semiconductors, robotics, and space systems (Wall Street Journal, 2025).

In response to China's rapid AI militarization, the United States has imposed sweeping export controls on AI-critical semiconductor technologies since October 2022, aiming to maintain strategic technological advantages (The White House, 2022). Nevertheless, China's military AI ambitions remain tied to its goal of achieving global AI leadership by 2030, in line with its "Next Generation Artificial Intelligence Development Plan" (Security and Intelligence Agencies of the United States, 2025).

This paper is structured into four main parts. The opening section delves into the rise of artificial intelligence (AI) within military technology. The second section investigates the ways AI is influencing the military doctrines of both the United States and China. Although previous studies have explored particular aspects of AI in defense such as autonomy, algorithmic bias, or arms control this work takes a doctrinal perspective to examine how these two powers are reshaping the fundamentals of modern warfare. The third part compares and contrasts the strategic approaches of the U.S. and China, highlighting areas of alignment and divergence. The fourth section considers the wider strategic consequences of these shifts for international security. The conclusion emphasizes how increasing similarities in AI-driven military doctrines between the U.S. and China are transforming global security frameworks. Grasping these changes is crucial not only for scholarly understanding but also for guiding efforts to ensure that the rapid AI arms race progresses alongside essential norms, dialogue, and confidence-building measures aimed at preventing conflict in the current century.

Literature Review
The integration of artificial intelligence (AI) in military applications has become a central theme in the evolving strategic rivalry between the United States and China. Scholarly and policy-oriented literature reveal a growing consensus that AI is not only reshaping military doctrines but also redefining power dynamics in global security affairs (Kania, 2020; U.S. Department of Defense, 2021). This section reviews current academic and policy discourse on the role of AI in U.S.–China military competition, focusing on key thematic areas which is strategic convergence, doctrinal adaptation, autonomous weaponry, cyber capabilities, and the influence of strategic culture.

Strategic Convergence and Technological Rivalry
The strategic competition between the United States and China is increasingly being defined by rapid advancements in AI and emerging technologies. According to the *U.S. Department of Defense* (2023), both nations are accelerating investments in AI to secure strategic military advantages. Joyce (2024) reports that while over sixty nations endorsed international guidelines

on military AI governance, China notably abstained, reflecting its intention to pursue AI development on its own terms. This signals a divergence in normative approaches, yet both countries demonstrate a clear convergence in prioritising AI as a critical military asset (Center for a New American Security, 2023). Baughman (2024) introduces the concept of "intelligentized warfare," particularly in the Chinese context, which reflects an evolution from informatized to AI-driven warfare. Similarly, Panwar (2021) highlights the U.S. military's enduring shift toward network-centric warfare that now integrates AI for operational superiority. These developments illustrate parallel trajectories, albeit informed by distinct strategic paradigms.

There is growing consensus among scholars that the strategic rivalry between the United States and China is increasingly defined by advancements in emerging technologies, particularly artificial intelligence (AI). While the two nations differ in their normative approaches—with the United States favouring international engagement and ethical governance in military AI (Joyce, 2024)—both demonstrate a parallel trajectory in prioritising AI as a strategic asset (Center for a New American Security, 2023). China's refusal to endorse international AI governance frameworks, as highlighted in recent global summits, signals its preference for a sovereign and realist approach. Baughman (2024) reinforces this notion by introducing the concept of "intelligentized warfare," where China aims to integrate AI, big data, and immersive technologies into future battlefields. This reveals an important gap in the global effort to regulate high-risk military technologies.

Doctrinal Innovation and Institutional Response

AI integration has necessitated doctrinal adaptation within both militaries. The *2018 U.S. National Defense Strategy* explicitly outlines AI as integral to maintaining the country's military edge (U.S. Department of Defense, 2018). The 2021 AI Strategy further details a whole-of-government approach toward AI advancement (U.S. Department of Defense, 2021). In contrast, China's *Next Generation Artificial Intelligence Development Plan* (People's Republic of China, 2017) and its doctrine of *military-civil fusion* (Bitzinger, 2021) signify a top-down integration model that blurs the boundaries between civilian and military research. Khanal, Zhang, and Taeihagh (2024) critically assess how Beijing's global AI ambitions often contend with local implementation challenges, reflecting gaps between aspiration and capacity.

