# 1AC vs Mishika

## +1AC—Advantages

### 1AC—War

#### Chinese autonomous weapons development is on the cusp of leapfrogging the US—urgent action is needed.

[Matt Bartlett (6-11-2020), University of Auckland Faculty of Law, “The AI Arms Race in 2020”, towards data science, https://towardsdatascience.com/the-ai-arms-race-in-2020-e7f049cb69ac]//[CHS](https://towardsdatascience.com/the-ai-arms-race-in-2020-e7f049cb69ac%5d//CHS) PK

While states might debate whether lethal autonomous weapon systems (or ‘killer robots’ in the popular imagination) are “unacceptably immoral”, there can be no doubt that Guterres is right on the urgency of the risk: development and use of autonomous weapons are both accelerating, and the stakes — ethical and political — are high.

The world’s military powers have been competing to dominate this new class of intelligent weapons for years, with this AI arms race occurring against a contentious global landscape where an advantage in military AI could make a real difference to the balance of power. This geopolitical game theory driving such advancement in the sophistication of war machines has an unwanted blind spot — historically, human rights factor little into strategic calculations.

With Covid-19, the acceleration of automation has taken on greater speed across a variety of different fronts. Military operations have had to be completely re-thought — physical distancing on a submarine is much harder than physical distancing in a supermarket. Lethal AI already had some mounting advantages over human equivalents, and can now add ‘immunity from catastrophic viruses’ to that list. For all of these reasons, keeping track of the AI arms race is more vital than ever.

If It’s A Race, Who’s Winning?

Almost every month, another innovation in autonomous weapons leaps off the headlines in military news — the autonomous Chinese Blowfish A3 helicopter drone equipped with machine guns or the Russian army of unmanned ‘Marker’ ground vehicles armed with mortars and grenade launchers. There is no question that new inventions in the world of military AI abound, but it is far less clear which country boasts the strongest tech.

Key figures in the United States military have been forthright in warning of China’s might in this area. The US Defense Department’s relatively new Joint Artificial Intelligence Center is building command-and-control AI capability for the first time, explicitly citing the Chinese threat as the reason for the department’s urgency. The Center’s director Lt. Gen. Jack Shanahan has been clear about his desire to automate as much of the American military machine as possible:

“What I don’t want to see is a future where our potential adversaries have a fully AI-enabled force and we do not.”

In the last year, officials as senior as the US Defense Secretary have warned that Chinese technology may, in fact, already be more advanced than America’s. Secretary Mark Esper predicted that China might have “leapfrogged” existing American technology. With the military establishment suitably concerned, spending on lethal autonomous weapons in all branches of the American military seems set to go to another level in 2020 after already increasing in 2019.

For China’s part, mounting investment in autonomous weapon development is a key plank in its ongoing effort to usurp American military dominance. Almost all large-scale AI programs in China benefit from massive governmental support and a huge trove of data, and its autonomous weapons program is the jewel in Beijing’s AI crown. China’s huge investment in lethal autonomous weapons predates other militaries, and its military theorists are ahead of the rest of the world in building futuristic “intelligentized” models of human-machine operations.

A further dimension to China’s AI strategy is economic, with Beijing seemingly interested in profiting from its autonomous weapons program as a new export product. Already, China appears to be exporting many of its most high-tech aerial drones to wealthy buyers in the Middle East, explicitly marketing them as capable of advanced autonomous operations like assassinations. Last year, Zeng Yi, a senior executive at Norinco, China’s third-largest defense company, predicted that as early as 2025, “there will be no people fighting in battlegrounds”.

#### 2 scenarios for war—

#### First is US-China war—Chinese LAWs growth causes nuclear war—they increase the risk of miscalc and shred deterrence dynamics.

[James Johnson (2020), PhD in Politics and IR from the University of Leicester, Assistant Prof. in Chinese Politics and FoPo at Dublin City University and Fellow with the Modern War Institute at West Point; “Artificial Intelligence, Drone Swarming and Escalation Risks in Future Warfare”; 16 Apr 2020; <https://www.tandfonline.com/doi/abs/10.1080/03071847.2020.1752026?scroll=top&needAccess=true&journalCode=rusi20> CHS PK

Autonomous Weapons, Swarming, and Instability The proliferation of a broad range of AI-augmented autonomous weapon systems (most notably drones used in swarming tactics) could have far-reaching strategic implications for nuclear security and escalation in future warfare.24 Several observers anticipate that sophisticated AI-augmented AWSs will soon be deployed for a range of ISR and strike missions.25 Even if AWSs are used only for conventional operations, their proliferation could nonetheless have destabilizing implications and increase the risk of inadvertent nuclear escalation. For example, AI-augmented drone swarms may be used in offensive sorties targeting ground-based air defenses and by nuclear-armed states to defend their strategic assets (i.e., launch facilities and their attendant C3I and early-warning systems), exerting pressure on a weaker nuclear-armed state to respond with nuclear weapons in a use-them- or- lose- them situation.

