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## 'Xi Jinping Thought': Lethal Autonomous Weapons Systems and Military Modernization with Chinese Characteristics

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## **‘Xi Jinping Thought’: Lethal Autonomous Weapons Systems and Military Modernization with Chinese Characteristics**

### **Abstract**

The article seeks to appraise Beijing’s military modernization and positions on Lethal Autonomous Weapons Systems (LAWS). In examining the rhetoric of Chinese policy makers through a qualitative analysis of relevant policy documents and Chinese statements, the article begins by evaluating the relationship between military modernization and the advancement of China’s innovation and civil-military integration strategies in the Xi Jinping era. Secondly, the article considers, via an analysis of diplomatic statements, the context of Chinese discussions on LAWS under the framework of the Convention on Certain Conventional Weapons (CCW). The analysis proposes it is probable that China is seeking to ban the use of LAWS for outside of a defensive remit via diplomatic efforts, while introducing a narrow definition that may permit for the potential application of these dual-use devices in geo-specified environments (similar to landmines)—thereby allowing the continuance of trade in artificial intelligence (AI) related goods and services underwriting the progress of the civilian economy. Lastly, in attempting to add much needed connective tissue, this article will illuminate the degree to which Xi Jinping’s Chinese Dream has integrated a policy of modernization that is seemingly expanding into the LAWS realm. This augmented trajectory is examined in the context of bilateral relations with the United States.

### **Author Bios**

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*Alek Hillas* is a researcher in the School of Global, Urban and Social Studies at RMIT University, where he graduated with a first-class honours degree in International Studies and a Diploma of Languages. His research interests are in global security and international humanitarian law, including artificial intelligence and lethal robotics, and Australian foreign policy.

## Introduction

The article seeks to appraise Beijing’s military modernization and positions on Lethal Autonomous Weapons Systems (LAWS). In examining the rhetoric of Chinese policy makers through a qualitative analysis of relevant policy documents and Chinese statements, the article begins by evaluating the relationship between military modernization and the speeding up and advancement of China’s innovation and civil-military integration strategies in the Xi Jinping era. In providing a substantive analysis of U.S.-China relations during the Xi Jinping period, which has traversed the Obama and Trump administrations and now encompasses the Biden presidency, this article deconstructs Beijing’s more assertive militarized course since Xi became the Chinese Communist Party (CCP) General Secretary in November 2012. The article will seek to illuminate the degree to which China has integrated an enhanced militarized platform stretching into the areas of artificial intelligence (AI) and LAWS. The advancements here are also assessed within the framework of the Chinese Dream—with its Two Centenary Goals to be achieved by 2021 and 2049—establishing the basis of the CCP’s measurement in meeting the national rejuvenation sentiments under the one-party system.

The CCP’s selection of Xi Jinping as its leader is one of the most significant developments to impact international relations over the last decade. Xi and his associates secured their positions at the CCP’s 18th National Congress in November 2012, ahead of Xi’s realization of the state presidency role at the 12th National People’s Congress in March 2013. The notion and conceptualization of the ‘Chinese Dream’ was introduced by Xi upon becoming General-Secretary of the CCP. As stated, this essentially encompassed two benchmarks: “the goal of bringing about a moderately prosperous society in all respects can be achieved by 2021,” marking the centenary of the CCP’s founding; and “the goal of building China into a modern socialist country that is prosperous, strong, democratic, culturally advanced and harmonious can be achieved by 2049,” marking the centenary of the establishment of the People’s Republic of China. According to Xi, once these two centenaries are met, “the dream of the rejuvenation of the Chinese nation will then be realized.”<sup>1</sup>

Rather than positing nationalism and Communism as being two mutually exclusive objectives, Xi has understood these as mutually reinforcing of the CCP’s role in securing national prosperity.

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<sup>1</sup> Xi Jinping, *The Governance of China* (Beijing: Foreign Languages Press, 2014), 38.

For example, Xi has said of the “Chinese spirit” that it “combines the spirit of the nation with patriotism as the core and the spirit of the time with reform and innovation as the core.”<sup>2</sup> Noticeably, these new sentiments and policies have “tapped into a deep reservoir of national pride and further solidified his [Xi’s] popularity.”<sup>3</sup> In exploring such notions, the first section of the article focuses on the establishment and ramifications of ‘Xi Jinping Thought.’ Understanding the intensification to Beijing’s military modernization, including its enhanced focus on technology, requires extrapolating on how Xi intends to govern domestically within China’s borders, and internationally through reshaping global governance institutions. As policy makers will be most likely interpreting China’s adaptation of Marxism under Xi until at least 2027, the section’s discussion of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, unpacks Xi’s ideology for understanding both current and future developments and views on the importance of developing and trading AI and robotics, which has ramifications for Beijing’s domestic economy and its foreign policy.

The article’s following section covers diplomacy on LAWS. Using audio statements from the delegation’s remarks through the framework of the Convention on Certain Conventional Weapons (CCW), as well as written statements, this section provides a thorough review and analysis of the key themes, categorized into three sections: limitations on arms control; the characteristics of LAWS; and AI ethics and governance. In seeking to recognize how LAWS could be part of China’s modernization platform—or instead, whether Beijing’s intention is to seek an international pre-emptive ban on such devices—this section will fill a research gap through its inclusion of audio recordings and additional Chinese language academic source material. This research here aims to present a contribution to the discussion on China’s position on LAWS, a ‘Revolution in Military Affairs’ expected to constitute one of the most important developments to conventional warfare in the future.

Lastly, the article assesses emerging challenges for the U.S. in responding to Beijing’s military modernization in the Xi Jinping era. Washington’s understanding of the rationale for China’s intensified military modernization and shifting approach to bilateral relations is important when considering the

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<sup>2</sup> “What does Xi Jinping’s China Dream mean?” *BBC News*, June 5, 2013, <http://web.archive.org/web/20201114124337/https://www.bbc.com/news/world-asia-china-22726375>; Faine Greenwood, “Xi Jinping describes ‘Chinese dream’ at Closing of National People’s Congress,” March 17, 2013, *PRI: Global Post*, <http://web.archive.org/web/20210101073656/https://www.pri.org/stories/2013-03-17/xi-jinping-describes-chinese-dream-closing-national-peoples-congress>

<sup>3</sup> Bates Gill, “Xi Jinping’s Grip on Power Is Absolute, But There Are New Threats To His ‘Chinese Dream,’” Australian Institute of International Affairs, February 9, 2020, <https://www.internationalaffairs.org.au/australianoutlook/xi-jinping-grip-on-power-is-absolute-but-there-are-new-threats-to-his-chinese-dream/>

historical and continuing role of the U.S. in providing security for East Asia or the wider Indo-Pacific region. While technological advantage has been a fundamental driver of U.S. military power and national competitiveness, China is starting to close the gap in its objective to become a “science and technology superpower.”<sup>4</sup> It is evident that while the U.S. military has maintained an initial advantage in technologies critical to information-age warfare, its superiority in the ‘AI-in-future-warfare’ domain is now struggling to maintain separation.

In considering the development of policy through a qualitative analysis of pertinent documents and Chinese statements over the period of approximately one decade—so as to assess the connection between military modernization and the acceleration and development of civil-military integration—the article will propose that China does not contribute toward the dialogue of wider global discussions on LAWS in a policy vacuum. Rather, in acknowledging that Beijing also is aware of potential military applications of AI and LAWS, and has a history of limited transparency where its security is concerned, the notion of escalating tensions is imminent. As U.S. and China competition in AI increases, the trajectories of their corresponding augmentations will impact future military and strategic stability. The People’s Liberation Army (PLA) is conscious of attaining an advantage in AI, and is concerned with addressing the advent of a generational dichotomy between its capabilities and that of the U.S. military—which it accepts as a formidable adversary and thus the important system of measurement for assessment. Yet, as Beijing may have the capacity to approximate or one day even outmatch Washington in this critical technology where the PLA has chosen to invest its resources, the U.S. military has also come to view the emergence of its peer competitor with unease and thus reevaluate the terrain of U.S.-China competition in emerging technologies.<sup>5</sup>

### **Defining Xi Jinping Thought**

In considering the strengthening of Beijing’s military modernization and enhanced focus on emerging technologies, officials and industry leaders in China need to understand how Xi aims to govern, so as to interpret his statements in the context of policy making, particularly following the elimination of term thresholds. Xi’s works, in both the written and spoken format, can now be deemed as canonical texts for party members and government officials due to the status afforded by the CCP and Chinese

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<sup>4</sup> Elsa B. Kania., “Battlefield Singularity: Artificial Intelligence, Military Revolution, and China’s Future Military Power,” Center for a New American Security, November 2017, <https://web.archive.org/web/20190709224511/https://s3.amazonaws.com/files.cnas.org/documents/Battlefield-Singularity-November-2017.pdf?mtime=20171129235805>

<sup>5</sup> Ibid.

constitutions' recognition of Xi Jinping Thought, which represents the most significant ideology alongside Mao.

As the below section indicates, Chinese diplomats today place great importance on Xi's rhetoric *before* he came to power, even referring to statements he made in the 1980s. In an article published by the Central Committee's journal in 2019 (and translated into English in 2020), ideological guidance is given to "the whole Party and all Chinese people" that "Chinese Communists [have] adapted the basic tenets of Marxism to the underlying trends of the times," and Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era is "the latest achievement in adapting Marxism to the Chinese context" and "best strategy for upholding and applying Marxism in the new era."<sup>6</sup> As remarked in one assessment, selected articles form "part of a larger effort to link Xi, and the slogans promoted under his name, with heroic narratives from the CCP's early history" and the journal, "originally founded to steer a course away from Maoist dogmatism" has thus "succumbed to the neo-Maoist revival of Xi Jinping."<sup>7</sup> Although Xi has acknowledged the ideological influences of former leaders (for example, referring to them in a speech marking the party's anniversary),<sup>8</sup> in a day-to-day sense, the Chinese population is expected to be studying from Xi. As Elizabeth C. Economy advised the U.S. House Committee on Foreign Relations in May 2019:

The most downloaded app in China is *Xuexi Qiangguo* [学习强国]—translated variously as 'Study to Make China Strong' or 'Xi Study Strong Country'—which is replete with information and quizzes on Xi Jinping, his thought, and CCP policy. Many workplaces have adopted the app as part of their official employee training and evaluation procedures, with workers required to submit the hours spent on the app and the scores they received on the quizzes. Unless there is a sustained economic slowdown or other crisis, Xi is likely to stay in power until at least 2027.<sup>9</sup>

In addition to the most downloaded app, there is a *Xuexi* website.<sup>10</sup> However, the most tangible artefacts of Xi Jinping Thought are encompassed in the form of the book series, 'Xi Jinping: The Governance of China' (习近平谈治国理政), which currently comprises four volumes. The series has been promoted

<sup>6</sup> Tong Xin, "History Bears Witness to the Chinese Dream," *Qiushi* 12, issue 42 (January–February 2020),

[http://web.archive.org/web/20201116095024/http://en.qstheory.cn/2020-03/20/c\\_495077.htm](http://web.archive.org/web/20201116095024/http://en.qstheory.cn/2020-03/20/c_495077.htm)

<sup>7</sup> John Dotson, "The CCP's Official Journal Falls in Line with Xi Jinping's Cult of Personality," *China Brief* 20, issue 14 (2020): 5,

<http://web.archive.org/web/20201118083910/https://jamestown.org/wp-content/uploads/2020/08/Read-the-08-14-2020-CB-Issue-in-PDF.pdf?x87691>

<sup>8</sup> Xi Jinping, *The Governance of China II* (Beijing: Foreign Languages Press, 2017), 35.