The integration of AI into military doctrine has prompted significant structural and policy transformations in both countries. The United States has responded with a series of strategic frameworks, including the *2018 National Defense Strategy* and the *2021 Artificial Intelligence Strategy*, promoting a collaborative approach across government, industry, and research institutions (U.S. Department of Defense, 2018, 2021). In contrast, China's model of *military-civil fusion* institutionalises a top-down mechanism that merges civilian technological innovation with military objectives (Bitzinger, 2021). While this approach accelerates development, Khanal, Zhang, and Taeihagh (2024) argue that it often faces implementation inefficiencies at the local level due to bureaucratic rigidity and fragmented governance. These contrasting approaches reflect not only divergent political structures but also differing interpretations of efficiency, control, and innovation in military AI development. Current literature still lacks in-depth comparative studies assessing the long-term operational effectiveness of both models.

Autonomous Weapons and Ethical Controversies

The development and potential deployment of lethal autonomous weapon systems (LAWS) remain a contentious issue. The Pentagon has introduced stricter oversight mechanisms for AI-based weapons to allay public concerns over "killer robots" (Business Insider, 2024). While the U.S. has emphasized transparency and ethical governance, China's position remains ambiguous, lacking clear policy guardrails despite its rapid advancements (Kania, 2020; Joyce, 2024). The Diplomat (2022) outlines President Xi Jinping's vision for AI integration in the PLA, emphasizing speed, precision, and unmanned warfare, with limited consideration of ethical frameworks. This discrepancy reflects differing values systems and civil-military norms.

The ethical implications of autonomous weapons and the prospect of fully AI-enabled lethal systems remain hotly debated. The United States has taken precautionary steps to address public concerns through layered oversight mechanisms, as reported by *Business Insider* (2024), where the Pentagon introduced additional controls over AI weapon systems. In contrast, China has yet to issue formal regulatory frameworks regarding the development and deployment of lethal autonomous weapon systems (LAWS). Kania (2020) notes that China's approach to AI weaponisation lacks transparency and public scrutiny, raising concerns over ethical accountability. Conceptually, there is a significant gap in the literature regarding how both nations incorporate moral reasoning in the deployment of autonomous systems. This underscores the need for more rigorous research on the ethical and legal dimensions of AI in warfare, particularly in the context of global arms control efforts.

Cyber Operations and Intelligence Capabilities

AI is also revolutionizing cyber capabilities and intelligence operations. Vaughn (2025) argues that China's increasing reliance on AI in strategic decision-making may expose it to blind spots, especially where political directives override technical constraints. Meanwhile, U.S. cyber doctrine emphasizes adaptive, layered defenses supported by AI to counter emerging threats (Central Intelligence Agency, 2023). China's cyber strategy, aligned with its broader intelligentization goal, aims to dominate the information domain by leveraging big data analytics and AI-powered surveillance (Josh, 2024). This reflects a fundamental doctrinal difference rooted in authoritarian versus liberal-democratic strategic cultures.

AI is significantly transforming cyber operations and intelligence capabilities. Vaughn (2025) contends that China's growing dependence on AI in decision-making processes may lead to strategic blind spots, particularly when political ideology overrides technical or operational rationality. This raises questions about the balance between political control and technical autonomy in Chinese military decision-making. The United States, by contrast, emphasises adaptive and layered cyber defence mechanisms supported by AI technologies to enhance responsiveness and resilience (Central Intelligence Agency, 2023). The divergent approaches reflect fundamentally different models of cybersecurity governance—centralised and authoritarian in China, versus decentralised and interagency-based in the United States. Literature remains limited in empirically comparing the effectiveness of AI-driven intelligence and cyber operations between the two powers, especially in terms of predictive accuracy, mass surveillance capability, and AI-assisted threat mitigation.

Strategic Culture and Policy Divergence

Despite technological similarities, strategic culture shapes how AI is incorporated into military affairs. Western frameworks tend to emphasize ethical regulation, transparency, and alliance-based development (James, 2022; Turner et al., 2022), while China's centralised, state-led model is opaquer and utilitarian (Bitzinger, 2021; Zaigham & Amin, 2024). Kania (2020) notes that PLA theorists often draw from historical Chinese military thought in conceptualising AI, viewing it not merely as a tool, but as a strategic enabler of asymmetric advantage. These cultural dimensions influence not only doctrine but also the pace and direction of AI militarisation.

