Abstract

The article assesses Chinese perceptions of lethal autonomous weapons systems (LAWS), in the context of Xi Jinping’s Chinese Dream and China’s broader approach to military modernization and artificial intelligence (AI). It will first discuss how military modernization is employed by Chinese policymakers in addressing challenges posed by the United States. Secondly, this article will assess the connection between military modernization and the advancement of China’s innovation strategy and civil-military integration, as specified in sections relating to “Xi Jinping Thought.” The article concludes with an analysis of Chinese diplomats’ statements on LAWS at the United Nations—namely, Beijing’s views on the definition of LAWS, global AI governance and ethics, and the
parameters of arms control. The analysis here suggests that China has sought guardrails to ban specific uses of LAWS for offensive purposes, while simultaneously arguing that it is illogical to regulate LAWS in a defensive context.

Introduction

Since 2012, Xi Jinping has led China into what some observers have deemed the era of the “Chinese Dream” (中国梦). Under Xi’s leadership, a more assertive China has realigned the foreign policy aims of the United States under the Obama and Trump administrations, and remains a distinct challenge and source of concern for President Joe Biden. In attempting to add much needed connective tissue to scholarship on US-China relations during this period, this article considers Beijing’s increasingly militarized trajectory since 2012, when Xi was appointed General Secretary of the Chinese Communist Party (CCP) and Chair of the Central Military Commission. The article will contextualize this period of militarization within the Chinese Dream outlined by Xi, then seek to examine the extent to which China is likely to incorporate artificial intelligence (AI) and lethal autonomous weapons systems (LAWS) into their broader diplomatic strategy and programs of military modernization.

The article begins with a section on Chinese military modernization and its challenges to the United States, in which we consider the guiding principles of China’s amplified military modernization and discuss this trajectory in the context of US-China relations. While technological advantage has been a core driver of US military power and national competitiveness, China is beginning to close the gap in its mission to become a scientific and technological superpower in the Indo-Pacific. Thus far, the American military has maintained an initial edge in technologies crucial to information-age warfare. However, China’s People’s Liberation Army (PLA) is aiming to challenge that dominance by “conceptualiz[ing]” and “operationaliz[ing]” AI technologies in future warfare.2 By examining the rhetoric of Chinese policymakers and Chinese

government officials’ public statements, the article will then assess the connection between military modernization and China’s goal of civil-military integration. We suggest that while Beijing sustains engagement in broader global fora, it is also important to recognize that China will continue its opaque pursuit of military applications of AI and LAWS, and likely heighten US-China tensions. As competition between the two nations in the field of artificial intelligence increases, its outcomes will impact the military equilibrium in the Indo-Pacific and the future of global trade in dual-use technologies. The PLA recognizes the importance of gaining an advantage in artificial intelligence in order to compensate for the dominance of the US in other military technologies. China’s potential to rival or exceed the United States in the AI domain has led the US military to reckon with the PLA’s emergence as a formidable competitor in the region and reexamine prospects of US-China technological competition.³

The second section of the article will focus on Xi’s ideological views and Chinese governance. To understand the acceleration of Chinese military modernization, including its technological trajectory, it is important to understand Xi’s intentions for national governance and the ways he seeks to reshape global governance institutions, such as the United Nations. Accordingly, we seek to analyze Xi’s particular adaptation of Marxism, “Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era” (习近平新时代中国特色社会主义思想), which provides an ideological framework for understanding both current and future developments in Chinese statecraft.⁴ It also includes Xi’s perspectives on the role of robotics and AI, which has wide-ranging implications for China’s domestic economy and how its international delegation approaches the issue of LAWS.

³ Ibid., 5.
⁴ This is commonly shortened to “Xi Jinping Thought” (习近平思想), which is the term that we will be using throughout this article.
The article’s final section will cover Chinese diplomacy and LAWS. By analyzing audio and written statements from the delegation’s discussions from the United Nations Convention on Certain Conventional Weapons (CCW), we will provide a comprehensive examination of Chinese diplomatic efforts in three key areas: the definition of LAWS in international law, global AI governance and ethics, and Beijing’s arms control parameters. We will also utilize audio recordings and Chinese-language academic sources to evaluate how LAWS could be part of China’s modernization platform, or, conversely, whether Beijing intends to create an international preemptive ban on such devices. These discussions will present a timely contribution to the literature on China’s unique goals regarding LAWS, which Beijing considers to be a “new military revolution.”

**Chinese Military Modernization and Challenges to the United States**

The arrival of Xi Jinping as the leader of the People’s Republic of China has been one of the most significant developments in international relations over the last decade. In November 2012, Xi formalized his positions as the general secretary of the Central Committee and the chair of the Central Military Commission at the CCP’s 18th National Congress—the two most important positions within the party structure. A few months later, in March 2013, he acceded to the titular role of state president at the opening session of the 12th National People’s Congress. The Chinese Dream emerged in reference and strategy in November 2012, coinciding with Xi’s appointment as general secretary. As he stated:

> I firmly believe that the goal of bringing about a moderately prosperous society in all respects can be achieved by 2021, when the CPC [Communist Party of China] celebrates its centenary; the goal of building China into a modern socialist country that is prosperous, strong, democratic, culturally advanced and harmonious can be achieved by 2049, when

[5] The description “new military revolution” has appeared in both of China’s position papers (December 2016 and April 2018), and in the delegation’s verbal statements on April 11, 2016 and April 9, 2018.
the People’s Republic of China marks its centenary; and the
dream of the rejuvenation of the Chinese nation will then be
realized.⁶

Extrapolating on its meaning and significance in his first formal address
as head of state in March 2013, Xi called upon the nation to “make per-
sistent efforts, [to] press ahead with indomitable will, [to] continue to
push forward the great cause of socialism with Chinese characteristics,
and [to] strive to achieve the Chinese Dream of [the] great rejuvenation
of the Chinese nation.” While Xi did not explicitly detail the logistics as-
associated with the Chinese Dream, he argued that “to realize the Chinese
road, we must spread the Chinese spirit, which combines the spirit of
the nation with patriotism as the core and the spirit of the time with re-
form and innovation as the core.”⁷ At this time, the Chinese Dream was
inserted into party doctrine. The party established new rules for the be-
behavior of officials; enforced the party line in an effort to stem ideological
decay;⁸ and introduced new standards to ensure the “Marxist view of
journalism,” which, as defined in the new textbook for journalists, em-
phasized “the leading role of the Party in publicity.”⁹ Even though these
changes indicated the party’s reassertion of state controls, they were not
yet on the Obama administration’s radar. However, in hindsight, these
first movements signaled the extent of Xi’s determination to depart from
his predecessor Hu Jintao’s greater willingness to accommodate US in-
terests through a policy of “peaceful rising.”¹⁰

Governance of China (Beijing: Foreign Languages Press, 2014), 38.
bbc.com/news/world-asia-china-22726375; Faine Greenwood, “Xi Jinping Describes
‘Chinese Dream’ at Closing of National People’s Congress,” March 17, 2013, GlobalPost,
https://theworld.org/stories/2013-03-17/xi-jinping-describes-chinese-dream-closing-na-
tional-peoples-congress
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org/web/20210103043320/https://www.globaltimes.cn/content/832671.shtml
Press, 2007), 242-244.
In their early stages in office, Xi and his advisors expressed a desire to strengthen the US-China relationship. For example, Xi accepted US President Barack Obama’s invitation to meet for several days of “extended and more informal conversation” at the bilateral Sunnylands Summit of June 2013.\[11\] At this summit, China’s new leaders demonstrated their willingness to pressure North Korea over its nuclear program in accordance with the views of American officials, while also agreeing to participate in a new phase of substantive negotiations with the United States over a bilateral investment treaty, abandoning some provisions that had hindered discussions in the past. In response to White House allegations of Chinese state-backed cyber infringements of US government and private networks over the previous decade, they agreed to create a high-level working group on cybersecurity to address the Obama Administration’s concerns.\[12\] Additionally, Obama and Xi agreed to high-level communications between military officials as part of enacting their “new model” of US-China relations.\[13\] Despite these more cooperative sentiments, however, some Chinese actions would provoke feelings of distrust throughout the Obama presidency that would later intensify during the Trump administration.