<sup>9</sup> Elizabeth C. Economy, "Smart Competition: Adapting U.S. Strategy Towards China at 40 Years," Statement before the Committee on Foreign Affairs, United States House of Representatives, May 8, 2019, 3,

<http://web.archive.org/web/20200613112026/https://docs.house.gov/meetings/FA/FA00/20190508/109457/HHRG-116-FA00-Wstate-EconomyE-20190508.pdf>

<sup>10</sup> 'Chinese language homepage,' Xuexi.cn, January 16, 2019, <http://web.archive.org/web/20190116194830/https://www.xuexi.cn/>

through the homepages of the National People’s Congress,<sup>11</sup> and the State Council Information Office,<sup>12</sup> as well as featuring on other government websites, such as the Supreme Court’s feature on studying Xi.<sup>13</sup>

The publishers of the first volume of ‘The Governance of China’ describe it as “a collection of Xi Jinping’s major works from November 15, 2012 to June 13, 2014. It includes speeches, talks, interviews, instructions and correspondence ... to help readers understand China’s social system, history and culture.”<sup>14</sup> An appendix titled “Man of the People” contains a hagiographic account of Xi’s life, which could be considered as his official biography. The closest it comes to attributing any flaws is through qualified expressions that lay criticism at the conditions Xi has faced, rather than attributing any character flaws to him. For example: “Although he did not attend school, Xi never stopped reading ... books as thick as bricks while herding sheep on mountain slopes or under a kerosene lamp at night.”<sup>15</sup>

The second volume contains the period of August 2014 to September 2017; the third volume covers October 2017 to January 2020; and the fourth covers February 2020 to May 2022. Notably, the publisher’s note introducing the second book in the series declares that: “Xi Jinping is the principal proponent of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era.”<sup>16</sup> The publisher’s introduction to the third book references the addition of Xi Jinping Thought into two constitutions—the CCP constitution in 2017, followed by the national constitution in 2018—which the publishers affirm “represented timely updates to the guiding philosophy of the Party and the country.”<sup>17</sup> As such, the book series has become the unrivalled doctrine, as its name suggests, for ‘The Governance of China.’ Moreover, as will be indicated below, unlike his predecessors who also held influential roles on powerful committees, the consolidation of power by Xi is derived from his essentially constitutionally enshrined status as the ‘principal proponent’ of contemporary theory in the CCP.

<sup>11</sup> ‘English language homepage,’ National People’s Congress of the People’s Republic of China, January 6, 2021, <http://web.archive.org/web/20201230011245/http://www.npc.gov.cn/englishnpc/>

<sup>12</sup> ‘English language homepage,’ State Council Information Office of the People’s Republic of China, June 21, 2020, <http://web.archive.org/web/20200621055612/http://english.scio.gov.cn/>

<sup>13</sup> “习近平这本书，海外读者追到第三卷。” [Overseas readers catch up to the third volume of Xi Jinping’s book], Supreme People’s Court of The People’s Republic of China, August 7, 2020, <http://web.archive.org/web/20200812070626/http://www.court.gov.cn/xinshidai-xiangqing-246621.html>

<sup>14</sup> Publisher’s note, in Xi Jinping, *The Governance of China*, n.p.

<sup>15</sup> No author, in Xi, *The Governance of China*, 480.

<sup>16</sup> Publisher’s note, in Xi, *The Governance of China II*.

<sup>17</sup> Publisher’s note, in Xi Jinping, *The Governance of China III*, n.p.

Before its amendment in March 2018, the Chinese constitution only included two ideological contributions named after a leader: Mao Zedong Thought and Deng Xiaoping Theory. Evidently, Xi Jinping Thought, as the first ‘thought’ since Mao Zedong Thought, sits in a hierarchy above Deng Xiaoping Theory. Other ideological contributions recognized are the Theory of Three Represents and the Scientific Outlook on Development, although neither of their principal proponents are named in the national constitution. (Xi considers Jiang Zemin and Hu Jintao both formed the third generation of collective leadership, following Deng at the core of the second generation, and Mao at the core of the first generation.)<sup>18</sup> Also, of significance, the amendment inserted a notion, associated with the final stage of the Chinese Dream, into the constitution, to “realize the great rejuvenation of the Chinese nation.” Thus, the fulfilment of Xi’s Chinese Dream is more than policy; it is a constitutional imperative.

For international audiences, Xi’s role in guiding China’s development is being promoted through translated books. ‘Up and Out of Poverty’ (摆脱贫困) was published as Xi’s first monograph in July 1992,<sup>19</sup> and translated into English and French in 2016. It covers speeches from the period September 1988 to May 1990, when Xi was district party secretary of Ningde, one of the poorest townships in Fujian Province. Foreign Minister Wang Yi has told the African Union Commission that “The book, Up and Out of Poverty, records the thinking and actions of President Xi ... In light of the interest of African leaders, the book was translated...”<sup>20</sup> In addition, Xi Jinping’s book, ‘Zhejiang, China: A New Vision for Development’ (之江新语), first published in August 2007, was translated into English and German in October 2019. ‘Zhejiang, China’ is a collection of essays Xi wrote while provincial secretary from February 2003 to March 2007. At the launch, the Chinese Ambassador to Germany said the translated edition will (as described by Chinese state media) “allow more foreign friends to understand the CPC’s governing philosophy and the strategy and wisdom of the Chinese leader.”<sup>21</sup>

A search of books authored by Xi Jinping can bring up scores of different titles, including semi-official collections of Xi’s works. However, if we consider *Xuexi* as the most authoritative source, Xi has

<sup>18</sup> Xi, *The Governance of China*, 8.

<sup>19</sup> ‘摆脱贫困,’ [Up and Out of Poverty], People.cn, <http://web.archive.org/web/20190918040124/http://theory.people.com.cn/GB/68294/389908/>

<sup>20</sup> Wang Yi, “Work Together to Fight Poverty and Achieve Common Prosperity,” Ministry of Foreign Affairs of the People’s Republic of China, June 21, 2017, [http://web.archive.org/web/20220911021954/https://www.fmprc.gov.cn/mfa\\_eng/wjzb\\_663304/wjzb\\_663308/2461\\_663310/201706/t20170621\\_468648.html](http://web.archive.org/web/20220911021954/https://www.fmprc.gov.cn/mfa_eng/wjzb_663304/wjzb_663308/2461_663310/201706/t20170621_468648.html)

<sup>21</sup> “German, English editions of Xi’s book on development launched in Frankfurt,” *Xinhua*, October 16, 2019, [http://web.archive.org/web/20200509091902/http://www.xinhuanet.com/english/2019-10/16/c\\_138476300.htm](http://web.archive.org/web/20200509091902/http://www.xinhuanet.com/english/2019-10/16/c_138476300.htm)

authored twelve books,<sup>22</sup> although this number precedes the publication of the third and fourth volumes of Governance of China and should be fourteen. The table below indicates the period covered, publication dates, and title of Xi's published works. Evidently, more translations of his works could be in the pipeline for international audiences, as a further propagation of Xi's model of governance.

Period	First published	Chinese title	English title
August 1982 to April 1985	December 2015	知之深 爱之切 <sup>23</sup>	The Better I Know Her [China], the Deeper I Love Her [China] (unofficial translation) <sup>24</sup>
September 1988 to May 1990	July 1992	摆脱贫困 <sup>25</sup>	Up and Out of Poverty (official translation)
October 2002 to June 2006	December 2006	干在实处 走在前列——推进浙江新发展的思考与实践 <sup>26</sup>	Achieving Tangible Results and Being at the Head of the Nation: Reflection and Practice of Promoting New Development of Zhejiang (unofficial translation) <sup>27</sup>
February 2003 to March 2007	August 2007	之江新语 <sup>28</sup>	Zhejiang, China: A New Vision for Development (official translation)
February 2012 to June 2015	August 2015	做焦裕禄式的县委书记 <sup>29</sup>	Be a Good County Party Secretary (semi-official translation) <sup>30</sup>
November 2012 to June 2014	October 2014	习近平谈治国理政（第一卷） <sup>31</sup>	The Governance of China (official translation)
December 2012 to December 2018	December 2018	论坚持全面深化改革 <sup>32</sup>	On Continuing to Comprehensively Deepen Reform (unofficial translation)
January 2013 to June 2018	October 2018	论坚持推动构建人类命运共同体 <sup>33</sup>	On building a human community with a shared future (official translation)

<sup>22</sup> “习近平著,” [Works of Xi Jinping], Xuexi.cn, <https://www.xuexi.cn/xxqg.html?id=1ih66mgksnflih66mgksnflih66mgksn> (accessed September 11, 2022).

<sup>23</sup> Xi Jinping, *知之深 爱之切* (Shijiazhuang, Hebei: Hebei People's Publishing House, 2015),

[http://web.archive.org/web/20200614002333/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=878713629569154512](http://web.archive.org/web/20200614002333/https://article.xuexi.cn/articles/pdf/index.html?art_id=878713629569154512)

<sup>24</sup> Title as translated by Zhu Yong-gang, “An Theoretical Exploration into the Source of Xi Jinping's Thoughts on the Governance of China – based on a theoretical investigation into his works,” *Leader's Companion* 1 (January 2017): 17,

<http://web.archive.org/web/20200614022429/http://www.hebdx.com/hbdxww/resource/cms/article/282523/307055/20171%E7%90%86%E8%AE%BA%E7%89%88.pdf>

<sup>25</sup> Xi Jinping, *摆脱贫困* (Fuzhou, Fujian: Fujian People's Publishing House, 1992),

[http://web.archive.org/web/20200613225449/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=4910211145553221310](http://web.archive.org/web/20200613225449/https://article.xuexi.cn/articles/pdf/index.html?art_id=4910211145553221310)

<sup>26</sup> Xi Jinping, *干在实处 走在前列——推进浙江新发展的思考与实践* (Beijing: Central Party School Publishing House, 2006),

<http://web.archive.org/web/20200614001925/https://preview-pdf.xuexi.cn/preview/index.html?url=https%3A%2F%2Fpreview-pdf.xuexi.cn%2F5c25de8945dea61033d66157%2F5z9teekdeg.pdf&copy=1>

<sup>27</sup> Title as translated by Cao Bing, via CNKI Journal Translation Project, from Wang Daojie, “An introduction to sports materialized culture studies,” *Journal of Beijing Sport University* 39, no. 6, <http://web.archive.org/web/20200614023055/http://jtp.cnki.net/bilingual/detail/html/BJTD201606003>

<sup>28</sup> Xi Jinping, *之江新语* (Hangzhou, Zhejiang: Zhejiang People's Publishing House, 2007), <http://web.archive.org/web/20200613113153/https://preview-pdf.xuexi.cn/preview/index.html?url=https%3A%2F%2Fpreview-pdf.xuexi.cn%2F5c25db5be045882f67d7670f%2Fmad7d31m3qs.pdf&copy=1>

<sup>29</sup> Xi Jinping, *做焦裕禄式的县委书记*, <http://web.archive.org/web/20200614000033/https://preview-pdf.xuexi.cn/preview/index.html?url=https%3A%2F%2Fpreview-pdf.xuexi.cn%2F5b6c4ecc2675211607e7c59b%2Fnl1ropfhplk8.pdf&copy=1>

<sup>30</sup> Cheng Weijun, ed., ‘Governing the Party with Strict Discipline,’ September 30, 2018, [http://web.archive.org/web/20200614023632/https://article.xuexi.cn/articles/index.html?art\\_id=8191099278997304904&study\\_style\\_id=feeds\\_default&howmenu=true&aid=8191099278997304904&item\\_type=1&recoid=&cid=&study\\_comment\\_disable=0&pid=5235972351291039&ref\\_read\\_id=9b7805f2-fea6-47c8-8302-60517dd767df&ptype=100&source=share&share\\_to=weibo](http://web.archive.org/web/20200614023632/https://article.xuexi.cn/articles/index.html?art_id=8191099278997304904&study_style_id=feeds_default&howmenu=true&aid=8191099278997304904&item_type=1&recoid=&cid=&study_comment_disable=0&pid=5235972351291039&ref_read_id=9b7805f2-fea6-47c8-8302-60517dd767df&ptype=100&source=share&share_to=weibo)

<sup>31</sup> Xi Jinping, *习近平谈治国理政（第一卷）* (Beijing: Foreign Languages Press, 2014), <http://web.archive.org/web/20200614004131/https://preview-pdf.xuexi.cn/preview/index.html?url=https%3A%2F%2Fpreview-pdf.xuexi.cn%2F5c26096099b6672f682e791a%2F92go8fxk2p6.pdf&copy=1>

<sup>32</sup> Xi Jinping, *论坚持全面深化改革* (Beijing: Central Party Literature Press, 2018),

[http://web.archive.org/web/20200613230937/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=14806408164639883065](http://web.archive.org/web/20200613230937/https://article.xuexi.cn/articles/pdf/index.html?art_id=14806408164639883065)

<sup>33</sup> Xi Jinping, *论坚持推动构建人类命运共同体* (Beijing: Central Party Literature Press, 2018),

[http://web.archive.org/web/20200613225917/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=10432642558579866397](http://web.archive.org/web/20200613225917/https://article.xuexi.cn/articles/pdf/index.html?art_id=10432642558579866397)