Strategic culture plays a decisive role in shaping the defence policies and AI strategies of both nations. China tends to view AI as a means of achieving asymmetric advantage in warfare, drawing on traditional strategic thought influenced by Sun Tzu and favouring centralised command and control systems (Kania, 2020; Zaigham & Amin, 2024). This strategic orientation prioritises autonomous systems and AI-enabled cyber capabilities as key enablers of disruptive advantage. Conversely, the United States adopts a more inclusive and rules-based approach, focusing on transparency, alliance coordination, and the development of shared norms (James, 2022). As noted by Turner et al. (2022), U.S. defence policy also seeks to build regional technological coalitions in the Indo-Pacific to counterbalance China's rise. These contrasting strategic cultures create significant obstacles to developing joint regulatory mechanisms or confidence-building measures. Further research is needed to assess the long-term implications of these cultural divergences on global strategic stability.

Theoretical Framework

The United States and China are navigating distinct but intersecting paths in integrating artificial intelligence (AI) into their military strategies, shaped by three interrelated theoretical perspectives: realism, strategic culture, and the security dilemma.

From a realist standpoint, both the United States and China are seen as rational actors operating in an anarchic international system where national survival, power maximization, and relative advantage are paramount (Waltz, 1979). In this view, AI functions as a force multiplier, enhancing operational capabilities, strengthening deterrence, and mitigating strategic vulnerabilities. The United States, consistent with realist logic, channels significant resources into preserving its technological edge, as evident in initiatives such as the Joint Artificial Intelligence Center (JAIC) and the Defense Innovation Unit (DIU). These reflect Washington's objective to sustain military preeminence amid accelerating technological change and strategic competition.

While also influenced by realist imperatives, China's approach is further informed by a distinct strategic culture rooted in historical experience, philosophical traditions, and doctrinal influences from thinkers like Sun Tzu. This culture emphasizes indirect approaches, asymmetric warfare, and the fusion of civilian and military innovation. Beijing's AI development is deeply embedded within a broader civil-military integration strategy, prioritizing dual-use technologies in sectors such as aerospace, additive manufacturing, and advanced computing (Richard, 2021). This approach reflects a legacy of caution toward foreign dominance and a focus on achieving self-sufficiency, allowing China to gradually close the capability gap with the United States.

The security dilemma further explains the intensifying AI arms race between the two powers. Rooted in realist theory but with distinct explanatory value (Jervis, 1978), the security dilemma posits that actions taken by one state to enhance its security such as AI-enabled weapon systems, autonomous platforms, and decision-support algorithms, are often perceived by others as threatening. This perception triggers reciprocal measures, escalating tensions even if both sides claim defensive intentions. In the context of U.S.–China relations, advances in AI by one side compel the other to accelerate its own programs, creating a cycle of mistrust and technological competition. This dynamic is intensified by the opacity of AI capabilities, where rapid innovation and limited transparency exacerbate uncertainty and worst-case scenario planning.
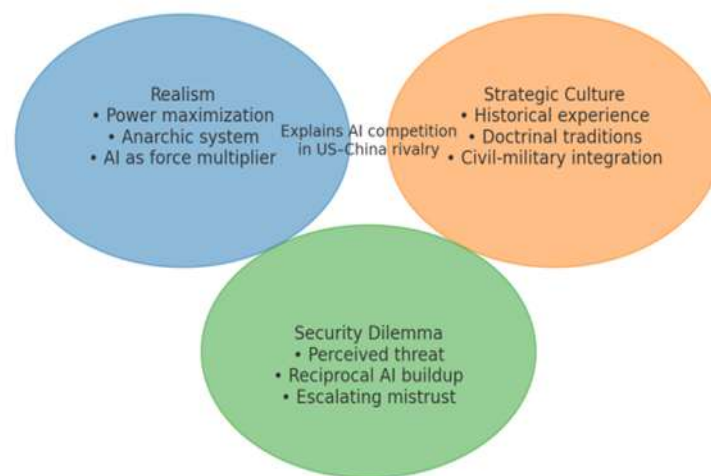

Figure 2: Theoretical Framework: AI In US-China Military Doctrine
Source: Quoted And Adapted From Various Sources By The Researcher

In sum, realism provides the structural explanation for competition, strategic culture contextualizes each state's unique doctrinal and historical lens, and the security dilemma elucidates the self-reinforcing nature of AI-driven military rivalry. Together, these frameworks offer a comprehensive lens for understanding how AI integration in military doctrine is reshaping the strategic landscape between the United States and China.