For instance, one significant area of contention involved Chinese economic expansion overseas. Under the framework of the Chinese Dream, China sought to expand upon its strengths in state-led business and infrastructure development, while turning the country into a defining

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global leader with an avant-garde technological base. In September 2013, Xi revealed the first piece of this strategy: the Belt and Road Initiative. To a certain extent, this was undertaken in response to then-Secretary of State Hillary Clinton’s call in October 2011 to create the New Silk Road Initiative to boost trade and implied stability in West Asian states.¹⁴ Re-adopted by Xi under the title “One Belt, One Road” (一带一路), Chinese authorities moved to establish an ambitious infrastructure development program that sought to internationalize the currency and build greater investment opportunities for the country’s state-owned enterprises across land and sea routes connecting Eurasia and the Indian Ocean. The program also included the establishment of the Silk Road Fund, Asian Infrastructure Investment Bank, and objectives to alleviate Chinese poverty that would coincide with the First Centenary Goal of July 2021.

Xi further ratcheted up the pressure pertaining to ongoing territorial disputes. For instance, he described the unification of Taiwan as a “political issue that can’t be passed on for generations,” and in the South China Sea, he proceeded to execute a long-term strategy to construct substantive military bases.¹⁵ In 2013, the Chinese Ministry of National Defense established an Air Defense Identification Zone (ADIZ) over international airspace in the East China Sea (and also territory administered by Japan). The United States did not recognize this ADIZ, which required airlines to file their flight plans with the Chinese government and to follow the Ministry of National Defense’s instructions—even if the flight paths did not enter China’s national airspace.¹⁶ Around this time, Manila initiated tribunal proceedings against Beijing through the Permanent Court of Arbitration over maritime disputes under the United Nations Convention on the Law of the Sea. However, when the international tribunal handed down its findings in favor of Manila in 2016, the president

of the Philippines, Rodrigo Duterte, defied expectations by not escalating tensions with Beijing’s leaders. In a move interpreted as seeking to gain leverage over a possible Biden presidency, Duterte went so far as to announce that he might cancel the Visiting Forces Agreement with the US. For a nation that had long eschewed such large and dramatic changes to foreign policy, China seemed to be achieving some influence in the region, while making bold new statements about its capabilities and widely contested great power status.

It is also worth expanding on Xi’s goals for the “rejuvenation of the Chinese nation.” As Gill argues, these new sentiments and policies “tapped into a deep reservoir of national pride and further solidified [Xi’s] popularity.” By 2015, this provided Xi greater leverage to launch a marked restructuring of the PLA, transforming it from a “bloated, corrupt, untested and inward-looking military” to one far more proficient in driving China’s power abroad. Moreover, he coordinated the addition of Xi Jinping Thought into the party’s constitution, including the elimination of term restrictions on his presidency—effectively permitting him to remain in control for life. Subsequently, during Obama’s second term in office, Xi would lead an ongoing and persistent effort to extend Chinese influence throughout Asia to counter the United States’ own strategic “pivot to Asia.” This signified a new era of enhanced state control in

[21] Ibid.
China and an emboldened and militarized foreign policy mandate in Asia, while the Obama and Trump administrations were responding to their other priorities in securing the stability of the Middle East.

From the start of Obama’s second term, it was evident that the new Chinese leadership would seek to reform the PLA to ensure the realization of their Chinese Dream. Specifically, Xi underscored the PLA’s actual fighting capabilities as the primary goal of China’s military modernization endeavors, which referred to “real combat” training for the purpose of “winning regional engagements in the information age.” In his position as chair of the Central Military Commission (CMC), Xi reformed the military’s institutions “under a new structure with the CMC exercising overall leadership” over the military’s governance, requiring officers and soldiers to be educated with Xi Jinping Thought. Xi claimed that this new party-based structure would serve “as a foundation for maintaining the military’s absolute loyalty to our Party,” help the military “fight against [its] corruption,” increase the military’s adaptability, and “try to win wars based on our Party’s political and organizational strength.” As an indication of the high priority given to such acts of corruption, Xu Caihou, a former Politburo member and vice-chair of the CMC who confessed to taking bribes, was expelled from the party. Meanwhile, since 2015, the PLA hastened modernization with ad-
ditional reforms, including the creation of a unified command system for integrated joint operations (using compliance mechanisms to avoid inter-service rivalries), the advancement of training to replicate the circumstances of real warfare, more rigorous education systems to teach commanders to execute operational concepts, and closer supervision through the CMC.²⁷

Unsurprisingly, China’s military modernization was buttressed by a steady rise in military expenditure. The US Department of Defense (DoD) estimates that from 2003 to 2012, China’s military budget had expanded at an average of 9.7 percent annually in inflation-adjusted conditions. However, after Xi Jinping took power, China’s official budget for 2013 reached $114 billion—10.7 percent higher than the 2012 budget. While these figures were considered to be substantive, China’s actual military expenditure as assessed by the Pentagon (when including major categories of expenditure which had been omitted in the official budget, such as procurement of foreign weapons and equipment) was thought to reach up to $215 billion.²⁸ From the DoD’s perspective, this rapid Chinese military growth was not being “accompanied by greater clarity of its strategic intentions in order to avoid causing friction in the region.”²⁹ Consequently, in order to account for increased risk, it
advised the US to “continue to make the necessary investments to ensure that we maintain regional access and the ability to operate freely in keeping with our treaty obligations and with international law.” The United States’ ‘rebalance’ to the Indo-Pacific had begun as a primarily political and economic program, but by 2013, increasing concern over China’s military modernization had begun to shift the Obama administration’s focus towards militarization.

Observing this debate within Washington, and through Obama’s interlocutors, Chinese authorities repeatedly reassured administration officials that Beijing was committed to working peacefully within the international system. Chinese leaders also indicated they did not have the intent or the capacity to confront the United States’ position in Asia. Despite receiving assurances of “peaceful development,” however, Obama officials continued to press China for greater transparency, especially regarding its modernization activities. By May 2013, China’s other military developments had forced Obama to investigate further into Chinese intentions. As one DoD report noted, China’s military modernization looked increasingly offensive, and was “designed to improve the capacity of [China’s] armed forces to fight and win short-duration, high-intensity regional military conflicts.” While the report noted that “preparing for potential conflict in the Taiwan Strait appears to remain the principal focus and primary driver of China’s military investment,” the DoD assessed that “China would seek to deter potential US intervention,” then “fight to a standstill and pursue a political settlement after a protracted conflict” with the United States over Taiwan.