September 2013 to July 2018	December 2018	习近平谈“一带一路” <sup>34</sup>	The Belt and Road Initiative (official translation)
August 2014 to September 2017	November 2017	习近平谈治国理政（第二卷） <sup>35</sup>	The Governance of China II (official translation)
May 2017	December 2017	习近平“一带一路”国际合作高峰论坛重要讲话 <sup>36</sup>	Xi Jinping: Important Speeches at the Belt and Road Forum for International Cooperation (official translation in bilingual publication)
September 2017	August 2018	习近平金砖国家领导人厦门会晤重要讲话 <sup>37</sup>	Xi Jinping: Important Speeches at the BRICS Xiamen Summit (official translation in bilingual publication)
October 2017 to January 2020	June 2020	习近平谈治国理政（第三卷）	The Governance of China III (official translation)
February 2020 to May 2022	June 2022	习近平谈治国理政（第四卷）	The Governance of China IV (official translation)

Having outlined the canon of Xi Jinping Thought, how does the CCP General-Secretary and Central Military Commission Chair intend to leverage emerging technologies domestically, and in his role as president shape international law and global governance institutions? As touched on briefly earlier, Xi wants the party’s “innovation-driven strategy” to guide the development of the nation’s “independent innovation ability.” He also believes that China needs to increase its market share in robotics domestically and in trade exports. In a speech titled ‘Transition to Innovation-driven Growth,’ from the first of the Governance of China books, Xi references “an article which argued that the Third Industrial Revolution would be a Robot Revolution. It asserted that robots would change the pattern of the global manufacturing industry, and China would become the world’s largest robot market.” In this speech, Xi indicates robotics will likely have economic and military benefits, envisaging growth in robotics and IT in the form of big data, cloud computing, mobile internet, AI, and 3D printing (additive manufacturing), while noting that self-driving cars, home-service robots, and unmanned aerial vehicles already have been put into application.<sup>38</sup> These sentiments were further expressed in a speech in the second book, drawing on a list of other emerging technologies that includes “next-generation robotics,” “emergent artificial intelligence,” “additive manufacturing,” “distributive manufacturing,” and “sense and avoid” drones.”<sup>39</sup>

<sup>34</sup> Xi Jinping, 习近平谈“一带一路” (Beijing: Central Party Literature Press, 2018),

[http://web.archive.org/web/20200613225136/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=12984321575110083306](http://web.archive.org/web/20200613225136/https://article.xuexi.cn/articles/pdf/index.html?art_id=12984321575110083306)

<sup>35</sup> Xi Jinping, 习近平谈治国理政（第二卷） (Beijing: Foreign Languages Press, 2017), <http://web.archive.org/web/20200614004918/https://preview-pdf.xuexi.cn/preview/index.html?url=https%3A%2F%2Fpreview-pdf.xuexi.cn%2F5c2ec53677a4b12a5067a1e0%2Fn1mzydsyjam.pdf&copy=1>

<sup>36</sup> Xi Jinping, *Important Speeches at the Belt and Road Forum for International Cooperation* (Beijing: Foreign Languages Press, 2017),

[http://web.archive.org/web/20210102063708/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=8074898780174917382](http://web.archive.org/web/20210102063708/https://article.xuexi.cn/articles/pdf/index.html?art_id=8074898780174917382)

<sup>37</sup> Xi Jinping, *Important Speeches at the BRICS Xiamen Summit* (Beijing: Foreign Languages Press, 2018),

[http://web.archive.org/web/20200709235103/https://article.xuexi.cn/articles/pdf/index.html?art\\_id=466313341456736061](http://web.archive.org/web/20200709235103/https://article.xuexi.cn/articles/pdf/index.html?art_id=466313341456736061)

<sup>38</sup> Xi, *The Governance of China*, 133.

<sup>39</sup> Xi, *The Governance of China II*, 278.

Such innovation, however, may require continued reform. Xi has labelled the Chinese economy “obese and weak” and located its “inadequate capacity for innovation [which] is its Achilles’ heel.”<sup>40</sup> As outlined in a speech titled ‘Strengthen the Foundation for Pursuing Peaceful Development,’ Xi outlines conditions required for China’s continued growth, including “a peaceful international environment. Neither China nor the rest of the world can develop without peace, nor can they enjoy lasting peace without development.”<sup>41</sup> These themes are repeated elsewhere, including speeches to ‘Safeguard National Security and Social Stability,’<sup>42</sup> ‘Build China into a Cyberpower,’<sup>43</sup> and ‘Work Together to Build the Belt and Road.’<sup>44</sup> As will become more evident in the next section, China’s economic development, including access to AI, is considered a precondition for arms control agreements. The mutually reinforcing relationship between economic development and national security, according to this perspective, is however at odds with the classical notion of the ‘political economy.’ The resolution to this apparent inconsistency can be found by reshaping global trade rules and governance institutions in more favorable terms.

Xi has said that innovation-driven growth is not only important for commerce, it will also reshape the global governance mechanisms and institutions that formalize power balances. He argues that in the context of “traditional 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,” China can move from being a spectator to playing “a major role in the construction of playgrounds, even at the beginning, so that we can make rules for new games.” In this regard, China does not have a “chance” if it is not capable enough to be a part, “indeed a major part, of the construction team.” Xi’s conclusion is that, “We cannot move forward by leaps and bounds unless we do so with innovation,”<sup>45</sup> in a potential reference to leapfrogging from legacy technology onto the next generation of emerging technologies.

Evidently, China’s national interest has been defined by Xi in terms of influencing other nations through global governance institutions. While the article later references developments in Chinese military

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<sup>40</sup> Ibid, 223.

<sup>41</sup> Xi, *The Governance of China*, 272.

<sup>42</sup> Ibid, 223–224.

<sup>43</sup> Ibid, 220.

<sup>44</sup> Xi, *The Governance of China II*, 561.

<sup>45</sup> Xi, *The Governance of China*, 135–136.

modernization from the beginning of the Xi Jinping period as a challenge to the U.S. in mostly military terms, Xi’s writings suggest that he considers China will be able to exercise greater influence over global institutions, particularly after Chinese industry accomplishes the milestone of independent innovation. Evidently, the Chinese economy will rely on trade in technologies, which as dual-use systems, might otherwise be regulated through arms control mechanisms. This tension between economic goals and military self-reliance is especially evident in the Chinese delegation’s statements on LAWS in Geneva, to which the next section turns.

### **Xi and Lethal Autonomous Weapons Systems**

Both military modernization and economic drivers are clear in China’s policy and approach to arms control, which this section now examines through a case study on LAWS. Views expressed by the Chinese delegation here allow policy makers to analyze or determine the drivers behind Beijing’s actions and its efforts to project influence on arms control negotiations through United Nations disarmament fora. In addition, links are made to Chinese language sources to indicate the extent to which the official position may be reflected in the private sector or academia.

Initially, Beijing’s stance on LAWS was most readily available through printable statements (including electronic copies, e.g., PDF format), which appeared to be one of the few primary sources available through text-based web searches. One included the position, “On the basis of consensus, China is willing to follow the model of the Protocol on Laser Weapons and conclude a legally binding protocol on issues such as the use of LAWS.”<sup>46</sup> As an example of the prominence given to such papers, the Yearbook of International Humanitarian Law noted, “in December 2016, [China] called for a new international law on autonomous weapons as the first member of the UN Security Council. China proposed to develop a legally binding protocol on autonomous weapons.”<sup>47</sup> Other analysts have noted the policy—to the extent that one has been developed—is less clear. Williams considers “on the surface” the Chinese position would seem to present a “constructive contribution to the development of legal norms regarding technologies with enormous strategic implications,” and yet the proposed characterization of LAWS

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<sup>46</sup> “Statement by the Head of the Chinese Delegation During the General Debate at the Fifth Review Conference of CCW Geneva,” December 12, 2017, [http://web.archive.org/web/20200516113839/https://www.onug.ch/80256EDD006B8954/%28httpAssets%29/1F8B99BB6D4EE06FC125808A0059D3FA/\\$file/China%27s+statement+during+general+debate.pdf](http://web.archive.org/web/20200516113839/https://www.onug.ch/80256EDD006B8954/%28httpAssets%29/1F8B99BB6D4EE06FC125808A0059D3FA/$file/China%27s+statement+during+general+debate.pdf)

<sup>47</sup> Beier Lin, Marie Wilmet, and Charlotte Renckens, “Year in Review 2017,” in *Yearbook of International Humanitarian Law 2017*, eds. Terry D. Gill, Tim McCormack, Robin Geiß, Heike Krieger, and Christophe Paulussen, 320-321.

remains “so narrowly [defined] as to render any ban on such weapons essentially meaningless.”<sup>48</sup> In light of the above, Beijing’s positions and statements required further analysis to determine the policy and its implications.

In our assessment of audio statements recorded during conference proceedings of the Convention on Certain Conventional Weapons, we have noted the original languages and, where applicable, simultaneous interpretation. While careful to differentiate the automatic functions of landmines from the autonomous functions of LAWS,<sup>49</sup> human-machine teaming tactics would not necessarily apply if LAWS were developed for use in a solely defensive context or so-called ‘kill zone.’ Therefore, the functions of LAWS as defensive weapons (from a Chinese policy perspective) are diametrically opposed to what is typically envisaged (predominately in U.S. and European writings) on the purpose of LAWS as AI-enabled devices to enhance human decision-making and responses, or carry out orders, in dynamic environments. These outcomes for technological development are likely to have implications for both arms control negotiations and trade restrictions related to weapons and matériel. In proving a thematic analysis of Beijing’s policy, we consider the following topics: the limitations of negotiated arms control agreements, the characterization of LAWS in a legal context, and the contested views on AI ethics.

### *Arms control considerations*

Beijing’s position is opposed to non-binding weapons reviews performed by states without an independent level of assurance or oversight. The delegation has advised, “We don’t support placebos such as political declaration[s] or voluntary code[s] of conduct.”<sup>50</sup> This suggests any form of regulation would require firm governance from day one, rather than gradually developing it over time. Traditionally, the first steps in arms control agreements have been the adoption of transparency and confidence-building measures (TCBM), known as soft law, which precede the enforcement mechanisms known as hard law. However, in the case of LAWS, Beijing’s delegation considers the adoption of “TCBM should be treaty-based and as a supplement to the treaty, and as the means to ensure the strict

<sup>48</sup> Robert D. Williams, *International Law with Chinese Characteristics: Beijing and the ‘Rules-Based’ Global Order* (Washington, D.C.: Brookings Institution, 2020), 10, [http://web.archive.org/web/20201116070148/https://www.brookings.edu/wp-content/uploads/2020/10/FP\\_20201012\\_international\\_law\\_china\\_williams.pdf](http://web.archive.org/web/20201116070148/https://www.brookings.edu/wp-content/uploads/2020/10/FP_20201012_international_law_china_williams.pdf)

<sup>49</sup> Chinese delegation’s third statement at the CCW GGE on LAWS on April 11, 2018 [original is in Chinese], [http://web.archive.org/web/20200605073921/https://conf.unog.ch/dr/public/61.0500/FBA254D5-B4B7-4BE6-A6E5-B8F2AD8744D9\\_15h09/chunks/snippet\\_IEs81-32t84-15.mp3](http://web.archive.org/web/20200605073921/https://conf.unog.ch/dr/public/61.0500/FBA254D5-B4B7-4BE6-A6E5-B8F2AD8744D9_15h09/chunks/snippet_IEs81-32t84-15.mp3); Chinese delegation’s first statement at the CCW GGE on LAWS on March 25, 2019 [original is in Chinese], [http://web.archive.org/web/20200518095738/https://conf.unog.ch/dr/public/61.0500/E3373111-6687-440D-B02D-CEFB477A9AD6\\_10h06/chunks/snippet\\_IEs109-45t113-40.mp3](http://web.archive.org/web/20200518095738/https://conf.unog.ch/dr/public/61.0500/E3373111-6687-440D-B02D-CEFB477A9AD6_10h06/chunks/snippet_IEs109-45t113-40.mp3)

<sup>50</sup> Chinese delegation’s first statement at CCW GGE on LAWS on November 16, 2017 [original is in English], [http://web.archive.org/web/20200607024007/https://conf.unog.ch/dr/public/61.0500/419FD8D8-C666-45AE-8CAA-FD3AA0DA9949\\_10h17/chunks/snippet\\_IEs58-36t60-28.mp3](http://web.archive.org/web/20200607024007/https://conf.unog.ch/dr/public/61.0500/419FD8D8-C666-45AE-8CAA-FD3AA0DA9949_10h17/chunks/snippet_IEs58-36t60-28.mp3)

compliance of the treaty; they should not replace the treaty itself.”<sup>51</sup> Furthermore, the delegation considers some states could make faithful attempts at completing self-reviews but would lack the competency to understand the subject matter, or conversely, some states would possess the capability but not be trusted to report their results impartially. As stated, “where lawyers who do not know much about the technical issues [are asked] to conduct a legal review on paper, the result of such a review is highly doubtful” and “such a practice can very well be used by a few countries to cover up the development of certain weapons systems, in violation of IHL [international humanitarian law] principles or as camouflage.”<sup>52</sup> Therefore, Beijing’s starting position is that an arms control deal on LAWS must be enforceable through an independent assurance mechanism, in contrast to TCBM as the traditional approach.