Methodology
This study employs a qualitative case study design to examine the application of the Security Dilemma Theory within the context of United States–China strategic competition over artificial intelligence (AI) in military doctrine. The qualitative approach is appropriate as it facilitates an in-depth exploration of perceptions, narratives, and strategic behaviours, enabling the researcher to capture the nuanced complexities of security interactions in an anarchic international system (Yin, 2014). The case study method is particularly suited to analysing a contemporary phenomenon within its real-world context, where the boundaries between phenomenon and context are not clear.

The selected case focuses on the AI-related military competition between the United States and China. This dyadic relationship is of strategic significance, given that it encapsulates a high-stakes technological rivalry with profound implications for global security. The selection is grounded in the relevance of the security dilemma framework, wherein mutual mistrust and reciprocal actions—such as the rapid development and deployment of AI-enabled military capabilities—can escalate into broader arms competition and potential conflict (Glaser, 1997). The study relies on documentary analysis as its primary data collection method. The corpus of documents includes official government and defence publications, such as the *U.S. National Defense Strategy* and China's *National Defense White Papers*, as well as strategic doctrinal statements and policy speeches by senior defence officials. Reports from military think tanks and research institutes provide additional policy and operational insights, while peer-reviewed academic literature offers theoretical grounding and conceptual clarity. To ensure the inclusion of contemporary developments, credible news media and defence industry publications are also incorporated into the analysis.

Data will be analysed using thematic analysis, which allows for the identification of patterns, recurring themes, and divergences within the data (Braun & Clarke, 2006). The analytical process is guided by the security dilemma framework, with a focus on how each state's AI-related initiatives are perceived by the other as potential threats, prompting reciprocal actions that exacerbate mistrust. Initial coding categories include perceptions of strategic vulnerability, the role of AI in deterrence, civilian–military fusion, arms race dynamics, and mechanisms for risk mitigation.

The interpretive lens for this study combines realism, strategic culture, and security dilemma theory. Realism provides an understanding of the competitive pursuit of AI dominance as an expression of power politics in an anarchic international order (Mearsheimer, 2001). Strategic culture offers insights into the distinct historical, ideological, and institutional patterns that shape each state's strategic behaviour (Johnston, 1995). The security dilemma theory, as articulated by Herz (1950) and further developed by Jervis (1978), captures the cyclical nature of mutual threat perceptions and the escalation of competitive measures. This triangulated theoretical framework enables a more holistic understanding of the US–China AI military competition, situating it within broader dynamics of strategic rivalry and global security.
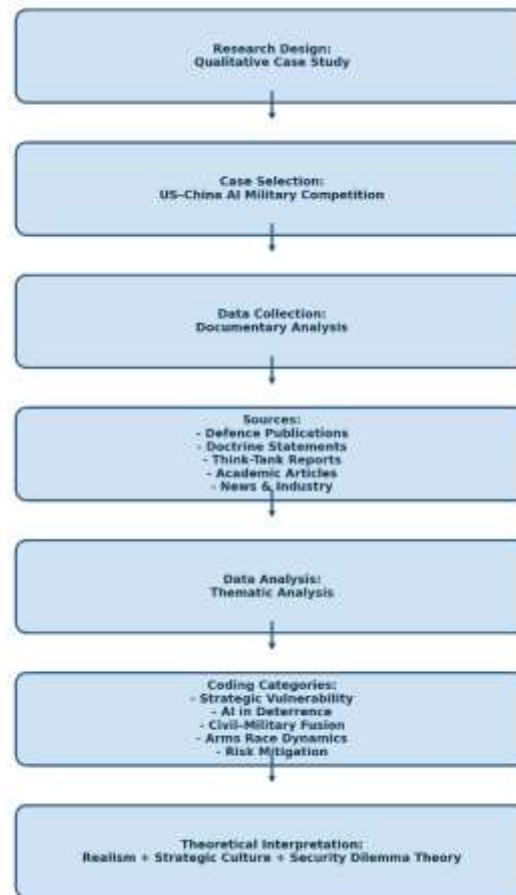
Figure 3: Flow Chart Showing The Step-By-Step Process From Research Design To Theoretical Interpretation Comparative Overview of U.S. And Chinese Military Doctrines

Source: Quoted And Adapted From Various Sources By The Researcher

The military doctrines of the United States and the People's Republic of China (PRC) reflect fundamentally different strategic paradigms, shaped by their historical trajectories, political institutions, and geostrategic imperatives. These doctrines not only inform how both states organize, train, and equip their armed forces, but also underpin their approaches to warfare in the evolving context of great power competition, particularly in the domain of emerging technologies such as AI, cyber operations, and space warfare.