It also observed that China’s military modernization aimed to broaden

[30] Ibid.
[31] Barack Obama and Xi Jinping, “Remarks by President Obama and President Xi Jinping of the People’s Republic of China After Bilateral Meeting.”
its capabilities to include extended-range power projection; missions in evolving spheres, such as cyber, space, and electronic warfare; as well as other operations, like anti-piracy exercises, peacekeeping, humanitarian support and disaster relief, and regional military actions.\textsuperscript{34}

China’s large investments in military modernization alerted Washington of threats to US mobility and influence in the Indo-Pacific region, as well as to its overall technological dominance. According to the DoD, the PLA was directing significant political, organizational, and financial resources to develop “capabilities with the potential to degrade core US operational and technological advantages,” such as cyber operations and projecting airpower over greater distances.\textsuperscript{35} The Pentagon anticipated that as China’s military progressed, it would likely be emboldened to challenge US supremacy in specific areas, including air, space, and cyberspace. Moreover, the PLA’s investment in innovative military technologies—including precursors to LAWS, such as AI and advanced robotics, as well as hypersonic missiles and directed energy weapons that could target defense systems across the globe—signaled the long-term focus of China’s military modernization efforts.\textsuperscript{36} Alongside these competitive developments in technology, the DoD worried that Beijing’s increasing use of intimidation in territorial disputes with its neighbors over territory in the East and South China Seas threatened to undercut overall regional stability in East Asia.

More than the simple development of existing capabilities, the Chinese military trajectory appeared to be orchestrating a build-up that was aimed at deterring an intervention by US forces in a conflict in the Indo-Pacific. The United States defined such proficiencies as “anti-access/area-denial” (A2/AD) operations, while the PRC described such missions as “counter-intervention operations.” Whatever the designation, Pentagon officials perceived a cause for concern in the PLA Navy’s “car-

\textsuperscript{34} Lawrence, \textit{US-China Relations}, 16.
\textsuperscript{36} Ibid., 102.
rier killer” anti-ship ballistic missile, which provided China with “the capability to attack large ships, including aircraft carriers, in the western Pacific Ocean.” Additionally, the DoD viewed stealth fighter aircraft prototypes as possible game-changers in China’s “ability to strike regional airbases and facilities,” which would ostensibly include US military bases. Finally, while China’s pursuit of an aircraft carrier in 2012—their first warship of its kind—was described by some commentators as being more symbolic than a truly defining military projection of tangible power, the DoD viewed it as an indication of a new and ambitious strategy for Chinese naval power projection. Obtained from Ukraine in 1998 and renamed the Liaoning, the ship, defense officials observed, would attain operational efficiency “in three to four years” and would likely herald the construction of “several aircraft carriers over the next 15 years.”

As Beijing noted in a 2015 white paper, its geostrategic environment would remain favorable for at least several more years. That is, Chinese leaders perceived this period to be stable enough to provide a “strategic opportunity” through which China could enhance its broader national potency and global competitiveness with few serious threats (and numerous prospects). However, some Chinese analysts at the time argued that from 2020 and beyond, China may be required to adapt to emerging realities and challenges. In their view, these challenges would likely include heightened US strategic attention, perceived threats from a militarily stronger Japan, a precarious global economy, and the problem of refining and maintaining its own economic development paradigm. Aside from these realities, the white paper also identified the continual shift toward a multipolar world, which China’s leaders believed would coincide with the relative weakening of the United States’ power. Here, China’s comprehensive national strength, core competitiveness, and

[37] Lawrence, *US-China Relations*, 16.
[38] Ibid., 17.
risk-resistance capacity would be able to greatly increase its ever-grow- 
ing international standing and influence.\footnote{Rinehart, “The Chinese Military,” 9.} The white paper also pointed to new technological frontiers of tension in outer space and cyberspace, with conflicts surrounding “informationization” (also referred to as in- 
formatization), as well as the assimilation and intensification of informa- 
tion technology into warfighting.\footnote{“China’s Military Strategy,” 6.} Rather than seeking to reassure neighbors and global powers that these concerns were primarily defensive, however, Chinese analysts instead sought to emphasize the security challenges and the requisite need for a stronger navy.\footnote{Zhang Xiaolin and Cao Yang, “推进海军战略转型，维护海洋安全 [Promote the Transformation of Naval Strategy, Safeguard Maritime Security], Navy Today [当代海军] (June 2015): 20-23, cited in Rinehart, “The Chinese Military,” 8-9.}

In the Trump era, China’s military modernization continued to cause notable unease among Washington officials, despite the expansion of the Pentagon’s budget and Trump’s promise to reverse the United States’ decreasing military advantage “over any potential enemy.”\footnote{“Hearing to Receive Testimony on the Department of Defense Budget Posture in Review of the Defense Authorization Request for Fiscal Year 2019 and the Future Years Defense Program,” legislative hearing, \textit{US Senate Committee on Armed Services} (115th Congress), April 26, 2018, https://www.armed-services.senate.gov/hearings/18-04-26-department-of-defense-budget-posture} Certainly, this anxiety could be traced back to almost any Pentagon budget analysis in the Bush and Obama administrations with respect to China’s increasing military capabilities. But by the beginning of 2017, observers assessing China’s modernization had begun to discuss Beijing as possessing “near peer competitor” status to the United States. To be sure, many Western analysts noted that Beijing could not deploy large numbers of conventional forces across the globe, and its modernization aims had not exceeded the capabilities already attained by the US military.\footnote{Cortez A. Cooper III, “PLA Military Modernization: Drivers, Force Restructuring, and Implications: Testimony Before the US-China Economic and Security Review Commission,” report, \textit{RAND Corporation} (February 2018): 12, https://www.rand.org/pubs/testimonies/CT488.html} At the same time, however, China’s investment in AI, hypersonic missiles, A2/AD ca-
pabilities, and 5G networks disrupted America’s military deterrence. By 2019, United States Defense officials had become increasingly alarmed. Former Deputy Secretary of Defense for Strategy and Force Development, Elbridge Colby, remarked that the military threat from China and Russia had become so demanding that the Pentagon was either required to do “less of everything else,” or do it more efficiently. In essence, according to Colby, any decision not directly connected to readying US forces to fight China or Russia should be scrutinized.