An aspect related to the uncertainty around legal reviews is forming a decision on whether the designated weapons are compliant with IHL. Beijing’s position that LAWS could not be used for offensive purposes is based on its judgment that LAWS are inherently indiscriminate. As stated, “such a weapons system is incapable of proportionate decisions,” and “presents difficulty in terms of accountability for its use.” These statements refer to the principle of proportionality and the enforcement of penalties for unlawful actions. Beijing’s position on a related component of IHL, the principle of distinction, is also skeptical of “whether such a weapons system is capable of distinction [which] remains doubtful.”<sup>53</sup> An additional concern of the delegation relates to limiting the deployment of LAWS to locations where its humanitarian concerns would not apply. As a delegate said, “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, as examples, that’s not logical in my view.”<sup>54</sup> These statements make claims about technologies that have not yet been put into the field and China’s position supports, “the development of a legally binding protocol on issues related to the use of LAWS, similar to the Protocol on Blinding Laser

<sup>51</sup> Chinese delegation’s first statement at CCW GGE on LAWS on April 13, 2018 [original is in Chinese and English, full quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200607031758/https://conf.unog.ch/dr/public/61.0500/E91311E5-E287-4286-92C6-D47864662A2C\\_10h14/chunks/snippet\\_1Es19-57t26-22.mp3](http://web.archive.org/web/20200607031758/https://conf.unog.ch/dr/public/61.0500/E91311E5-E287-4286-92C6-D47864662A2C_10h14/chunks/snippet_1Es19-57t26-22.mp3)

<sup>52</sup> Ibid.

<sup>53</sup> ‘The position [sic] paper submitted by the Chinese delegation to CCW 5th Review Conference’, 12–16 December 2016, [http://web.archive.org/web/20190808163631/https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/DD1551E60648CEBBC125808A005954FA/\\$file/China's+Position+Paper.pdf](http://web.archive.org/web/20190808163631/https://www.unog.ch/80256EDD006B8954/(httpAssets)/DD1551E60648CEBBC125808A005954FA/$file/China's+Position+Paper.pdf)

<sup>54</sup> Chinese delegation’s fourth statement at the CCW GGE on LAWS on April 11, 2018 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200605074118/https://conf.unog.ch/dr/public/61.0500/FBA254D5-B4B7-4BE6-A6E5-B8F2AD8744D9\\_15h09/chunks/snippet\\_1Es120-40t125-31.mp3](http://web.archive.org/web/20200605074118/https://conf.unog.ch/dr/public/61.0500/FBA254D5-B4B7-4BE6-A6E5-B8F2AD8744D9_15h09/chunks/snippet_1Es120-40t125-31.mp3)

Weapons, to fill the legal gap in this regard.”<sup>55</sup> Nevertheless, while a ban on blinding lasers was adopted pre-emptively under the Convention on Certain Conventional Weapons, Beijing’s reference is more likely in relation to having a “legally binding protocol.” As noted above, such a protocol would provide for assurance that states are complying with an agreement on LAWS, rather than depend upon TCBM which the Chinese position does not consider adequate.

The above considerations of the delegation would limit LAWS to a treaty that enforces oversight over other states’ weapons systems but does not necessarily prohibit their use in a defensive context. An inspection regime, however, could not resolve territorial claims. In this context, the characterization of LAWS as defensive weapons may be subjective to its political context. Conversely, the standard could apply to offensive weapons, thus creating a false distinction. Beijing’s delegation referenced its national interest and the inviolability of sovereignty in respect to LAWS, without addressing how such territorial disputes would be resolved or managed via an inspection regime. As stated, “China is of the view that countries should abide by the UN Charter and armed conflict law while using LAWS, respect the sovereignty and territorial integrity of other countries, and attach importance to the humanitarian consequences and other issues possibly caused by these weapons.”<sup>56</sup> Furthermore, in remarking on their own region, the delegation has claimed “some countries are planning for swarming, you know ‘swarm strategy,’ to use in the future wars in the Asia-Pacific region, you know [a] larger quantity of unmanned autonomous systems, in [the] maritime environment, in air, and on land,” but they suggested LAWS would not be sent on missions to attack civilians because “military guys are not stupid ... and I don’t think they would like to waste such expensive weapons on commercial targets, which [as] you know to target commercial vessels, itself, is [the act of] a war criminal.”<sup>57</sup> If LAWS could be used judiciously against military targets posing a threat to “territorial integrity,” the delegation’s argument suggests limits apply to other areas. It is a political question if the use of LAWS by ‘maritime militia’ on fishing boats would also be considered, by Beijing, to be defending claims to an exclusive economic zone or if territory refers to the stricter definition of sovereign waters hugging the coastline.

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<sup>55</sup> ‘The position paper’ [sic].

<sup>56</sup> ‘Statement by Counsellor Wang Chang of the Chinese Delegation at the Thematic Discussion on Conventional Weapons at the First Committee of the 72nd Session of the UNGA [United Nations General Assembly],’ October 20, 2017, [http://web.archive.org/web/20200514090015/https://www.fmprc.gov.cn/ce/ceun/eng/chinaandun/disarmament\\_armscontrol/unga/t1505677.htm](http://web.archive.org/web/20200514090015/https://www.fmprc.gov.cn/ce/ceun/eng/chinaandun/disarmament_armscontrol/unga/t1505677.htm)

<sup>57</sup> Chinese delegation’s first statement at the CCW Meeting of Experts on LAWS on April 15, 2016 [original is in English], [http://web.archive.org/web/20200607050704/https://conf.unog.ch/dr/public/61.0500/37559DDD-9E6F-4E12-B48D-74E6AB594E3B\\_10h14/chunks/snippet\\_IEs55-55t62-04.mp3](http://web.archive.org/web/20200607050704/https://conf.unog.ch/dr/public/61.0500/37559DDD-9E6F-4E12-B48D-74E6AB594E3B_10h14/chunks/snippet_IEs55-55t62-04.mp3)

While ongoing territorial claims fall outside of scope for arms control negotiations on LAWS, and most likely will be interpreted by respective nation states in a subjective manner, other areas for cooperation are more promising. Security Council Resolution 1540 prohibits the transfer of nuclear, chemical, and biological weapons to non-state actors. China has suggested expanding this resolution to mitigate LAWS and support counter-terrorism actions. The delegation expressed that LAWS could be contained by the mechanism in operation for the Security Council resolution, particularly in terms of preventing terrorists from gaining access to autonomous weapons systems. Moreover, the delegation has argued that within the structure of the 1540 Committee, it should be plausible “to establish a mechanism that covers all weapons systems and relevant technologies, especially with regard to the export control.” This framework would make possible the establishment of “a truly global, comprehensive, and non-discriminatory export control system.”<sup>58</sup> The credibility of Beijing’s proposal would rest upon what other details it provides in future, its participation in other non-proliferation initiatives, the likelihood that any other existing models or proposals could expand into LAWS, and whether the shifting political climate favors arms control.

As noted in the above sections on CCP ideology, in fulfilling the Chinese Dream, the driver of policy making is to elevate the country from the standard achieved in its First Centennial Goal (2021) and move toward the higher standard of the Second Centennial Goal (2049). As a self-described developing country, China does not see itself in a position to fully define trade rules and will seek to ensure it does not lose market access to dual-use technologies. Beijing’s delegation has stated during meetings on LAWS, “due to the dual-use nature of these technologies, our discussion of these issues should not lead to granting certain countries a blank check in high-tech weapon development as they wish,” but establishing, “new discriminatory technical barriers in the name on non-proliferation [would be] depriving developing countries of their right to use technology on an equal basis.”<sup>59</sup> As previous experiences with nuclear technologies have demonstrated, some dual-use technologies can be regulated effectively, but are difficult to control entirely.<sup>60</sup> Beijing’s delegation’s approach to arms control discussions has a firm grasp of its national interest, in finding a balance to allow for trade in dual-use

<sup>58</sup> Chinese delegation’s first statement at the GGE on LAWS on 13 April 2018 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200607031758/https://conf.unog.ch/dr/public/61.0500/E91311E5-E287-4286-92C6-D47864662A2C\\_10h14/chunks/snippet\\_1Es19-57t26-22.mp3](http://web.archive.org/web/20200607031758/https://conf.unog.ch/dr/public/61.0500/E91311E5-E287-4286-92C6-D47864662A2C_10h14/chunks/snippet_1Es19-57t26-22.mp3)

<sup>59</sup> Chinese delegation’s first statement at the CCW Meeting of Experts on LAWS on 11 April 2016 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200607032814/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2\\_15h03/chunks/snippet\\_1Es5-40t9-54.mp3](http://web.archive.org/web/20200607032814/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2_15h03/chunks/snippet_1Es5-40t9-54.mp3)

<sup>60</sup> Aiden Warren and Alek Hillas, “Contact Tracing for Lethal Autonomous Weapons Systems? Governance Mechanisms to Enhance Arms Control and Non-Proliferation,” *Georgetown Journal of International Affairs* 22, no. 1 (Spring 2021): 70-71, <https://doi.org/10.1353/gia.2021.0017>

technologies to continue unimpeded, and locating counter-terrorism as the area for joint action through Security Council mechanisms. Moreover, it appears possible that Beijing may seek to outlaw LAWS for offensive purposes but be receptive to the possibility of defensive LAWS, including the export of these to other nation states. The characteristics of LAWS within a legal context, and whether such a policy could be successfully adopted, would depend on how LAWS are defined, a question to which the next section turns.

### ***Characteristics of LAWS***

How Beijing’s delegation has attempted to define LAWS is pertinent when considering the arms control mechanisms that China may be aiming to negotiate. While its position is that LAWS are future weapons systems which “do not exist at the moment,”<sup>61</sup> the delegation has repeatedly stated, “The definition and scope of LAWS are the precondition and basis for discussion on its other aspects,” underscoring the need achieve consensus on a definition for LAWS before anything else is negotiated.<sup>62</sup> As touched on earlier, the delegation’s view on the additional protocol to the Convention on Certain Conventional Weapons on blinding lasers is that binding aspects are the most relevant condition. In contrast, the delegation considers blinding lasers as a technology that “has already been in existence for many years” and its nature was “something certain” which “people more or less have consensus on” in a similar way to nuclear, biological or chemical weapons, despite the timing of the ban on blinding lasers as being pre-emptive.<sup>63</sup> In juxtaposition, the delegation has stated AI “is still in its infancy; how it will evolve, [and even] what will come in the next couple of years, we really don’t know.”<sup>64</sup> Hence, the delegation’s position is LAWS are a future weapon on which consensus on a definition will need to be reached in advance of other areas, such as export control regimes. As stated,

Discussions about definitions should focus on a number of core issues:

1. Levels of autonomy and criteria for their determination;
2. Relations and distinctions between automation, autonomy and remote control;
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 judgement’ or ‘meaningful human control’.

<sup>61</sup> Chinese delegation’s first statement at CCW GGE on LAWS on April 9, 2018 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200605073058/https://conf.unog.ch/dr/public/61.0500/2DCCE4C0-9A85-4EB2-A384-5C7E59A8FF09\\_15h11/chunks/snippet\\_IEs81-31t86-32.mp3](http://web.archive.org/web/20200605073058/https://conf.unog.ch/dr/public/61.0500/2DCCE4C0-9A85-4EB2-A384-5C7E59A8FF09_15h11/chunks/snippet_IEs81-31t86-32.mp3)

<sup>62</sup> ‘The position paper’ [sic], 1.