The United States military doctrine is deeply embedded in its global security role and commitment to preserving a liberal international order. As articulated through the *Joint Publication* (JP) system, U.S. doctrine codifies the principles, tactics, and operational approaches required to achieve national security objectives. Central to this is the notion of *full-spectrum dominance,* which is the ability to conduct synchronized operations across land, sea, air, cyber, and space domains to decisively influence any adversary (U.S. Department of Defense [DoD], 2018). The 2023 *Military and Security Developments Involving the People's Republic of China* report reaffirms the integration of AI as a key enabler of command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), aimed at maintaining technological superiority over strategic competitors (DoD, 2023).

In recent years, U.S. military thought has emphasized joint multi-domain operations (JMDO), incorporating AI for real-time data processing, autonomous systems, and predictive analytics (James, 2022). Furthermore, the U.S. military has institutionalized AI development through the Joint Artificial Intelligence Center (JAIC) and formal strategies such as the *2021 Department of Defense AI Strategy*, which advocates for ethical, explainable, and reliable AI deployment (U.S. DoD, 2021).

In contrast, China's military doctrine, shaped by the Chinese Communist Party (CCP) and the Central Military Commission (CMC), prioritizes regional dominance and strategic deterrence within the context of national rejuvenation under the "China Dream" (Xi Jinping Thought on Strengthening the Armed Forces). Historically rooted in Maoist principles of "People's War," Chinese doctrine has evolved substantially since the 1990s. The introduction of the concept of *"Local Wars under Informatized Conditions"* marked the PLA's shift toward embracing information-centric warfare, emphasizing precision strikes, information dominance, and joint operations (Bitzinger, 2021; Kania, 2020).

By the mid-2010s, China advanced further into the domain of "Intelligentized Warfare", which signifies a future-oriented military paradigm that seeks to operationalize disruptive technologies such as AI, autonomous platforms, quantum computing, and big data analytics (Josh, 2024; Center for a New American Security, 2023). Official doctrinal works such as the *Science of Military Strategy* and *Science of Campaigns* reveal key priorities including information confrontation, strategic deception, and psychological warfare—all embedded within a centralized command structure that fuses civilian and military innovation (People's Republic of China, 2017; Bitzinger, 2021).

The PRC's military planning is regionally focused, with strategic emphasis on Taiwan, the South China Sea, and the East China Sea. China's doctrine treats these theaters as central to its core interests and perceives U.S. military presence as a challenge to its sovereignty and regional ambitions (DoD, 2023; Vaughn, 2025). PLA reforms, particularly under Xi Jinping's leadership, have reorganized command structures, streamlined joint command mechanisms, and accelerated defense innovation through the *military-civil fusion* strategy (Khanal, Zhang, & Taeihagh, 2024; Zaigham & Amin, 2024).

In comparative perspective, U.S. doctrine is outward-looking and expeditionary, favoring global force projection, coalition warfare, and rapid deployment. It values agility, interoperability, and integration across domains, bolstered by AI and digital command systems (Panwar, 2021). Meanwhile, China's doctrine is introspective and regionally assertive, focused on achieving asymmetric advantage, information superiority, and control over contested zones. While both states increasingly converge in leveraging AI as a force multiplier, their doctrinal orientations remain distinct shaped by contrasting strategic cultures, civil-military relations, and geopolitical objectives.

Recent scholarship also highlights how these divergent doctrines are adapting in response to one another. For instance, Baughman (2024) notes that China's intelligentization efforts are partly reactive to U.S. developments in multi-domain operations and autonomous warfare. Conversely, the U.S. has recalibrated its Indo-Pacific posture to deter PLA advances, signalling a doctrinal feedback loop that underscores the dynamic nature of contemporary military competition.

Strategic and Global Ramifications of Military AI Integration

The integration of AI into military strategy and doctrine is fundamentally transforming the character of modern warfare and the broader architecture of global security. Traditionally, strategic stability in the international system was underpinned by clear mechanisms such as mutually assured destruction (MAD), the balance of power, and well-established arms control regimes. However, the advent of AI introduces unprecedented speed, opacity, and unpredictability into military decision-making, which in turn undermines the foundational assumptions of classical deterrence theory (Kania, 2020; Bitzinger, 2021).