Recently, the question of whether the United States could defend Taiwan from a concerted Chinese military attack has been regarded with similar uncertainty by Washington officials. The US-China Economic and Security Review Commission’s 2019 annual report to Congress noted that the “cross-Strait military balance” had decidedly “shifted in China’s favor in recent years,” and that this change presented a major challenge both to Taiwan’s ability to defend itself and to the United States’ ability to intervene effectively in a cross-Strait conflict. While the Commission reported that Beijing did not yet have the military capability to successfully invade and capture Taiwan, Beijing could nonetheless deter Washington from coming to Taipei’s aid under its formidable A2/AD counter-intervention measures—specifically designed to impede US access to East Asian theaters of war. Part of this equation also involved the question of relative resolve. As the Commission noted, the CCP’s elevation of Taiwan as a “core interest” in 2003 and their belief in an asymmetry of stakes could lead Beijing to misread American intentions by predicting that defending Taiwan would not be “worth it” from

Washington’s perspective. Moreover, if “peaceful means” of unification were exhausted by both of Taiwan’s major political parties rejecting the possibility of eventual unification with the mainland, the Commission assessed that Xi Jinping “may believe force is his only option left.” Given the trends in China’s military modernization and this calculation of resolve, analysts like Mastro forecast that Chinese capabilities would not merely overcome, but “outmatch” the United States in Taiwan.

In the maritime zone, too, China had developed superiority through its number of PLA Navy vessels, the world’s largest (paramilitary) Coast Guard forces, and the world’s only maritime militia force. These sizable forces could enable China to overwhelm and nullify the relatively small number of America’s more advanced surface vessels and to dominate the East and South China Seas. This is not to say that China could project naval force outside of the first island chain—reaching from Japan to Malaysia—as this would require a decade of ship-building, including adding more aircraft carriers to its fleet. But part of China’s modernization activities, including its advanced weapons programs, has already been explicitly designed to exploit American vulnerabilities. In April 2018, US Admiral Philip Davidson went as far as to suggest that the Chinese could feasibly “control” the South China Sea in all circumstances short of a war with the United States. By January 2020, James Kraska, a lecturer at the Naval War College and former naval commander, suggested that the United States had lost its advantage “throughout the spectrum of operations” in the South China Sea, allowing China to obtain “es-

[51] Ibid.
calation dominance” since it had the “power to deter any US turn to-
wards escalation.” While the United States spends more on its military
than any other country, it is also a global military. In contrast, China
has focused its military development in select areas aimed at keeping
the United States out of the first island chain, such as A2/AD. Pentagon
projections indicate that by 2025, the PLA will have approximately 30
percent more fighter aircraft and four aircraft carriers in the Pacific, as
well as further guided-missile destroyers, advanced undersea warfare
systems, and hypersonic missiles. Simultaneously, Beijing continues to
assert an innovation-driven strategy for dual civilian and military de-
velopment to establish China as the world’s premier center for AI in-
novation by 2030. Growth in AI would be facilitated via systemic and
structural advantages, involving state support and investment, prospec-
tive human capital reserves, substantial quantities of government and
private data, as well as the use of private sector AI advancements to aug-
ment the PLA’s military capabilities. Among the 532 companies involved
in the development of the Shandong, China’s first endogenous aircraft
carrier, 77 percent were from the civilian sector (state-owned enterpris-
es, private companies, and research institutes). This ratio is worth not-
ing, as major outcomes from military-civil “fusion” in the future are also
expected in the areas of LAWS and other unmanned platforms, as well
as supercomputers, driverless military vehicles, and missile launch ve-
hicles.

While the PLA’s preliminary conceptions pertaining to AI in warfare
have been inspired by a cautious assessment of US military assertions,
Beijing’s approach looks increasingly likely to deviate from the United

[53] John Power, “Has the US Already Lost the Battle for the South China Sea?” South
China Morning Post, January 18, 2020, https://www.scmp.com/week-asia/politics/arti-
cle/3046619/has-us-already-lost-battle-south-china-sea
[54] Jane Perlez and Steven L. Myers, “US and China Are Playing ‘Game of Chick-
port, National Institute of Defense Studies,” report, National Institute for Defense Stud-
cation/chinareport/index.html
States’ based on its distinctive strategic philosophy and administrative dynamics. The PLA expects that the advent of AI will profoundly redefine the nature of warfare, changing today’s ‘informatized’ methods of conflict to future ‘intelligentized’ warfare. In the future, for both China and the US, AI will be essential to military power. In this regard, the PLA will likely utilize AI as a means to augment its future competences, including in smart and autonomous unmanned systems; AI-enabled data synthesis, information processing, and intelligence analysis; war-gaming, simulation, and training; defense, offense, and command in information warfare; and intelligent support to command decision-making.56

During the Trump administration, policymakers began to view China’s military modernization as posing a much more comprehensive threat to US interests, extending into realms of foreign policy, trade, aid, and even regional integration, thus meriting a more robust response. In July 2020, Secretary of State Mike Pompeo affirmed the US position aligned with the 2016 South China Sea Arbitration decision that rejected the nine-dash line as the basis of extending Beijing’s exclusive economic zone.57 Additionally, in late 2020, the Navy Secretary announced the 1st Fleet would be moved to “the crossroads between the Indian and the Pacific oceans,” indicating the US would continue to use freedom of navigation operations to contest Chinese maritime claims.58 Meanwhile, in November 2020, the Trump administration issued Executive Order 13959 on “Addressing the Threat from Securities Investments that Finance Communist Chinese Military Companies,” which noted that China’s “national strategy of Military-Civil Fusion...exploits United States investors to finance the development and modernization of its

military”; declared a national emergency “with respect to this threat”; and prohibited transacting in publicly traded securities of “any Communist Chinese military company.”\textsuperscript{59} In 2021, the Biden administration issued Executive Order 14032 on “Addressing the Threat from Securities Investments that Finance Certain Companies of the People’s Republic of China,” which expanded on Trump’s prior order. In particular, Biden declared that Chinese surveillance technology posed “unusual and extraordinary threats, which have their source in whole or substantial part outside the United States, to the national security, foreign policy, and economy of the United States.”\textsuperscript{60}

Currently, the PLA is financing a wide array of projects on AI within the Chinese private defense sector. PLA research centers are engaging in extensive research and development and collaborating with universities and companies to develop civilian technologies that could be used in military contexts. These technologies include AI and software for image analysis, language processing, intelligent robotics, and autonomous vehicles. Such initiatives mark a change in the PLA’s tactical method: away from asymmetric concentration on US susceptibilities, and towards the innovation arms race. As Kania argues, the PLA is looking to undertake a sort of “leapfrog development” to attain a pivotal advantage in “strategic front-line” technologies.\textsuperscript{61} This paper now turns to the rationale of why China is unlikely to undertake a linear trajectory or adhere to the path of US military modernization, as Beijing looks to develop an independent innovation capability along the pathway set out by Xi Jinping.

\textbf{Xi Jinping Thought and Chinese Governance}

In understanding the intensification of Chinese military modernization and its technological trajectory, it is important to assess how Xi intends to govern. This is particularly important in light of his removal of term limits, which will extend the period of his leadership until at least 2027.