<sup>63</sup> Chinese delegation’s first statement at the CCW Meeting of Experts on April 12, 2016 [original is in English], [http://web.archive.org/web/20200607045129/https://conf.unog.ch/dr/public/61.0500/E630EFC4-7113-46F1-977D-1A3672D48590\\_15h07/chunks/snippet\\_IEs5-32t11-47.mp3](http://web.archive.org/web/20200607045129/https://conf.unog.ch/dr/public/61.0500/E630EFC4-7113-46F1-977D-1A3672D48590_15h07/chunks/snippet_IEs5-32t11-47.mp3)

<sup>64</sup> Ibid.

As to the scope, distinction should be made between civilian and military, offensive and defensive, anti-personnel and auxiliary [e.g. logistics], and lethal and non-lethal uses.<sup>65</sup>

In addition to the above, Beijing's delegation has provided other foundations on which to define LAWS. As stated, "We believe that these [below] five characteristics are indispensable key elements in any definition of LAWS. In other words, any weapons system that [would] lack one or more of these characteristics, should not be regarded as LAWS."<sup>66</sup> These characteristics are summarized below.

- *Lethal* – the aim is to use LAWS for lethal purposes, and they carry a sufficient payload; this characteristic of lethality separates LAWS from devices incidentally causing fatalities, such as self-driving vehicles
- *Total autonomy* – the absence of human intervention or control during the entire operation
- *Uncontrollable / Impossibility of termination* – once started, there is no method to suspend its operations or terminate the device
- *Indiscriminate nature* – the device will execute the task of killing and injuring, deciding which humans to attack, without special conditions, scenarios, or targets
- *Self-evolutionary nature* – through self-learning and interaction with their environment, LAWS autonomously can work through limitations made by humans to improve their own abilities and expand their functions, in a way that goes beyond human prediction.

The interpretation of these characteristics in Chinese-language academic texts indicates the conceptualization had a positive reception. In an overview of LAWS discussions at the Convention on Certain Conventional Weapons, Cao *et al.* have noted Beijing's five characteristics garnered attention in Latin America and Europe, and with non-governmental organisations. (A previous article by Cao *et al.* notes their affiliation with the National Key Laboratory of Science and Technology on Information System Security, Beijing Institute of System Engineering.)<sup>67</sup> According to their overview, advocates envisaged three steps for progressing the issue, beginning with a political declaration, followed by transparency and non-proliferation, and the development of voluntary codes of conduct. Through the CCW, bilateral or multilateral dialogue, Cao *et al.* suggest that Beijing will develop its reputation and

<sup>65</sup> 'The position paper' [sic], 1.

<sup>66</sup> Chinese delegation's first statement at CCW GGE on LAWS on April 9, 2018 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200605073058/https://conf.unog.ch/dr/public/61.0500/2DCCE4C0-9A85-4EB2-A384-5C7E59A8FF09\\_15h11/chunks/snippet\\_lEs81-31t86-32.mp3](http://web.archive.org/web/20200605073058/https://conf.unog.ch/dr/public/61.0500/2DCCE4C0-9A85-4EB2-A384-5C7E59A8FF09_15h11/chunks/snippet_lEs81-31t86-32.mp3)

<sup>67</sup> 曹华阳 [Cao Huayang], 况晓辉 [Kuang Xiaohui], 李响 [Li Xiang], and 赵刚 [Zhao Gang], "致命性自主武器系统的定义方法," [Research on the Definition Method of Lethal Autonomous Weapons Systems], 装备学院学报 [Journal of Equipment Academy] 28, no. 3 (June 2017), <https://doi.org/10.3783/j.issn.2095-3828.2017.03.007>

make contributions to arms control as a great power.<sup>68</sup> The framing of discussions in this manner, suggests LAWS may be considered as an area for collaboration, or competition, among great powers.

As noted, Beijing's delegation has a relatively strict definition for LAWS, demarcating so-called killer robots from other forms of autonomous robotics. Their contention is that "in a military field the application of AI is still at an initial stage [and] at present there are no 'smart weapons.'"<sup>69</sup> As the delegation has emphasized, AI is more "highly suitable for conducting high-risk, non-lethal military tasks in harsh conditions" and "AI technology does not necessarily lead to LAWS."<sup>70</sup> This suggests what other countries may view as LAWS, Beijing may consider as below the LAWS threshold. For example, a distinction is not characterising lethal autonomous robotics as LAWS if there is a possibility for human intervention to deactivate the mission. On the issue of the partnership and collaboration between machines and humans, Beijing has argued that it would be premature to make a judgement, as "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."<sup>71</sup> Hence, based on such characteristics, LAWS which have zero human oversight would be in a different category and thus subject to more regulation, than other uses for the technology, which remains an open question. The framing of ethics is particularly relevant in relation to considering the nature of oversight that humans would have along the spectrum, spanning from coding in a desktop environment, through to real-time monitoring of complex swarms in a zone of armed conflict.

### ***Artificial Intelligence governance***

Epistemologically, Beijing has aligned itself with views expressed by Stephen Hawking about the existential threat one day that self-learning AI could pose to humanity. At the Meeting of Experts in 2016, a member of Beijing's delegation disagreed with the assembled experts who specialized in human control over AI. The delegate contended, "artificial intelligence, without control, may cause the

<sup>68</sup> 曹华阳 [Cao Huayang], 李响 [Li Xiang], 况晓辉 [Kuang Xiaohui], 赵刚 [Zhao Gang], "联合国框架下致命性自主武器系统军控问题磋商进展," [Progress of Consultation on Arms Control of Lethal Autonomous Weapon Systems under the Framework of the United Nations], in *2020 国际军备控制与裁军*, [2020 International Arms Control and Disarmament], ed. 李驰江 [Li Chijiang] (Beijing: 世界知识出版社 [World Affairs Press Co.], 2020), 131, 135.

<sup>69</sup> Chinese delegation's first statement at CCW GGE on LAWS on September 24, 2020 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20201125074419/https://conf.unog.ch/dr/public/61.0500/BC0F8FB7-5F42-4E59-8A47-F201A18A87D2\\_10h18/chunks/snippet\\_IEs18-07t20-30.mp3](http://web.archive.org/web/20201125074419/https://conf.unog.ch/dr/public/61.0500/BC0F8FB7-5F42-4E59-8A47-F201A18A87D2_10h18/chunks/snippet_IEs18-07t20-30.mp3)

<sup>70</sup> Ibid.

<sup>71</sup> Chinese delegation, *Position Paper Submitted by China*, April 11, 2018 [CCW/GGE.1/2018/WP.7], [http://web.archive.org/web/20200508124940/https://www.unog.ch/80256EDD006B8954/\(httpAssets\)/E42AE83BDB3525D0C125826C0040B262/\\$file/CW\\_GGE.1\\_2018\\_WP.7.pdf](http://web.archive.org/web/20200508124940/https://www.unog.ch/80256EDD006B8954/(httpAssets)/E42AE83BDB3525D0C125826C0040B262/$file/CW_GGE.1_2018_WP.7.pdf)

extinction of the human race,”<sup>72</sup> and “Professor Hawking [would] know better about the universe, know better about the human race’s fate in the time-space [spacetime]. This is a higher-level wisdom, and we have to respect that.”<sup>73</sup> Furthermore, the delegation noted that making predictions is difficult for emerging technologies. Taking the twentieth-century arms race as an example: “The total achievement in the past 100 years exceeds what we achieved in the past 1900 years” and—they claim, according to some analysts—could be surpassed in the next three to five years. The delegation also queried whether AI could become sentient, “like the evolution of [the] human race from a small, small insect,” and once conscious, “it could feel that the human controller is so stupid, I’m gonna override the decision of the stupid human controller.”<sup>74</sup> By adopting an epistemological lens that acknowledges gaps in human knowledge, the delegation’s approach suggests ethics are an indispensable component of the LAWS discourse in the absence of scientific or technical approaches to substantiate concerns related to the loss of human control over ‘evolved’ or sentient AI.

Not only does the Chinese delegation propose the debate on LAWS includes an AI ethics component, it has used its own domestic arrangements for AI as support for governance on LAWS. Providing an example of AI research ethics adopted in China, Beijing’s delegation outlined a series of measures during the 2019 CCW meeting. Namely, in 2017, China’s State Council issued the ‘Next Generation Artificial Intelligence Development Plan’ (新一代人工智能发展规划). In addition, instances of self-regulation were noted, including an “important declaration” by an artificial intelligence industry innovation alliance (人工智能产业创新联盟) in 2018.<sup>75</sup> The delegate suggested the declaration could also be adopted outside of China, which “clearly states that artificial intelligence technology should keep in mind [the] well-being of man as its fundamental goal, [and] should uphold morality, ethics and human rights ... The declaration required setting up of [the] relevant technical risk assessment mechanism and it elaborates on a series of binding codes for researchers and users of the technology.”<sup>76</sup>

<sup>72</sup> Chinese delegation’s second statement at the CCW Meeting of Experts on April 11, 2016 [original is in English], [http://web.archive.org/web/20200607033028/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2\\_15h03/chunks/snippet\\_IEs134-05t138-54.mp3](http://web.archive.org/web/20200607033028/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2_15h03/chunks/snippet_IEs134-05t138-54.mp3)

<sup>73</sup> Chinese delegation’s third statement at the CCW Meeting of Experts on April 11, 2016 [original is in English], [http://web.archive.org/web/20200607082650/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2\\_15h03/chunks/snippet\\_IEs157-47t158-25.mp3](http://web.archive.org/web/20200607082650/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2_15h03/chunks/snippet_IEs157-47t158-25.mp3)

<sup>74</sup> Chinese delegation’s second statement at the CCW Meeting of Experts on April 11, 2016 [original is in English], [http://web.archive.org/web/20200607033028/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2\\_15h03/chunks/snippet\\_IEs134-05t138-54.mp3](http://web.archive.org/web/20200607033028/https://conf.unog.ch/dr/public/61.0500/74C25690-9490-44F3-82C9-483F858B62A2_15h03/chunks/snippet_IEs134-05t138-54.mp3)

<sup>75</sup> Chinese delegation’s first statement at the GGE on LAWS on March 27, 2019 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20200607022837/https://conf.unog.ch/dr/public/61.0500/23259B84-DEBF-4877-9410-FF702E2AA998\\_10h12/chunks/snippet\\_IEs91-56t96-26.mp3](http://web.archive.org/web/20200607022837/https://conf.unog.ch/dr/public/61.0500/23259B84-DEBF-4877-9410-FF702E2AA998_10h12/chunks/snippet_IEs91-56t96-26.mp3)

<sup>76</sup> Ibid.

Noting the above section on arms control, the adoption of these principles, as envisaged by Beijing, would presumably be encapsulated in a binding treaty rather than voluntary codes of conduct.

Though not stated directly, the delegate was most likely referencing a declaration from the 11 July 2018 ‘Robotics and Artificial Intelligence Conference’ (机器人与人工智能大会), abbreviated as ‘RAIC’ (雷克大会). While having no (known) translation in English, 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 which made this declaration had been established a year earlier at the RAIC in 2017, and its membership included the state-owned China Center for Information Industry Development plus around two hundred corporate or research institutions. Affiliates of Intel and SAP also held senior positions within the organizational structure.<sup>77</sup> The key messages of the declaration were reported by Chinese-language media at the time,<sup>78</sup> and its entire text was subsequently published in Mandarin.<sup>79</sup> Some points relevant to the discourse on LAWS are paraphrased as follows: 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; technical risk assessment mechanisms should ensure that dangers related to AI systems can be controlled; AI can help with decision making but should not be the decision-maker; and despite offering military advantages, AI should not be used as offensive weapons due to humanitarian related considerations. In essence, these principles suggest industry in China, along with Beijing’s diplomats, consider AI to be an instrument for societal progress. If adopted as a binding treaty, it would be difficult to limit access to AI. Significantly, the declaration does not treat all AI-enabled weapons equally, with offensive weapons being singled out as the category with humanitarian concerns.