The United States has spearheaded the Joint All-Domain Command and Control (JADC2) initiative, designed to interlink sensors, platforms, and decision-makers across air, land, sea, space, and cyber domains through AI-enhanced interoperability. This architecture seeks to facilitate real-time situational awareness, accelerate the Observe-Orient-Decide-Act (OODA) loop, and reinforce strategic deterrence by enhancing operational responsiveness and flexibility (U.S. Department of Defense, 2021; James, 2022). The U.S. military perceives AI not only as a technological enabler but also as a strategic multiplier that ensures continued dominance in contested domains.

In contrast, China's approach, characterized by its concept of "Intelligentized Warfare", reflects a strategic focus on information superiority and cognitive domain dominance. As Josh (2024) and the Center for a New American Security (2023) observe, Beijing's military thinking increasingly emphasizes the use of AI to shape adversarial perceptions, disrupt decision-making cycles, and achieve strategic effects through non-kinetic means such as psychological operations, data manipulation, and algorithmic deception. This doctrine is not merely tactical but part of a grand strategy to erode U.S. military primacy and recast regional security architectures, particularly in East Asia.

The global ramifications of these divergent strategies are profound. AI's ability to compress decision-making timelines introduces risks of accidental escalation, especially in high-stakes environments where automated systems may respond to ambiguous stimuli without adequate human oversight (Vaughn, 2025; Kania, 2020). Autonomous weapons, by their very nature, may act in ways that are unpredictable or misinterpreted by human adversaries, thus exacerbating the risks of strategic miscalculation. Unlike the stability provided by the predictability of nuclear posturing, AI-driven capabilities can obfuscate intentions, reduce transparency, and heighten crisis instability.

Moreover, the militarized AI competition between the U.S. and China is reshaping international alliances and global order. Initiatives such as AUKUS, which emphasize joint AI research, autonomous systems development, and cyber cooperation, represent a deliberate attempt by the U.S. and its allies to counterbalance China's expanding military-technological footprint (James, 2022; Bitzinger, 2021). This technological alignment is driving a reconfiguration of traditional alliances around shared values of transparency, ethical AI deployment, and collective deterrence.

Conversely, China's Civil-Military Fusion (CMF) policy accelerates the assimilation of civilian technological innovations into military applications, providing the PLA with rapid access to cutting-edge capabilities. This model not only enhances China's operational readiness but also supports the export of AI technologies to the Global South through infrastructure

initiatives and security partnerships (Khanal, Zhang, & Taeihagh, 2024; Zaigham & Amin, 2024). Such strategies extend Beijing's geopolitical influence and challenge Western norms in the governance of military technologies.

Regional flashpoints, including the South China Sea and the Taiwan Strait, exemplify the operational impact of AI integration. The PLA has deployed AI-enabled surveillance systems, autonomous underwater and aerial platforms, and predictive analytics tools to enhance its situational awareness and assert maritime claims. This has complicated U.S. naval operations and challenged established principles such as freedom of navigation (DoD, 2023). In response, the U.S. has reinforced forward presence, deepened strategic partnerships with regional allies, and integrated AI into early warning systems, cyber defense, and electronic warfare capabilities, thereby escalating the technical complexity and intensity of regional deterrence dynamics.

At the global level, this AI-driven arms race is giving rise to a bifurcated international order, where states increasingly align based on technological capabilities, normative preferences, and strategic interests. Traditional alliances such as NATO are evolving to include AI as a central pillar of interoperability, while new coalitions are emerging among technologically advanced states with converging threat perceptions. This shift challenges existing multilateral arms control frameworks, which are often ill-equipped to govern dual-use technologies and non-transparent AI algorithms (Center for a New American Security, 2023).

The risks associated with strategic ambiguity and algorithmic opacity are particularly acute. Autonomous systems deployed with limited human intervention may operate outside intended parameters, triggering unintended engagements or misinterpreted escalatory moves. The U.S. Department of Defense has attempted to mitigate such risks through policies requiring senior-level authorization for the development and deployment of lethal autonomous systems, alongside ethical guidelines that emphasize accountability, transparency, and proportionality (DoD, 2021; Business Insider, 2024).

In contrast, China's rapid acceleration in military AI development lacks a similarly transparent regulatory framework, raising concerns among analysts about the potential for destabilizing deployments (Kania, 2020; Vaughn, 2025). The absence of bilateral communication protocols or crisis de-escalation mechanisms between Washington and Beijing on AI-specific military uses further compounds the risk of misinterpretation and unintended conflict.