Xi’s writings can be treated as canonical texts for party members and government officials due to a series of amendments to the constitutions of both the Chinese Communist Party and the Chinese government in October 2017 and March 2018. These amendments recognized Xi Jinping Thought as the second ideological framework named after a party leader, with Xi’s adaptation of Marxism representing the most significant ideological framework outside of Mao Zedong’s founding ideals. As part of the amendments, both constitutions inserted references to “national rejuvenation” (中华民族伟大复兴), a term synonymous with the Chinese Dream. In the publisher’s introduction to Xi’s prominent book series, the constitutional amendments were described as “timely updates to the guiding philosophy of the Party and the country,”62 and Xi was described as the “principal proponent” of the thought.63 As such, Chinese diplomats and other members of China’s foreign policy apparatus today attach great importance to Xi Jinping’s statements and writings—even those made before his rise to political power.64 In 2019, the party’s top ideological journal, Qiushi, focused on the implementation of Xi Jinping Thought as the “best strategy for upholding and applying Marxism in the new era,” and emphasized that Xi’s cadres would be expected to apply his ideology to their nation’s contemporary circumstances.65 Around this time, ordinary Chinese citizens were also required by their employers to study Communist theory. An app for the study of Xi Jinping Thought, “Study Xi, Strengthen the Country” (学习强国), was adopted by many workplaces as part of their “official employee training and evaluation

[62] Publisher’s introduction to The Governance of China III.
procedures,” which required workers to document their hours and the scores they received on quizzes through the app.\textsuperscript{66} As part of these measures, large sections of Chinese society became accustomed to a new geopolitical philosophy, which directed the national effort towards the priority growth areas outlined by Xi.

A further illustration of this drive is encompassed in a series of thematic analyses of party literature conducted by Dotson in 2020. As he suggests, a “neo-Maoist” revival is now underway, with the CCP’s premier publication placing greater emphasis on ideological orthodoxy under Xi than the periods under his predecessors—Deng Xiaoping, Jiang Zemin, and Hu Jintao.\textsuperscript{67} Not surprisingly, the Party’s support for Xi and his ideology has since been further emboldened. In November 2021, the Central Committee adopted a significant leadership resolution that was only the third of its type in the history of the party, following one under Mao and another under Deng.\textsuperscript{68} In this communique, the Central Committee described Xi as “the principal founder” of Xi Jinping Thought, and claimed that Xi’s ideology not only encompassed the “best of the Chinese culture and ethos in our times” (中华文化和发展中国精神的时代精华), but represented a “new breakthrough in adapting Marxism to the Chinese context” (实现了马克思主义中国化新的飞跃) and a new era “of national rejuvenation.”\textsuperscript{69} The formalization of Xi’s goals and perspectives as national policy, as well as recent efforts to equate this ideology with

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\end{footnotes}
cultural identity, provide a framework for analyzing the statements of Chinese officials through the benchmarks set by their leader.

Of course, a central tenet of Xi’s “innovation-driven strategy” is to guide the nation’s capacity for domestic and homegrown innovation. In a speech from the first volume of the *Governance of China* book series titled “Transition to Innovation-driven Growth,” Xi argues that “the Third Industrial Revolution [will] be a Robot Revolution” which will redefine global manufacturing and broader security. As such, it is imperative that China becomes the world’s largest manufacturer of the applicable technology.\(^7^0\) Xi specified the economic and military benefits of such technological advancements, envisaging “the integration between robot technology and the new generation of information technology” in the form of big data, cloud computing, mobile internet, AI, 3D printing and additive manufacturing, self-driving cars, and unmanned aerial vehicles for military use.\(^7^1\) In building on this national imperative in the second volume, Xi also emphasized other emerging technologies and capabilities, such as next-generation robotics, distributive manufacturing, and “sense and avoid” drones.\(^7^2\) According to Xi, continued political and economic reforms at all levels of Chinese society will be necessary to build out the speed and scale required for such technological innovation. As it stands, the Chinese economy is “obese and weak” and does not have the requisite “capacity for innovation.”\(^7^3\) Additionally, Xi points out that the conditions conducive to continued growth include “a peaceful international environment,” a sound “multilateral trading system,” and a stable “global economic governance” framework.\(^7^4\)

While Xi has made clear that innovation-driven growth is important

\(^{[70]}\) Xi Jinping, “Transition to Innovation-Driven Growth,” in *The Governance of China*, 133.

\(^{[71]}\) Ibid.


for commerce, it could also reshape the governance and institutions that formalize international balances of power. As he pointed out, in the “traditional international playgrounds, the rules are set by others, and we play games by the established rules.” However, in “seizing the important opportunities made available by the new scientific, technological and industrial revolution,” global governance systems that govern technological development, arms control, international law, and innovation will be reconstructed on Chinese terms with Chinese capabilities, advantages, and strategic goals in mind. Xi sees China’s national interest in terms of its capacity to influence other nations through global governance institutions such as the World Trade Organization and the World Health Organization. Yet, China’s reliance on other states to supplement its own innovation capacity reveals that Beijing is not yet positioned to exert maximum influence on the world stage. This indicates that managing the continued access to dual-use technologies is important to the Chinese economy. As the next section explores, China views the potential regulation of AI and unmanned weapon platforms through international arms control mechanisms as an impediment and potential threat to its national security in both economic and military terms.

**Chinese Diplomacy and Lethal Autonomous Weapons Systems (LAWS)**

In this section, we examine the Chinese delegation’s statements on LAWS during conferences regarding the Convention on Certain Conventional Weapons (CCW) in Geneva to understand the military modernization and economic growth drivers in Beijing’s policy and approach to arms control. The Chinese delegation’s view on LAWS thus far has largely been understood through their two position papers submitted to the CCW meetings in December 2016 and April 2018. The


former concluded that China would consider the Protocol on Blinding Laser Weapons as a model for “issues related to the use of LAWS.” Analysts consider these policy papers important for understanding and clarifying the Chinese government’s policy positions; for instance, the *Yearbook of International Humanitarian Law* noted that China “called for new international law on autonomous weapons as the first member of the UN Security Council,” and “proposed to develop a legally binding protocol on autonomous weapons.” That said, however, other analysts have noted that the Chinese position is far from clear. For example, Williams contends that China’s rhetoric at face value appears to be a “constructive contribution to the development of legal norms regarding technologies with enormous strategic implications,” yet the proposed definition is crafted “so narrowly as to render any ban on such weapons essentially meaningless.”

To further understand Beijing’s position, we transcribed CCW conference proceeding audio recordings, which amounted to around 20,000 words of statements from the Chinese delegation. In our analysis, the types of LAWS presented in such statements could be used by states with a defensive military doctrine without having to consider human-machine teaming tactics. It is evident here that the accepted functions of LAWS differ greatly from Chinese proposals for their uses, and are markedly different compared to what is typically envisaged by West-

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ern policymakers or think tanks, which often view LAWS as potential devices to assuage political concerns over military casualties. Instead, we should feasibly categorize Chinese-used LAWS as weapon systems that circumvent international humanitarian law requirements through assertions that they do not apply in a defensive context. This is in direct contrast to the accepted functions of LAWS, which are viewed as offensive weapons in civilian-populated areas. In addition to the delegation's statements, the source material in this section also draws on Chinese-language texts to indicate the extent to which the official position may be reflected in the private sector or academia. In breaking down the Chinese position, three thematic areas are considered: the definition of LAWS, the Chinese foreign policy apparatus' perspectives on AI use and ethics, and the practicalities of international arms control agreements.