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<sup>77</sup> “中国人工智能产业创新联盟在京成立,” [Chinese Artificial Intelligence Industry Innovation Alliance established in Beijing], China Center for Information Industry Development, June 30, 2017, <http://web.archive.org/web/20200608043502/https://www.ccidgroup.com/dtjd/9594.htm>

<sup>78</sup> “《人工智能创新发展道德伦理宣言》在天津发布,” [‘Declaration on the Moral and Ethical Principles of AI Innovation and Development’ issued in Tianjin], *People.cn*, July 13, 2018, <http://web.archive.org/web/20200608013352/http://tj.people.com.cn/n2/2018/0713/c375366-31811522.html>; see also, “人工智能伦理道德宣言在天津发布 助人工智能产业健康发展,” [Declaration on the Moral and Ethical Principles of AI Innovation and Development announced in Tianjin to assist healthy development of AI industry], *People.cn*, July 12, 2018,

<http://web.archive.org/web/20200608014628/http://tj.people.com.cn/n2/2018/0712/c375366-31808984.html>; see also, 马樱健 [Ma Yingjian], “始终以造福人类为宗旨: 雷克大会发布《人工智能创新发展道德伦理宣言》,” [Always aiming to benefit humankind: RAIC issues Declaration on the Moral and Ethical Principles of AI Innovation and Development], *科技先导* [Sci-Tech Herald] 7 (2018): 17,

<http://web.archive.org/web/20200608024544/http://www.tht.gov.cn/kjxdb/2018/2018-07.pdf>

<sup>79</sup> “《人工智能创新发展道德伦理宣言》全文, 在人工智能伦理,” [Full text of the Declaration on the Moral and Ethics Principles of AI Innovation and Development], *人工智能* [Artificial Intelligence View] 4 (2019): 130–132,

<http://web.archive.org/web/20200608031853/https://book.yunzhan365.com/jtqx/qeli/mobile/index.html>

Evidently, the Chinese delegation has acknowledged AI is a dual-use technology, with uses across the civilian and military domains. How industry will tap into AI to promote innovation and growth in the Chinese economy, without jeopardizing trade due to military risks posed by dual-use technologies, will depend on the wider acceptance and adoption of Beijing’s proposed AI ethics. This approach would promote the benefits of AI, while asserting that risks can be overcome through the adoption and application of risk management tools. In addition to the above sentiments, Beijing’s delegation has also noted the “Beijing Consensus on Artificial Intelligence in which it’s clearly specified that AI should serve the purpose of the whole humankind and [be] safeguarding the ethical and moral standard of humankind.”<sup>80</sup> The term ‘Beijing Consensus’ (北京共识), previously used by scholars in reference to developmental economics, contrasts with the ‘Washington Consensus’ (华盛顿共识) model.<sup>81</sup> Notwithstanding the origins of the term, the Beijing Consensus was the outcome of an international conference held in the Chinese capital in 2019. It affirms, among other items of concern, that “AI should be designed in an ethical, non-discriminatory, equitable, transparent and auditable manner.”<sup>82</sup> Referring to the fourth Sustainable Development Goal (SDG)—‘Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all’—the United Nations Educational, Scientific and Cultural Organization (UNESCO) claims the Beijing Consensus is “the first ever document” on “how best Member States can respond to the opportunities and challenges brought by AI for accelerating the progress towards SDG 4.”<sup>83</sup> This suggests the adoption of the Beijing Consensus by UNESCO is progressing AI ethics in the commercial sector ahead of the UN’s consideration of AI in a military context. In short, it is possible arms control discussions may be led in part by whichever nation state demonstrates the initiative to govern AI ethical principles in other areas, with China at the forefront. Another forum where Beijing has sought to exert its model on technology governance is through the World Internet Conference, held each year in Wuzhen, Zhejiang.<sup>84</sup> While these efforts support the goals outlined by Xi Jinping, Chinese commerce and dual-use technologies will remain vulnerable to supply

<sup>80</sup> Chinese delegation’s second statement at the CCW GGE on LAWS on September 24, 2020 [original is in Chinese, quote in English is via simultaneous interpreter], [http://web.archive.org/web/20201125092819/https://conf.unog.ch/dr/public/61.0500/BC0F8FB7-5F42-4E59-8A47-F201A18A87D2\\_10h18/chunks/snippet\\_IEs95-32t100-07.mp3](http://web.archive.org/web/20201125092819/https://conf.unog.ch/dr/public/61.0500/BC0F8FB7-5F42-4E59-8A47-F201A18A87D2_10h18/chunks/snippet_IEs95-32t100-07.mp3)

<sup>81</sup> Linda Yueh, *The Great Economists: How Their Ideas Can Help Us Today* (United Kingdom: Viking, 2018), 256-257.

<sup>82</sup> United Nations Educational, Scientific and Cultural Organization (UNESCO), *Beijing Consensus on Artificial Intelligence and Education* (Paris: UNESCO, 2019), 4.

[http://web.archive.org/web/20210102071032/https://unesdoc.unesco.org/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach\\_import\\_a16e5c78-9a4f-4722-84be-35f5e8937be2?\\_id=368303qaa.pdf&to=70&from=1](http://web.archive.org/web/20210102071032/https://unesdoc.unesco.org/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach_import_a16e5c78-9a4f-4722-84be-35f5e8937be2?_id=368303qaa.pdf&to=70&from=1)

<sup>83</sup> UNESCO, “Artificial intelligence in education,” 2020, <http://web.archive.org/web/20210102070236/https://en.unesco.org/artificial-intelligence/education>

<sup>84</sup> Nathan Attrill and Audrey Fritz, “China’s cyber vision: How the Cyberspace Administration of China is building a new consensus on global internet governance,” Australian Strategic Policy Institute, 2021, <http://web.archive.org/web/20220320210500/https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2021-11/Chinas%20cyber%20vision.pdf?VersionId=M0ePH4Ij3w7WRJrLhYxVvt269MWSYOs>

chain shocks in the economy until they can sustain innovation-driven growth, particularly as other nation states look to become more self-reliant in the post-COVID era and increase their attention on risks to mitigate their exposure to volatile markets, including China's.

Given the expansive space of AI ethics and governance, the views of actors other than diplomats representing Beijing in the capacity as official delegates, may also be considered. Long and Xu, affiliated with the National University of Defense Technology, an institution under the leadership of the Central Military Commission, have noted Xi Jinping's vision for AI leapfrog development. While suggesting China should seek out a ban on LAWS, Long and Xu warn that Beijing should not cease research, which could give an opportunity to terrorists and countries that ignore international norms to exploit the capability gap. Unsurprisingly, China could not trust the United States to adhere to an arms control agreement according to their perspective.<sup>85</sup> Such analyses indicate research on LAWS-related technologies would be akin to an arms race, although unlike nuclear weapons which can be monitored globally, it would be more difficult to enforce a comprehensive test ban treaty on LAWS. Taking it a step further, Hou Wanqiu has considered whether the notion LAWS could be used as a defensive weapon is comparable to the International Court of Justice advisory opinion on the use of nuclear weapons,<sup>86</sup> which did not rule out that a state could deploy its nuclear arsenal when its survival is at stake. Furthermore, Guan and Zheng have noted the exceptions China has provided under its nuclear weapons doctrine, or those applicable under Article 51 of the UN Charter.<sup>87</sup> On face value, these defensive systems would extend beyond use within sovereign jurisdiction or claimed territorial areas and appear somewhat misaligned with the official position of Beijing's delegation, which has acknowledged the humanitarian consequences of indiscriminate or disproportionate attacks on civilians. Nevertheless, the context of Beijing's diplomatic approach on LAWS is within preliminary discussions exploring thematic issues along with CCW counterparts, and it is not far-fetched to see a softening of this approach if armed conflict breaks out. As evident in their diplomacy and media coverage of the war in Ukraine, Beijing

<sup>85</sup> 龙坤[Long Kun], 徐能武 [Xu Nengwu], “致命性自主武器系统军控——困境、出路和参与策略,” [Controlling the Killer Robots: Problems, Paths, and Strategies], *国际展望* [Global Review] 40, no. 2 (2020): 100–101, <https://doi.org/10.13851/j.cnki.gjzw.202002005>; see also, 徐能武 [Xu Nengwu], 龙坤 [Long Kun], “联合国 CCW 框架下致命性自主武器系统军控辩争的焦点与趋势,” [Lethal Autonomous Weapon Systems in the UN CCW Framework: Focus and Trends in the Arms Control Debate], *国际安全研究* [Journal of International Security Studies] 5 (2019): 108–132, <https://doi.org/10.14093/j.cnki.cn10-1132/d.2019.05.005>

<sup>86</sup> 侯婉秋 [Hou Wanqiu], “致命性自主武器系统与区分原则,” [Lethal Autonomous Weapon Systems and the Principle of Distinction] (master's thesis, Jilin University, 2020), 8–9, <https://doi.org/10.27162/d.cnki.gjlin.2020.002005>.

<sup>87</sup> 管建强 [Guan Jianqiang], 郑一 [Zheng Yi], “国际法视角下自主武器的规制问题,” [Regulation of autonomous weapons from the perspective of international law], *中国海洋大学学报 (社会科学版)* [Journal of Ocean University of China (Social Sciences)], no. 3 (2020): 110–111, <http://web.archive.org/web/20210102071342/http://zghz.cbpt.cnki.net/WKD/WebPublication/wkDownLoad.aspx?fileID=da1e8996-a367-4574-9f6f-f324aba55d2a&pid=f85221fb-e7a7-4159-8d19-1d47002f085e>

has neither condemned Moscow for the invasion, nor implemented sanctions in protest of the unfolding humanitarian crisis.<sup>88</sup> The prospect that LAWS could also commit atrocities, similarly, may become a position queried by Beijing if the basis of an armed conflict were considered to be defensive, including if this viewpoint were contrary to the majority position of the international community on the origins of the conflict.

In addition, other academics based in China have suggested that prohibiting research and development would not be possible due to their government's push for development in militarized AI and the requirement for self-defense. He Bei has suggested China accelerate "leapfrog development" in the areas of military AI and conventional weapons, to overtake the capability gap of its adversaries. As opposed to the LAWS moratorium called upon by then-special rapporteur Christof Heyns, the analyst recommends Beijing consider the gap in international law as an opportunity for pioneering research and development on autonomous weapons systems. Of course, this would not exclude the possibility of pursuing diplomacy, as the analyst contends Beijing could negotiate its preferred characterization of LAWS at the UN, including the difference between offensive and defensive deployments. Another option suggested was that China promote tools that gradually develop soft law, providing the Tallinn Manual on cyber warfare operations as an example.<sup>89</sup> Evidently, the above options which are available to China, could also be pursued by other great powers. However, the discourse on LAWS among Chinese analysts and policy makers appears to explicitly consider AI as a tool for military use, and conversely, acknowledge the dual-use characteristics of AI along with other emerging technologies.

In relation to the research, development and use of emerging technologies, particularly AI and unmanned weapons, the above analysis suggests Chinese policy makers understand their country has been unable to reach parity with the U.S. and must instead concentrate efforts on 'leapfrogging' to the adoption of future systems which neither nation state has yet developed. In relation to LAWS, Chinese policy makers have considered whether these devices will contribute to national security (for example, as defensive weapons) but it is evident that LAWS on balance are more likely to be understood as posing a threat to China, and Beijing is pursuing offensive

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<sup>88</sup> Ingram Niblock, Samantha Hoffman, and Matthew Knight, "China's messaging on the Ukraine conflict," Australian Strategic Policy Institute, May 2022, <http://web.archive.org/web/20220525120628/https://ad-aspi.s3.ap-southeast-2.amazonaws.com/2022-05/Chinas%20messaging%20on%20the%20Ukraine%20conflict.pdf?VersionId=NTxOLMJgwYuHxr8nflwxovIBCkkt3U.c>

<sup>89</sup> 何蓓 [He Bei], "自主武器系统的国际法问题研究," [Research on International Law issues of Autonomous Weapon System] (PhD thesis, Wuhan University, 2018), 159–162, <https://kns.cnki.net/kcms/detail/detail.aspx?FileName=1019016377.nh&DbName=CDFD2020>

weapons in other areas outside of LAWS. It is possible Beijing does not envisage potential adversaries acquiring the force multiplier capability that LAWS could offer, which may threaten its territorial claims, as a positive development. Moreover, unwelcome regulation on the dual-use components available in robotics, in considering Beijing’s chosen pathway of civil-military integration, would make market access more difficult for the associated technologies, thus exposing risks for China’s economic development, access to markets, and relationships with trade partners.