Despite these challenges, nascent efforts to promote responsible AI governance in defense have emerged. The 2023 Responsible Artificial Intelligence in the Military Domain (REAIM) summit, attended by over 60 nations including both the U.S. and China, marked a significant though non-binding, step toward fostering global dialogue. The summit's declaration emphasized the importance of ethical design, human accountability, and international cooperation in the development and deployment of military AI systems (Joyce, 2024). However, the divergent positions of Washington and Beijing—particularly on transparency, sovereignty, and regulation—pose significant obstacles to establishing a universal normative framework.

As AI becomes increasingly central to command-and-control systems, early warning networks, and autonomous operational platforms, the future of warfare appears to be increasingly algorithmically mediated. This transformation calls for the urgent establishment of international standards and verification mechanisms to ensure that military AI systems remain under effective human control and operate within legal and ethical boundaries.

Table 1: The Evolution of U.S. Military Doctrine Since the Cold War, Highlighting Its Relationship with Major Technological Revolutions, With A Focus on How These Developments Paved the Way for AI Integration.

Period / Era	Key Strategic Context	Technological Revolutions	Doctrinal Evolution	Notable Programs Initiatives
Cold War (1947–1991)	Bipolar U.S.–Soviet rivalry; nuclear deterrence as central pillar	Precision-guided munitions (PGMs), stealth aircraft (F-117), satellite reconnaissance, early computer-based C2 systems	Doctrine of technological superiority to offset Soviet numerical advantage; AirLand Battle doctrine	Stealth technology development, GPS deployment, Strategic Defense Initiative (SDI)
Post–Cold War & RMA (1991–2001)	Unipolar moment; U.S. global military dominance; Gulf War as showcase of high-tech warfare	Network-centric warfare, real-time ISR (intelligence, surveillance, reconnaissance), advanced PGMs, integrated C4ISR systems	Revolution in Military Affairs (RMA)—emphasis on information dominance, rapid precision strike, joint force integration	Development of network-centric warfare concepts, Joint Vision 2020
Post-9/11 & Asymmetric Warfare Era (2001–2014)	Global War on Terror (Afghanistan, Iraq); counterinsurgency focus	UAVs (Predator, Reaper), biometric systems, big data ISR tools, IED detection tech	Shift from peer-competition doctrine to counterinsurgency and stability operations	Expansion of drone warfare, biometric targeting, COIN doctrine
Return to Great Power Competition (2014–2017)	Rising China and resurgent Russia challenge U.S. primacy; Crimea crisis; South China Sea tensions	Cyber warfare capabilities, hypersonics, advanced sensors	Strategic pivot back to peer and near-peer competition	Third Offset Strategy, investments in AI and autonomous systems
AI & Algorithmic Warfare Era (2017–present)	U.S. National Defense Strategy (2018) prioritizes China and Russia; contested multi-domain environment	Artificial intelligence (AI), machine learning, autonomous systems, predictive analytics	Doctrinal shift towards AI-enabled multi-domain operations, decision dominance, and algorithmic warfare	Project Maven, Joint Artificial Intelligence Center (JAIC), DoD AI Strategy, adoption of Joint All-Domain Command and Control (JADC2)

Source: Quoted And Adapted from Various Sources by the Researcher

Table 2: China's Military Doctrinal Evolution Since the Late Cold War Period, Showing Its Relationship with Technological Revolutions and the Integration of AI Into Military Thinking.