China's Definition of LAWS

The Chinese delegation's strategies to define LAWS as completely independent devices are highly relevant when assessing Beijing's desired regulations for LAWS at the international level. Beijing has emphasized the need to achieve consensus on a definition, and asserted that LAWS are futuristic weapons systems that “do not exist at the moment.” While the reference to future weapons systems touches on the precedent of the preemptive ban on blinding lasers, the delegation nevertheless considers blinding lasers as a technology that “has already been in existence for many years.” In contrast, AI is considered to be “still in its infancy,”

and how it will evolve and develop across the next three to five years and beyond is still uncertain.\(^{84}\) Therefore, from the Chinese delegation’s perspective, LAWS constitute unformed and uncertain weapons which will require an international consensus on the applicable definitions before future diplomats can even consider discussing possible regulatory regimes to govern their use globally. As signified by the Chinese delegation, definitional discussions should focus on several core issues: (1) levels of autonomy and criteria for their determination; (2) relations and distinctions between automation, autonomy and remote control; and (3) the mode of human involvement and the human role, which requires a strict definition and cannot be replaced by such vague concepts as “human judgment” or “meaningful human control.”\(^{85}\)

Broadly, in the context of scope, the Chinese delegation argued that distinctions should be made between civilian and military, anti-personnel and auxiliary (i.e., logistics), offensive and defensive, and lethal and non-lethal applications.\(^{86}\) In addition to the issues above, the Chinese delegation provided other pillars with which to define LAWS, or what was articulated as five “indispensable key elements in any definition of LAWS,” which states that any weapons system lacking in one or more of these characteristics is not regarded as LAWS.\(^{87}\) These five characteristics are: (1) carrying a payload that is intended to be used for lethal purposes; (2) the absence of human intervention or control during the entire operation; (3) the inability to terminate the device once started; (4) the lack of special conditions, scenarios, or targets meaning that the device kills or injures based on its own nature; and (5) the device has a capacity for self-learning, and can expand their functions and overcome their limitations in a way that goes beyond human prediction.\(^{88}\) In their

April 11 – April 15, 2016.


\(^{86}\) Ibid.

\(^{87}\) “Chinese Delegation Statement of April 9, 2018 (audio).”

\(^{88}\) Ibid.
recounting of the history of the CCW discussions on LAWS, Cao et al. observe that the five characteristics of LAWS posited by Beijing drew widespread attention from European and Latin American governments as well as international NGOs, with several stakeholders expressing hope that such discussions would have three main aspects: a political declaration, transparency and non-proliferation, and the development of voluntary codes of conduct. By working through the CCW as well as bilateral or multilateral dialogues to create international consensus on governance institutions for LAWS, these policymakers contend that China will establish its image as a responsible great power and make significant beneficial contributions to international arms control regimes.89

In setting out their position on the links between AI and LAWS, the Chinese delegation has emphasized AI is more “highly suitable for conducting high-risk, non-lethal military tasks in harsh conditions” and that “AI technology does not necessarily lead to LAWS.” Furthermore, this statement sought to downplay concerns over the proliferation of military AI, with the delegation claiming that “at present there are no ‘smart weapons.’”90 Overall, when it comes to the relationship between humans and machines, China’s position is that “discussions on human-machine interaction should first have a clear definition on LAWS, and secondly, define the mode and degree of human involvement and


intervention.” Essentially, China claims that certain types of LAWS which require no human oversight at all should be more regulated or even entirely banned, while other types could remain legal.

**Global AI Governance and Ethics**

The widespread adoption of AI has added another emerging complication to the equation. The Chinese delegation recognizes that the debate on LAWS includes an ethical component, and has referenced its domestic regulations to advocate for a specific approach during the CCW meetings on LAWS. Pointing to examples of ethical AI research undertaken in China, the delegation shared a range of policy measures at the 2019 Group of Governmental Experts conference. First, the delegation highlighted China’s State Council’s “Next Generation Artificial Intelligence Development Plan” (新一代人工智能发展规划) issued in 2017. Second, the delegation gave examples of self-regulation, noting an “important declaration” made in 2018 by an artificial intelligence industry innovation alliance (人工智能产业创新联盟). The delegate recommended a series of binding codes for researchers and users, which require the implementation of technical risk assessment mechanisms to ensure that AI is moral, ethical, and focuses on the well-being of humans.

In our view, the diplomat was most likely referring to a highly significant declaration made on 11 July 2018 at the Robotics and Artificial Intelligence Conference (机器人与人工智能大会), abbreviated as RAIC (雷克大会). Since there is no official translation of this declaration at this time, we will refer to it here as the “Declaration on the Moral and Ethical Principles of AI Innovation and Development” (人工智能创新发展道德伦理宣言). The industry alliance making the declaration was established one year earlier at RAIC in 2017. Its membership included the state-owned China Center for Information Industry Development.

[93] Ibid.
and approximately 200 other corporate or research institutions; affiliates of multinational corporations, including Intel and SAP, held senior positions within the organizational structure. While summaries of the Declaration were provided through Chinese media reporting at the time, the full text has now become available in Chinese. Four important elements of the Declaration are summarized below:

(1) The full-scale development of research and development in AI technologies will bring forward the next step in the development of human society to the highest levels.

(2) Technical risk assessment mechanisms should ensure that dangers related to AI systems can be controlled.

(3) AI can help with decision making but should not be the decision-maker.

(4) Despite offering military advantages, AI should not be used as offensive weapons due to humanitarian related considerations.

In relation to the research, development, and use of emerging technologies, particularly AI and unmanned weapons, Chinese academics and policymakers understand their country is unlikely to reach parity with the US, and must instead concentrate efforts on “leapfrogging” to the adoption of future-generation systems. In regard to LAWS, they have assessed the extent to which these devices will contribute to national security (for example, as defensive weapons) or ultimately to pose more of a threat than opportunity.

Some Chinese analysts suggested that prohibiting research and development would not be possible because of underlying strategic considerations, self-defense, and their government’s push for development in militarized AI. For example, their viewpoints have pointed to the use of LAWS as a defensive weapon, comparable to the 1996 International Court of Justice advisory opinion on the use of nuclear weapons. They also highlighted the exceptions under China’s nuclear doctrine to allow for the use of nuclear weapons in response to an attack on strategic capabilities or civilian infrastructure; and the right to self-defense under Article 51 of the UN Charter. Article 51 provides that “nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.” As these Chinese analysts have indicated in their interpretations of international law, states could use LAWS for self-defense against external threats.