Based on the above analysis, it is probable that Chinese diplomats and scholars view the regulation of LAWS, on Beijing’s terms, as a desirable objective. Further statements in support of a governance mechanism are therefore likely to be forthcoming. However, the steps for Beijing to commit such statements into action are limited. As noted above, Beijing would not support a political declaration that does not contain enforcement measures. Rather, Beijing considers it is a developing country that must continue with its military modernization efforts, encompassing AI components, to deter the United States, which it does not trust with adherence to arms control agreements. The next section expands further upon this trajectory of U.S.-China bilateral relations.

### **Military Modernization in the Xi Jinping Era**

Not surprisingly, ‘Xi Jinping Thought’ is also reflected in China’s military modernization and its approach to the United States. What later would become an observable theme of China’s new foreign policy under Xi, was the extent to which Xi’s first movements would herald the departure from his predecessor’s policy of China’s ‘peaceful rising,’ which had been intended to convey a greater willingness to accommodate U.S. interests.<sup>90</sup> Initially, Xi and his cadres gesticulated their ambition for growing the bilateral relationship with the United States, symbolized when Xi attended the June 2013 California summit with President Obama. Here, China’s new leaders acknowledged issues with North Korea’s nuclear ambitions, and appeared more open to Washington’s conditions for a bilateral investment treaty. Indeed, with the White House alleging that cyber infringements into U.S. government and private networks were attributable to Chinese actors, a high-level working group was established on cybersecurity. In practice, however, no substantive concessions were granted that would have significantly increased the trust between

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<sup>90</sup> Susan L. Shirk, *China: Fragile Superpower* (New York: Oxford University Press, 2007), 242–245.

the two powers, required to overcome the military modernization platform under Xi and renewed focus on the Indo-Pacific under Obama, and later the Trump and Biden administrations.

Discernibly, the Chinese Dream sought to expand China’s engagements abroad. As a first plank in this strategy, in September of 2013, Xi unveiled the Belt and Road Initiative. Beijing moved to invest in and develop infrastructure, expand use of its currency, and more readily facilitate Chinese enterprises to connect the land and sea routes across Eurasia and the Indian Ocean, and later the Pacific. Other developments also took place at a rapid pace, including the establishment of the Asian Infrastructure Investment Bank. Closer to home, Xi further described Taiwan as a “political issue that can’t be passed on for generations,” and implemented a strategy to build up Beijing’s military presence and control over an air defense identification zone in the South China Sea.<sup>91</sup> Philippines President Rodrigo Duterte defied expectations by not seeking to confront Beijing’s leaders despite the 2016 South China Sea Arbitration decision largely ruling in favor of Manila.<sup>92</sup> Indeed, perhaps in a response to Beijing’s assertiveness during the Xi period, Manila announced it may cancel the Visiting Forces Agreement with the United States (although this position was later reversed). Nevertheless, Xi seemed to be reshaping the region with the center of economic and, increasingly, military power shifting toward Beijing.

By 2015, Xi had launched 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.<sup>93</sup> In addition, he successfully inserted “Xi Jinping Thought” and achieved other amendments to the party’s constitution, to steer the state into a “new era” of national revitalization, including the removal of term restrictions on his leadership. In this regard, particularly during Obama’s second term in office, Xi’s assertiveness became emboldened, in a region where the U.S. was still undertaking its own strategic ‘pivot.’ These actions would prove disconcerting markers for the Obama and later Trump administrations, presaging a new era of firmer state controls within China and an increasingly militarized foreign policy mandate.

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<sup>91</sup> Richard McGregor, “Party Man: Xi Jinping’s Quest to Dominate China,” *Foreign Affairs*, September/October 2019, 18–25, <https://www.foreignaffairs.com/articles/china/2019-08-14/party-man>

<sup>92</sup> Michael Rowand, “Duterte Will Fight Anyone but Beijing,” *Foreign Policy*, October 19, 2020, <http://web.archive.org/web/20201101081255/https://foreignpolicy.com/2020/10/19/duterte-philippines-china-interests/>

<sup>93</sup> Gill, “Xi Jinping’s Grip on Power.”

Over time, Washington came to view China’s intensifying military modernization as being designed, in part, to inhibit the autonomy of movement and prevent an international intervention in the region. According to the U.S. Department of Defense (DoD), the PLA sought to develop “capabilities with the potential to degrade core U.S. operational and technological advantages.”<sup>94</sup> A primary concern related to China’s increasing use of intimidation in disputes with its neighbors over territory in the East and South China Seas, which could undercut the stability on which the region depended. As China’s military continued to modernize, according to the Pentagon, Beijing could become emboldened and compete with the U.S. in a range of areas, including air, space, and cyberspace, where the PLA was directing significant political, organizational, and financial resources. Moreover, Chinese investments in innovative military technologies, such as autonomous and unmanned systems, maneuverable reentry vehicles (including hypersonic missiles), AI and other enabling technologies, were an indication of attempts to leapfrog to the next generation of warfighting capabilities.

Moreover, it was clear Beijing would also modernize and reinvigorate the PLA, as part of ensuring the Chinese Dream’s realization. Xi considered the military’s warfighting capabilities as the main goal of their modernization endeavors.<sup>95</sup> When he came to power, Xi was not only the General-Secretary of the CCP and President of the State; he also became Chair of the Central Military Commission (CMC). In this position as CMC Chair, Xi reformed the military’s institutions “under a new structure with the CMC exercising overall leadership” over the military’s governance. Through this change, PLA officers and soldiers were mandated to learn Xi Jinping Thought. This ideological alignment would serve, according to Xi, “as a foundation for maintaining the military’s absolute loyalty to our Party,” and through military party organizations, would help the military to “fight against [its] corruption” and adapt to its future requirements, “to win wars based on our [drawing upon our] Party’s political and organizational strength.”<sup>96</sup> The PLA’s reforms increased the speed to which modernization would take place, including the creation of a more efficient joint command system, more realistic training to prepare for actual

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<sup>94</sup> U.S. Department of Defense, “Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2019,” Office of the Secretary of Defense, 2019, iii, [https://media.defense.gov/2019/May/02/2002127082/-1/1/2019\\_CHINA\\_MILITARY\\_POWER\\_REPORT.pdf](https://media.defense.gov/2019/May/02/2002127082/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf)

<sup>95</sup> Chen Fei cited in Ian E. Rinehart, “The Chinese Military: Overview and Issues for Congress,” Congressional Research Service (2016), 8, <http://web.archive.org/web/20201224035918/https://fas.org/sgp/crs/row/R44196.pdf>

<sup>96</sup> Xi Jinping, *The Governance of China III* (Beijing: Foreign Languages Press, 2020), 446–448.

warfare scenarios, the augmentation of skilled and qualified personnel, and additional directions under the party's leadership of the military.<sup>97</sup>

Modernization of the PLA in other areas, was matched by a commensurate increase in funding for the military. According to DoD estimates, the budget for China's military grew at an average of 9.7 percent annually from 2003 to 2012. At the beginning of the Xi Jinping period, China's officially announced budget for 2013 emerged at \$114 billion, representing an increase of 10.7 percent over 2012. The Pentagon assessed the true figure, however, was \$215 billion.<sup>98</sup> As a means to maintain a contingency, the Defense Strategic Guidance report advised the U.S. should "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."<sup>99</sup> Whether or not the focus of the 'rebalance' to the Indo-Pacific region had begun as a primarily economic or political goal for the U.S., the growing skepticism over China's intentions began to alter Washington's focus to include more material, military features.

In responding to this skepticism, Beijing made attempts to reassure Washington that it was also committed to working *within* the international system, rather than attempting to reshape it. Despite China's assurances of "peaceful development,"<sup>100</sup> the White House sought greater transparency, and importantly, clarification over PLA modernization activities. By May 2013, further alarming aspects of China's military developments had required Obama to seek greater explanation in terms of Chinese intentions.<sup>101</sup> As one DoD report noted, China's military modernization appeared to become more offensively-oriented, "designed to improve the capacity of [China's] armed forces to fight and win short-duration, high-intensity regional military conflict."<sup>102</sup> It assessed the "principal focus and primary driver of China's military investment" referred to Taiwan, and that China's military modernization was also focused on developing a broader suite of capabilities for

<sup>97</sup> Rinehart, "The Chinese Military," 8–9.

<sup>98</sup> U.S. Department of Defense, "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense," January 2012, 2, [http://web.archive.org/web/20201214093352/https://archive.defense.gov/news/Defense\\_Strategic\\_Guidance.pdf](http://web.archive.org/web/20201214093352/https://archive.defense.gov/news/Defense_Strategic_Guidance.pdf)

<sup>99</sup> U.S. Department of Defense, Sustaining U.S. Global Leadership.

<sup>100</sup> Xi Jinping, in Obama White House Office of the Press Secretary, "Remarks by President Obama and President Xi Jinping of the People's Republic of China After Bilateral Meeting," Sunnylands Retreat, Rancho Mirage, California, June 8, 2013, <http://web.archive.org/web/20201217143152/https://obamawhitehouse.archives.gov/the-press-office/2013/06/08/remarks-president-obama-and-president-xi-jinping-peoples-republic-china>

<sup>101</sup> Susan V. Lawrence, "U.S.-China Relations: An Overview of Policy Issues," Congressional Research Service (2013), 17, <http://web.archive.org/web/20210101082306/https://crsreports.congress.gov/product/pdf/R/R41108>

<sup>102</sup> U.S. Secretary of Defense, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2013," Office of the Secretary of Defense, 2013, i, [http://web.archive.org/web/20201224025536/https://archive.defense.gov/pubs/2013\\_China\\_Report\\_FINAL.pdf](http://web.archive.org/web/20201224025536/https://archive.defense.gov/pubs/2013_China_Report_FINAL.pdf)

“protracted-scope projection” and missions in evolving spheres such as cyber, space, and electronic warfare, and regional military actions. The U.S. considered the trajectory was aimed to develop capabilities such as “anti-access/area-denial,” which China termed “counter-intervention operations.” However described, the DoD also recognized the PLA’s development of “carrier killer” anti-ship ballistic missiles would provide “the capability to attack large ships, including aircraft carriers, in the western Pacific Ocean” and that stealth aircraft similarly could “strike regional airbases and facilities.”<sup>103</sup> Lastly, the acquisition of an aircraft carrier was viewed as indicative of Beijing’s naval ambitions to project power further across the region.

The Chinese leadership’s perception of its national security was clearly centered on its interpretation of predominant global movements blended with its internal situation. As Beijing evaluated in its 2015 defense white paper, an overall favorable external environment would remain in place for a more years at least.<sup>104</sup> In this regard, what was meant by “generally favorable” was what Beijing’s leaders perceived a period in which, while acrimonious at varying intervals, would be stable enough to provide a “strategic opportunity” where China could pursue its modernization without facing major external challenges. In hindsight, one Chinese analyst’s prediction that from 2020 and beyond, China may face greater challenges, including the attention of the U.S. and Japan, a less stable economy globally, and the necessity to maintain its own economy domestically, was also fairly accurate.<sup>105</sup> Another trend in China’s favor, at the time, appeared to be the move toward a multipolar world, in which Beijing assessed it was positioned to expand its “growing international standing and influence.”<sup>106</sup> In considering the emergence of new technological frontiers of tension, the white paper also argued that outer space and cyberspace would become pivotal conflict domains, including the assimilation and intensification of information technology into warfighting, so-called “informationization,” or informatization.<sup>107</sup> Instead of expressing these changing conditions as benign, Chinese analysts emphasized the challenges Beijing faced, and the requirements for building a more powerful military.<sup>108</sup>

<sup>103</sup> Lawrence, “U.S.-China Relations,” 16–17.

<sup>104</sup> Chinese Government Ministry of National Defense, “National Security Situation,” Chapter 1 of ‘China’s Military Strategy’ White Paper, State Council Information Office of the People’s Republic of China, May 26, 2015, [http://web.archive.org/web/20200529220416/http://eng.mod.gov.cn/Database/WhitePapers/2015-05/26/content\\_4586688.htm](http://web.archive.org/web/20200529220416/http://eng.mod.gov.cn/Database/WhitePapers/2015-05/26/content_4586688.htm)

<sup>105</sup> Xu Jian cited in Rinehart, “The Chinese Military,” 8.

<sup>106</sup> Ibid.

<sup>107</sup> Chinese Government Ministry of National Defense, “National Security Situation.”

<sup>108</sup> Zhang Xiaolin and Cao Yang cited in Rinehart, “The Chinese Military,” 8–9.