Period / Era	Key Strategic Context	Technological Revolutions	Doctrinal Evolution	Notable Programs / Initiatives
Late Cold War (1978–1991)	Deng Xiaoping's reforms; focus on modernization after decades of internal upheaval; limited tech base	Basic mechanization, early missile tech, radar improvements	Doctrine of "People's War under Modern Conditions"—shift from mass mobilization to limited, tech-enhanced regional defense	Four Modernizations in defense; import of foreign technologies (e.g., Russian aircraft, Western electronics)
Early Post–Cold War (1991–2003)	Gulf War and Kosovo War showcase U.S. high-tech dominance; Taiwan Strait crisis (1995–1996) spurs modernization	Precision-strike capabilities, C4ISR awareness, early space tech	Introduction of Local Wars under High-Tech Conditions—emphasis on informatization and precision strike	Expansion of missile forces, launch of Beidou navigation system, digital command upgrades
Informatization Era (2004–2014)	Rising economic power; concerns over U.S. intervention in Taiwan; focus on regional dominance	Network-centric operations, advanced missile systems, early UAV programs	Shift to Local Wars under Informatized Conditions—joint operations, integrated C4ISR, space and cyber capabilities	2004 military guidelines, development of anti-access/area denial (A2/AD) strategy, expansion of cyber warfare units
Strategic Rejuvenation & Military Reform (2015–2016)	Xi Jinping's reforms; aim for "world-class military" by mid-21st century; assertiveness in South China Sea	Cyber-electronic warfare integration, advanced ISR, initial AI applications	Move towards Integrated Joint Operations—restructuring PLA for high-tech, multi-domain warfare	2015 PLA reorganization, creation of Strategic Support Force (SSF) for cyber, space, and electronic domains
AI & Intelligentized Warfare Era (2017–present)	Strategic competition with U.S.; AI as a disruptive equalizer; civil–military fusion policy	AI, machine learning, autonomous systems, big data analytics, swarm robotics	Doctrinal shift to "Intelligentized Warfare"—AI-enabled decision-making, predictive operations, and man–machine integration	Next-Generation AI Development Plan (2017), integration of AI into PLA training and simulations, development of unmanned systems,

Period / Era	Key Context	Strategic Technological Revolutions	Doctrinal Evolution	Notable Programs / Initiatives
				expansion of SSF capabilities

Source: Quoted And Adapted from Various Sources by the Researcher

Conclusion

The accelerating integration of artificial intelligence into military doctrines signals a pivotal shift in global strategic paradigms. This paper has examined how the United States and China embodying distinct Western and Eastern military traditions are not only competing to harness AI but also reconfiguring their strategic doctrines to accommodate its transformative impact. Despite differences in political systems, institutional designs, and threat perceptions, both powers reveal striking parallels and contrasts that are set to shape the future global security environment.

At a doctrinal level, both nations understand that AI represents more than a technological upgrade; it is a core enabler of next-generation warfare. The U.S. framework emphasizes multi-domain operations (MDO), where AI acts as a unifying force across air, land, sea, space, and cyberspace. This aligns with longstanding U.S. preferences for decentralized command structures, joint force interoperability, and precision warfare. In contrast, China's military strategy—anchored in the concept of "intelligentized warfare"—prioritizes a system-of-systems approach, leveraging AI for cognitive dominance and centralized command efficiency to enable rapid strategic adaptation. Yet, both approaches converge on the importance of human-machine teaming, autonomous systems, and big-data-driven command cycles.

This convergence is particularly evident in mutual investments in AI-enhanced ISR (intelligence, surveillance, and reconnaissance), autonomous weapons, and decision-support technologies. Both militaries increasingly utilize real-time data fusion, simulation-based training, and predictive analytics to anticipate adversary behavior. However, their approaches to civil-military integration differ significantly: China benefits from state-led coordination, while the U.S. relies heavily on private sector innovation. These structural differences contribute to divergent speeds of implementation, ethical norms, and transparency standards.

One of the most significant implications of this doctrinal alignment is the challenge it poses to traditional models of deterrence. AI accelerates decision-making and complicates attribution, increasing the risk of unintended escalation in high-stakes scenarios. Misjudgments by autonomous systems or algorithmic errors could trigger conflict absent clear human oversight. Although both nations express commitments to the "responsible" use of AI, these pledges often lack clarity and are frequently subordinated to national security objectives.

This evolution in military doctrine is unfolding in a dynamic global context. Smaller states and non-state actors are also adapting to the AI-driven transformation of warfare, underscoring the need for international norms and governance mechanisms. As the U.S. and China continue to refine their strategies, the risk of strategic miscommunication and destabilizing arms races particularly in opaque domains like cyberspace, outer space, and undersea operations grows increasingly acute.

Ultimately, the rise of AI is reshaping not just the instruments of warfare, but the underlying logic of military doctrine. The strategic convergence between the U.S. and China reflects a shared acknowledgment of AI's disruptive potential, even as it exposes enduring geopolitical and ideological divides. Managing this transition will require sustained international dialogue, robust transparency frameworks, and a rethinking of deterrence in a world where machines may act at unprecedented speed. For both scholars and practitioners, this convergence offers a dual lens: a warning about the risks of autonomous escalation, and a glimpse into a future where strategic advantage may depend less on material assets and more on the quality of human and artificial decisions behind them.

Acknowledgements

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