Long and Xu, from the PLA’s National University of Defense Technol-
ogy, noting Xi Jinping’s call to accelerate AI development, have called on China to seek a ban on LAWS. However, they caution that China should not stop its research, for that would give terrorists and states that ignore international norms opportunities to undertake clandestine activities which they contend may include the US.\textsuperscript{100} Additionally, another Chinese analyst, He Bei, noted that Beijing must again accelerate its leapfrog development of military AI and conventional weapons to catch up with and overtake the global military powers. Rather than observe the moratorium called by then-UN special rapporteur Christof Heyns, He suggests China could view the absence of international law on autonomous weapons systems as a window to pioneer renewed research and development in those areas, while simultaneously negotiating its preferred definition of LAWS at the GGE. Alternatively, China could promote tools which gradually develop soft law—model non-binding guidelines for interpreting and applying the principles of customary international law in relation to emerging technologies.\textsuperscript{101}

The Chinese delegation has acknowledged that AI is a dual-use technology, with uses across the civilian and military domains. This approach could promote the benefits of AI while asserting that researchers could follow technical assessment mechanisms to address risks related to the misuse of AI.\textsuperscript{102} Of course, there is a downside, as the dual-use components inherent to robotics—especially in the context of Beijing’s designated strategy of civil-military integration—would make market ac-


\textsuperscript{102} “Chinese Delegation Statement of March 27, 2019 (audio).”
cess more difficult for the associated technologies. It would also have the potential of affecting China’s economic development and access to markets, as well as relationships with trade partners. While this line of thinking supports the goals outlined by Xi Jinping to promote innovation-driven growth, Chinese commerce and dual-use technologies remain vulnerable to changes in the present global-political environment. In particular, trade partners are looking to become more self-sufficient in the post-pandemic era by mitigating the risk of potential supply-side shocks or their reliance on Beijing as an otherwise volatile market. For example, in September 2021, Australia, India, Japan, and the United States jointly released the “Quad Principles on Technology Design, Development, Governance, and Use.” Among these was a principle on “close cooperation on supply chains with allies and partners who share our values” with regard to ensuring “resilient, diverse, and secure technology supply chains—for hardware, software, and services—[which] are vital to our shared national interests.”

If the international community engages with the models of AI ethics adopted in China, further policy proposals from China in support of a governance mechanism to ensure “non-discriminatory” trade in dual-use technologies are likely to be forthcoming. While Beijing has not fully disclosed its intentions, it is evident that its position on the definition of LAWS, as well as its policies on AI governance and ethics, are meant to prevent potential adversaries of China from acquiring the force multiplier capabilities of LAWS. However, the opportunities for Chinese actors to push for a global arms control mechanism is somewhat limited by their stated distrust of US intentions to comprehensively adhere to such agreements. Due to the perception of relative (and shrinking) superiority of American military power, and Chinese actors’ assessment of their status as one of disadvantage as a developing state, Beijing will continue to carry forward the modernization of its military, including

AI related components. Simultaneously, as we argue in the next section, the Chinese delegation will likely continue to seek an outcome on arms control during discussions on LAWS at the CCW that is more favorable to their national interest.

Arms Control Parameters

In the Chinese delegation’s first statement at the 2017 CCW conference, they laid out the Chinese position on non-binding arms control agreements for LAWS. As the delegation argued, it would be ineffective to permit weapons reviews with no binding legal force, as they would be conducted by signatory states on themselves with no external oversight mechanism. As stated, “We don’t support placebos such as [a] political declaration or voluntary code of conduct.”104 In this regard, the delegation asserted its strong skepticism toward the adoption of transparency and confidence-building measures (TCBM) in modern arms control agreements, which are not legally binding. As they argued, non-binding agreements, such as the 1925 Geneva Protocol, were historical mistakes, as they did not prohibit the development of chemical and biological weapons and failed to stop the deaths of three million Chinese people during the Second World War. The delegation also noted that while TCBM related revisions were made to the Geneva Conventions, they proved to be ineffectual compared to the legally-binding verification measures that entered into force with the Chemical Weapons Convention in 1997.105 Consequently, the Chinese delegation argued that, “TCBM should be treaty-based and as a supplement to the treaty, and as the means to ensure the strict compliance of the treaty; they should not replace the treaty itself.”106 The difficulty in relying on TCBMs, as

opposed to formal compliance mechanisms backed by treaty law, is further underscored by the delegation in its statement that legal reviews are likely to produce “highly doubtful” results and indeed be used as “camouflage” by states.107

Beijing considers non-compliance with international humanitarian law (IHL) as one of the key reasons why LAWS would not be used for offensive purposes. As the Chinese delegation has expressed, LAWS would be “incapable” of meeting the IHL principle of proportionality and it is also “doubtful” whether they could meet the IHL principle of distinction. Further, Beijing has also referred to the “difficulty in terms of accountability for [LAWS] use.”108 Perhaps it was for these reasons that China supported the international community in developing a legally binding protocol on the use of LAWS.109 In the case of blinding lasers, a pre-emptive ban was resolutely adopted under the CCW. However, for China, the consideration for LAWS relates to not having a preemptive ban but rather the “legally binding” nature of an international agreement. The most important factor of this agreement would entail an independent verification mechanism to ensure states comply with their treaty obligations. Clearly, political declarations such as TCBM are considered inadequate in regulating LAWS and other AI-based technologies from Beijing’s perspective. China’s diplomats consistently note various technical and humanitarian concerns with the offensive use of LAWS. For example, the delegation has stated that:

In most cases, defensive systems normally do not cause humanitarian concerns. Therefore, in order to remove the humanitarian concerns caused by LAWS, first we should focus on the main functions, especially targeting and taking actions on the targets. And another issue is that we should focus our attention on offensive systems. If we give examples of defensive systems... that’s not logical.110

(first session).
[107] Ibid.
[109] Ibid.
[110] “Chinese Delegation Statement of April 11, 2018 (audio, English via simultaneous
Complications may arise in disputed territories or flashpoints where skirmishes are likely to break out. In this context, the ‘defensive’ use of LAWS by one country could appear as an ‘offensive’ military doctrine to its adversaries. The Chinese delegation has addressed such considerations in two ways. First, through referencing their interpretation of international law which requires states to “respect the sovereignty and territorial integrity,” of Chinese territorial claims.111 Secondly, the delegation that advised China was aware that “some countries are planning for...unmanned autonomous systems, [to swarm the] maritime environment, in air, and on land,” but contended that “military guys are not stupid,” and they would not commit a war crime by using “such expensive weapons on commercial targets.”112

Even before the CCW discussions can be concluded, a possible area for agreement may center on counter-terrorism efforts. China has suggested the existing mechanisms under United Nations Security Council Resolution 1540, which prohibit the transfer of nuclear, chemical and biological weapons to non-state actors, could be broadened to prevent terrorists from gaining access to autonomous weapons systems including LAWS. They also argued that within the structure of the 1540 Committee, it was plausible “to establish a mechanism that covers all weapons systems and relevant technologies, especially with regard to the export control.” In this context, it would be possible “to establish a truly global comprehensive, and non-discriminatory, export control system.”113 While further details on differentiating between civilian and military aspects of du-
al-use technologies, and mechanisms to enforce the export rules would be required to assess the viability of such a model, China's proposal to expand the 1540 mechanism should be considered in the context of Beijing’s non-membership in other export control agreements, such as the Missile Technology Control Regime or the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual Use Goods and Technologies. Indeed, the statement reveals a vulnerability to China’s national interest that the delegation elsewhere has referred to.

Specifically, a driver of Chinese policy-making in this area is that as a developing state by the standards of the World Bank and United Nations, China relies on trade rules that allow the export of dual-use technologies. As such, its delegation has expressed concern that “new discriminatory technical barriers in the name of non-proliferation, depriving developing countries of their right to use technology on an equal basis,” would be unfair to a “developing” China.114 Of course, Beijing has also acknowledged the need for some kind of regulation, suggesting that “a blank check in high-tech weapon development” cannot continue in the context of such technologies.115 Based on the statements presented by the Chinese delegation in the context of conventional arms control, it appears that Beijing may seek to outlaw LAWS for offensive purposes but maintain its options with respect to possible defensive LAWS, including their use and export. In essence, the likelihood of the Chinese position being considered as part of a negotiated agreement on LAWS will depend to a large extent on Beijing’s relations with other states, especially the US, which considers it to be a global competitor.