While China’s military modernization was initially in large part a response to U.S. capabilities, Beijing’s trajectory has appeared likely to differentiate itself to that of the United States. As noted, the push to develop next-generation technologies may shift the future of warfare in a new direction, in which AI will be essential to military power. This involves the PLA financing a wide array of projects encompassing AI, and Chinese defense sector and PLA research centers engaging in extensive research and development, including collaborating with private entities. Such direction could be the beginning of a marked change in the PLA’s tactical method, outside its customary asymmetric concentration on focusing on U.S. susceptibilities, to the offset-oriented quest of rivalry to innovate. As such, the PLA would be looking at undertaking what has been described as ‘leapfrog development’ to attain a pivotal advantage in ‘strategic front-line’ technologies.<sup>109</sup>

Under the Trump administration, the Pentagon expanded its budget to address the relative weakening of Washington’s military competitive advantage “over any potential enemy.” Nevertheless, Beijing’s modernization efforts continued to cause unease.<sup>110</sup> Of course, the Bush and Obama administrations had not downplayed the prospect of China’s growing military prowess. However, by 2017, observers began to consider Beijing’s status and capabilities as that of a “near peer competitor” in the region.<sup>111</sup> By 2019, dialogue among Defense officials had become increasingly concerned. In discussing military priorities, the former Deputy Secretary of Defense for Strategy and Force Development remarked the military threat from China and Russia had become so demanding that the Pentagon was required to do either “less of everything else,” including the wars in the Middle East, or do it more efficiently.<sup>112</sup> This meant U.S. investment in the DoD should be connected in some way to preparing for great power conflict, or otherwise considered under a more harsh and skeptical light.<sup>113</sup> Around this time, the “cross-Strait military balance” was also judged to have “shifted in China’s favor in recent years,” representing a major challenge to the

<sup>109</sup> Kania, “Battlefield Singularity,” 4.

<sup>110</sup> Joseph F. Dunford, Jr., “Statement of General Joseph F. Dunford, Jr., USMC, 19th Chairman of the Joint Chiefs of Staff, Department of Defense Budget Hearing,” Senate Armed Services Committee, April 26, 2018, 3, [http://web.archive.org/web/20180427170104/https://www.armed-services.senate.gov/imo/media/doc/Dunford\\_04-26-18.pdf](http://web.archive.org/web/20180427170104/https://www.armed-services.senate.gov/imo/media/doc/Dunford_04-26-18.pdf)

<sup>111</sup> Cortez A. Cooper III, “PLA Military Modernization: Drivers, Force Restructuring, and Implications,” Testimony before the U.S.-China Economic and Security Commission, February 15, 2018, RAND Corporation, 12, [http://web.archive.org/web/20201117115625/https://www.rand.org/content/dam/rand/pubs/testimonies/CT400/CT488/RAND\\_CT488.pdf](http://web.archive.org/web/20201117115625/https://www.rand.org/content/dam/rand/pubs/testimonies/CT400/CT488/RAND_CT488.pdf)

<sup>112</sup> Elbridge A. Colby, “Testimony Before the Senate Armed Services Committee Hearing on Implementation of the National Defense Strategy,” January 29, 2019, 11, [http://web.archive.org/web/20201210095302/https://www.armed-services.senate.gov/imo/media/doc/Colby\\_01-29-19.pdf](http://web.archive.org/web/20201210095302/https://www.armed-services.senate.gov/imo/media/doc/Colby_01-29-19.pdf)

<sup>113</sup> Colby, “Testimony Before the Senate.”

United States' ability to intervene effectively in a China-Taiwan conflict.<sup>114</sup> This stemmed from Beijing's envisaged counter-intervention capabilities, as well as its military modernization efforts and willingness to outlast U.S. forces.<sup>115</sup> By early 2020, some saw the U.S. as having lost its advantage "throughout the spectrum of operations" in the South China Sea, allowing China to obtain "escalation dominance" since it had the "power to deter any U.S. turn towards escalation."<sup>116</sup> However, in late 2020, the Navy Secretary announced the 1st Fleet would be stood up and put "in the crossroads between the Indian and the Pacific oceans," indicating the U.S. would continue to use freedom of navigation operations to contest Chinese maritime claims.<sup>117</sup>

The apparent shift in U.S. focus to dependence on trade, beginning under the Trump administration, included the adoption of trade barriers and Executive Orders to prevent U.S. investments in companies with links to the Chinese military, with a national emergency declared "with respect to this threat" prohibiting publicly traded securities, as listed by the Secretary of Defense and/or Secretary of the Treasury.<sup>118</sup> Of course, China's agenda for a military-civil synthesis could empower the PLA to take maximum advantage of private sector advancement in AI to augment its military capabilities, but this would now take place with less inbound investment. The quantum is worth noting. For example, 77 percent of the companies involved in development of China's first endogenous aircraft carrier were from the civilian sector. Major outcomes from military-civil "fusion" could very well be expected in the areas of LAWS and other unmanned platforms, supercomputers, driverless military vehicles, and missile launch vehicles,<sup>119</sup> although the U.S. Executive Orders may encourage Chinese companies to develop independent innovation earlier than planned. More recently, under the Biden administration, the U.S. has more

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<sup>114</sup> "2017 Report to Congress of the U.S.-China Economic and Security Review Commission," U.S. Government Publishing Office, November 2017, 19, 385, 371, 389, 392, 401, 604, [http://web.archive.org/web/20201016162023/https://www.uscc.gov/sites/default/files/2019-09/2017\\_Annual\\_Report\\_to\\_Congress.pdf](http://web.archive.org/web/20201016162023/https://www.uscc.gov/sites/default/files/2019-09/2017_Annual_Report_to_Congress.pdf)

<sup>115</sup> Oriana Skylar Mastro, "China's Military Modernization Program: Trends and Implications," Statement before the U.S.-China Economic and Security Review Commission on Shifting Dynamics in the U.S.-China Security relationship, September 4, 2019, 10-12, [http://web.archive.org/web/20201102033437/https://www.uscc.gov/sites/default/files/Panel%20II%20Mastro\\_Written%20Testimony.pdf](http://web.archive.org/web/20201102033437/https://www.uscc.gov/sites/default/files/Panel%20II%20Mastro_Written%20Testimony.pdf)

<sup>116</sup> John Power, "Has the US Already Lost the Battle for the South China Sea?" *South China Morning Post*, January 18, 2020, <http://web.archive.org/web/20220321224006/https://www.scmp.com/week-asia/politics/article/3046619/has-us-already-lost-battle-south-china-sea>

<sup>117</sup> Seth Robson, "Navy pushes ahead with plans to stand up another numbered fleet in the Indo-Pacific," *Stars and Stripes*, December 4, 2020, <http://web.archive.org/web/20201219102052/https://www.stripes.com/news/pacific/navy-pushes-ahead-with-plans-to-stand-up-another-numbered-fleet-in-the-indo-pacific-1.654149#menu-panel-topics>

<sup>118</sup> Donald J. Trump, "Executive Order on Addressing the Threat from Securities Investments that Finance Communist Chinese Military Companies," White House, November 12, 2020, <https://web.archive.org/web/20201231115852/https://www.whitehouse.gov/presidential-actions/executive-order-addressing-threat-securities-investments-finance-communist-chinese-military-companies/>

<sup>119</sup> Japanese Ministry of Defense, "National Institute for Defense Studies China Security Report 2021: China's Military Strategy in the New Era," 2020, 76-77, [http://web.archive.org/web/20201113230702/http://www.nids.mod.go.jp/publication/chinareport/pdf/china\\_report\\_EN\\_web\\_2021\\_A01.pdf](http://web.archive.org/web/20201113230702/http://www.nids.mod.go.jp/publication/chinareport/pdf/china_report_EN_web_2021_A01.pdf)

or less ended its strategic ambiguity on Taiwan, committing to assist Taipei militarily,<sup>120</sup> and declaring an invasion from Chinese forces would “dislocate the entire region and be another action similar to what happened in Ukraine.”<sup>121</sup> Although substantial details were not provided, Biden’s remarks suggest an invasion of Taiwan would likely disrupt China’s trade flows, currency, and inbound foreign direct investment, similar to political and economic sanctions placed on Russia following the outbreak of war in Ukraine.

## Conclusion

This article has assessed ‘Xi Jinping Thought’ and Beijing’s position on LAWS. It has also contextualized these ideological and diplomatic statements with a recounting of the hard power landscape shaping up across the Indo-Pacific over the last decade. The argument bridging these components is the assessment that China relies on trade for its economy but does not rely on LAWS for its security, providing some flexibility in its approach to any potential negotiation on LAWS. To this extent, regulating LAWS for offensive purposes would sit relatively comfortably with Beijing’s proposed characterization of these weapons systems, while allowing time for continued trade and access to AI related goods and services which could support the Chinese economy in reaching toward Xi’s goal of independent innovation. Evidently, an arms control agreement in this area would require the consent of the U.S. and China (and other major powers such as Europe and Russia) to be implemented, raising the prospect of whether such consensus is possible in the polarized geopolitical climate of a war in Ukraine and increased tensions in East Asia. To this extent, China’s most successful endeavor could be outside of the military domain, through its shaping of ethics related to AI governance, such as through the adoption of the Beijing Consensus by UNESCO.

Beijing and Washington remain distrustful of each other’s intentions and likelihood to abide by international commitments. During the Trump administration, Chinese rhetoric was intended to undermine the withdrawal of the U.S. from treaties and question Washington’s commitment to allies, seeking to position Beijing as a more ‘responsible’ power. More recently, China’s statement on the New Era of International Relations, issued as joint statement with Russia during President

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<sup>120</sup> Joe Biden cited in Scott Pelley, “President Joe Biden: The 2022 60 Minutes Interview,” *CBS News*, September 18, 2022, <https://web.archive.org/web/20220920075029/https://www.cbsnews.com/news/president-joe-biden-60-minutes-interview-transcript-2022-09-18/>

<sup>121</sup> Tessa Wong, “Biden vows to defend Taiwan in apparent US policy shift,” *BBC News*, May 2022, <http://web.archive.org/web/20220529095746/https://www.bbc.com/news/world-asia-china-61548531>

Putin’s visit to Beijing at the beginning of the 2022 Winter Olympics, noted “the denunciation by the United States of a number of important international arms control agreements has [had] an extremely negative impact on international and regional security and stability,” and affirmed Beijing and Moscow have “no limits” or “‘forbidden’ areas of cooperation,” and that their bilateral relationship today is “superior to [their] political and military alliances of the Cold War era.”<sup>122</sup> Moreover, China has effectively supported Russia in laying blame on the North Atlantic Treaty Organization (NATO) for Moscow’s actions in Ukraine, and in doing so, revealed Beijing’s subjectivity in describing the invasion of another self-governing people as a war of defense.<sup>123</sup> As ties with the United States harden, an arms control agreement on LAWS (and treatment of related dual-use technologies) could become a comparatively pressing issue for Beijing. Washington, conversely, appears to have greater leverage in its diplomacy through its historically guarded approach to ratifying arms control agreements that are not clearly in alignment with the U.S. national interest, including the reduction of military casualties. Moreover, the Biden administration has renewed its partnerships and engagements, indicating an overall skepticism of Chinese intentions in the region.

If Beijing is intent on pushing for regulation on LAWS, it may look to achieve traction through other areas, such as through Security Council mechanisms to address the envisaged proliferation of LAWS to terrorists—provided the measures do not seek to prevent other trade barriers from emerging in the future. Another way forward, may rest on negotiating LAWS as part of a package or agreement across other security related issues. After all, robotics and AI are relatively complex issues that span across the perhaps competing national interests of economic and military security, which presidential decision-making can overcome, provided each party trusts the other’s intentions or secures verification measures. Unlike the Obama and Trump administrations, the Biden administration not only inherited an America that had come to be defined by Beijing’s attainment—rather than aspiration—of civil-military integration within its own borders, but also one that had begun to implement a cohesive and largely bipartisan policy response. This initiative may yet challenge the ideological orthodoxy of China guided by Xi Jinping Thought, in an increasingly inward looking and unbalanced post-COVID world.

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<sup>122</sup> ‘Joint Statement of the Russian Federation and the People’s Republic of China on the International Relations Entering a New Era and the Global Sustainable Development,’ February 4, 2022, Presidential Executive Office, Kremlin, <https://web.archive.org/web/20220204132213/http://en.kremlin.ru/supplement/5770>

<sup>123</sup> Niblock, Hoffman, and Knight, ‘China’s messaging on the Ukraine conflict,’ 9.