In recent times, it is clear to see that ongoing acrimony will persist in US-China bilateral relations. In a landmark speech in July 2020, Secretary of State Mike Pompeo declared that “America can no longer ignore the fundamental political and ideological differences between our countries, just as the CCP has never ignored them.” Pompeo juxtaposed the levels of trust in the Soviet Union in the 1980s with the trust in China

[114] “Chinese Delegation Statement of April 11, 2016 (audio).”
[115] Ibid.
today, recalling that “President Reagan said that he dealt with the Soviet Union on the basis of ‘trust but verify.’ When it comes to the CCP, I say we must distrust and verify.”\footnote{Michael R. Pompeo, “Communist China and the Free World’s Future,” speech, Richard Nixon Presidential Library, Yorba Linda, CA, \textit{US State Department}, July 23, 2020, \url{https://2017-2021.state.gov/communist-china-and-the-free-worlds-future-2/index.html}} Although Pompeo’s speech, which took place in July 2020, several months before the election, was considered to be hawkish,\footnote{Deirdre Shesgreen, “Mike Pompeo Likens China Threat to ‘Frankenstein,’ Says Engagement Hasn’t Worked,” \textit{USA Today}, July 23, 2020, \url{https://www.usatoday.com/story/news/world/2020/07/23/pompeo-likens-china-threat-frankenstein-says-engagement-failed/5497036002/}} US-China relations remained unchanged after President Biden took office. In March 2021, in a briefing with his Chinese counterpart, Secretary of State Antony Blinken outlined the Biden administration’s approach as “competitive where it should be, collaborative where it can be, adversarial where it must be.”\footnote{“Secretary Antony J. Blinken, National Security Advisor Jake Sullivan, Director Yang and State Councillor Wang at the Top of Their Meeting,” press release, \textit{US Department of State}, March 18, 2021, \url{https://www.state.gov/secretary-antony-j-blinken-national-security-advisor-jake-sullivan-chinese-director-of-the-office-of-the-central-commission-for-foreign-affairs-yang-jiechi-and-chinese-state-councilor-wang-yi-at-th/}} In an unscripted remark, Blinken recalled when President Biden was vice president and they met with Xi in China, “Vice President Biden at the time said it’s never a good bet to bet against America, and it’s true today.”\footnote{Ibid.} That Washington has put Beijing’s actions—not rhetoric—at the forefront of the US-China relationship has changed the context of their diplomacy, with Beijing becoming more assertive in challenging the reputation of the United States in response.

Beijing remains distrustful of American intentions, and has harshly criticized the recent withdrawal of the US from treaties and international organizations. In 2020, for instance, the spokesperson for the Chinese Ministry of Foreign Affairs criticized US moves to leave, \textit{inter alia}, UNESCO in 1984 and 2017, the Paris Agreement and Trans-Pacific Partnership in 2017; the Intermediate-Range Nuclear Forces Treaty in 2019.\footnote{Notably, UNESCO adopted the Beijing Consensus on Artificial Intelligence in}
Beijing has also argued that the United States was losing its global leadership position as a result of the Trump Administration’s “America First” stance, and that the US faced greater disapproval than approval of its recent performance in Australia, Britain, France, and Germany.\(^{121}\) In further seeking to discredit the United States, spokespersons for the Chinese Ministry of Foreign Affairs referred to the first outbreak of COVID-19 in China. They claimed (without evidence) that it was “possible that the US military brought the virus to Wuhan,”\(^ {122}\) and accused the United States of obstructing the World Health Organization from investigating a “big question mark over the lab at Fort Detrick.”\(^ {123}\) By escalating their rhetoric beyond diplomatic disagreements, Beijing has signaled its intent to challenge the leadership and integrity of the United States.

**Conclusion**


the discourse on the diplomatic level. The article began by exploring whether China has the potential to approximate or exceed the United States in critical emerging technologies. The PLA’s emergence as a peer competitor of the US military in the Indo-Pacific has not only come to define the landscape of technological competition, but has become emblematic of the broader US-China relationship. In attempting to add much needed connective tissue to this assertive trajectory by China, the article sought to examine the extent to which the Chinese Dream has acted as the guiding point for Beijing’s amplified military modernization, and whether this militarized platform may extend into the LAWS domain. In examining the rhetoric of Chinese policy makers through a qualitative analysis of pertinent documents and diplomatic statements, the article also assessed the acceleration and development of China’s innovation strategy and civil-military integration, as specified in sections relating to Xi Jinping Thought. Finally, the article concluded it is likely that China is seeking to ban the use of LAWS for offensive purposes, subject to international acceptance of the proposed Chinese definition of LAWS. As we note, this definition may allow for the possible use of these devices in a defensive context, while continuing to permit trade in dual-use technologies, including AI, for the sustenance of the civilian economy. As such, Chinese and Western conceptions of LAWS should be clearly differentiated, as China envisions a broad, defensive use for LAWS, while the West primarily views them as mechanisms to reduce military casualties.

As we have argued in our previous work, a clear distinction should exist between political systems for rationalizing the expenses to invest in human-machine teaming capabilities, with autocracies generally spending less money on protecting each “foot soldier” compared to those democracies which have “ballot-box considerations.”124 LAWS may be the first of many emerging technologies that puts AI at the intersection of armed conflict between states.125 While the focus of this article is China, 

a prospective arms control agreement in this area requires consensus between the US, China, and other major military powers. An important consideration as to the feasibility of this outcome would depend on the extent to which AI and conventional weapons are subject to an arms control agreement, the technical methods for verification, and the requisite political consent to do so. Yet the shifting US-China relationship is arguably more consequential, and indeed, some goodwill is a prerequisite for any meaningful negotiations.

In the future, US-Chinese diplomacy on LAWS within this increasingly tense bilateral relationship may consider LAWS to be one aspect of broader arms control agreements on other security related issues. For example, Washington could seek details from Beijing on the possibility of adopting the latter’s proposal under which “LAWS can be very well covered in the 1540 mechanism, especially in terms of how to prevent terrorists from getting access to autonomous weapons systems.”126 While taking small steps towards the proliferation of LAWS may be something that diplomats can and should seek to resolve through the United Nations, it is a large and complex issue that spans the competing national interests of economic and military security—in other words, the issue has entered into the unique domain where presidential decision-making may now be required. As noted, Xi intends to “make rules for new games” outside of the “traditional international playgrounds.”127 Unlike the Obama and Trump administrations, President Biden has inherited an America that is defined by Beijing’s attainment—rather than aspiration—of civil-military integration. In expanding upon his predecessor, Biden recently used his executive authority to counter American financing of further declared “fusion” companies in China, and developed the Quad Principles on Technology in partnership with US allies, re-asserting the United States’ commitment to the rules-based order. Biden’s response may come to define the nature of a new agreement on

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126 “Chinese Delegation Statement of April 13, 2018 (audio).”
conventional weapons such as LAWS, and more broadly demonstrate the continued legitimacy of global governance institutions for the regulation of such measures in a new era of great power competition. Beijing will no doubt feel compelled to respond.

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