Recent advances in AI and autonomy have substantially increased the perceived operational value that military great powers attach to the development of a range of AWSs,26 potentially making the delegation of lethal authority to AWSs an increasingly irresistible and destabilizing prospect.27 That is, in an effort to defend or capture the technological upper hand in the possession of cutting-edge war-fighting assets vis-à- vis strategic rivals’ traditionally conservative militaries, states may eschew the potential risks of deploying unreliable, unverified, and unsafe AWS. Today, the main risk for stability and escalation is the technical limitations of the current iteration of AI machine learning software (i.e., brittleness, explainability, unpredictability of machine learning, vulnerability to subversion or “data poisoning,” and the fallibility of AI systems to biases).28 To be sure, immature deployments of these nascent systems in a nuclear context would have severe consequences.29

Conceptually speaking, autonomous systems will incorporate AI technologies such as visual perception, speech, facial recognition, and decision-making tools to execute a range of core air interdiction, amphibious ground assaults, long-range strike, and maritime operations independent of human intervention and supervision.30 Currently, only a few weapon systems select and engage their targets without human intervention. Loitering attack munitions (LAM)—also known as “loitering munitions” or “suicide drones”—pursue targets (such as enemy radars, ships, or tanks) based on preprogrammed targeting criteria and launch an attack when their sensors detect an enemy’s air defense radar.31 Compared to cruise missiles (designed to fulfill a similar function), LAMs use AI technology to shoot down incoming projectiles faster than a human operator ever could and can remain in flight (or loiter) for much longer periods. This attribute could complicate the ability of states to reliably and accurately detect and attribute autonomous attacks.32

A low-cost lone-wolf unmanned aerial vehicle (UAV) would, for example, not pose a significant threat to a US F-35 stealth fighter, but hundreds of AI machine learning autonomous drones in a swarming sortie may potentially evade and overwhelm an adversary’s sophisticated defense capabilities—even in heavily defended regions such as China’s east and coastal regions.33 Moreover, stealth variants of these systems34—coupled with miniaturized electromagnetic jammers and cyberweapons—may be used to interfere with or subvert an adversary’s targeting sensors and communications systems, undermining its multilayered air defenses in preparation for drone swarms and long-range stealth bomber offensive attacks.35 In 2011, for example, MQ-1 and MQ-9 drones in the Middle East were infected with hard-to- remove malicious malware, exposing the vulnerability of US subset systems to offensive cyber.36 This threat might, however, be countered (or mitigated) by the integration of future iterations of AI technology into stealth fighters such as the F-35.37 Manned F-35 fighters will soon be able to leverage AI to control small drone swarms in close proximity to the aircraft performing sensing, reconnaissance, and targeting functions, including countermeasures against swarm attacks.38 In the future, extended endurance of UAVs and support platforms could potentially increase the ability of drone swarms to survive these kinds of countermeasures.39

Several prominent researchers have opined that, notwithstanding the remaining technical challenges as well as the legal and ethical feasibility,40 we can expect to see operational AWSs in a matter of years.41 According to former US deputy secretary of defense Robert Work, the United States “will not delegate lethal authority to a machine to make a decision” in the use of military force. 42 Work adds, however, that such self-restraint could be tested if a strategic competitor (especially China and Russia) “is more willing to delegate authority to machines than we are and, as that competition unfolds, we’ll have to make decisions on how we can best compete” (emphasis added).43 In short, pre-delegating authority to machines, and taking human judgment further out of the crisis decision-making process, might severely challenge the safety, resilience, and credibility of nuclear weapons in future warfare.44

The historical record is replete with examples of near nuclear misses, demonstrating the importance of human judgment in mitigating the risk of miscalculation and misperception (i.e., of another’s intentions, redlines, and willingness to use force) between adversaries during crises.45 Despite these historical precedents, the risks associated with unpredictable AI-augmented autonomous systems operating in dynamic, complex, and possibly a priori unknown environments remain underappreciated by global defense communities.46 Eschewing these risks, China and Russia plan to incorporate AI into unmanned aerial and undersea vehicles for swarming missions infused with AI machine learning technology.47 Chinese strategists have reportedly researched data-link technologies for “bee swarm” UAVs, particularly emphasizing network architecture, navigation, and anti-jamming military operations for targeting US aircraft carriers.48

Drones used in swarms are conceptually well suited to conduct preemptive attacks and nuclear ISR missions against an adversary’s nuclear and nonnuclear mobile missile launchers and nuclear-powered ballistic missile submarines (SSBN), along with their attendant enabling facilities (e.g., C3I and early warning systems, antennas, sensors, and air intakes).49 The Defense Advanced Research Projects Agency (DARPA), for example, is developing an autonomous surface vehicle (ASV) double outrigger, Sea Hunter, currently being tested by the US Navy to support antisubmarine warfare operations (i.e., submarine reconnaissance).50 Some observers have posited that autonomous systems like Sea Hunter may render the underwater domain transparent, thereby eroding the second-strike deterrence utility of stealthy SSBNs. The technical feasibility of this hypothesis is highly contested, however.51

On the one hand, several experts argue that deployed in large swarms, these platforms could transform antisubmarine warfare, rendering at-sea nuclear deterrence vulnerable. On the other hand, some consider such a hypothesis technically premature because (1) it is unlikely that sensors on board AWSs would be able to reliably detect deeply submerged submarines; (2) the range of these sensors (and the drones themselves) would be limited by battery power over extended ranges;52 and (3) given the vast areas traversed by SSBNs on deterrence missions, the chance of detection is negligible even if large numbers of autonomous swarms were deployed.53 Thus, significant advances in power, sensor technology, and communications would be needed before these autonomous systems have a game-changing strategic impact on deterrence.54 However, irrespective of the veracity of this emerging capability, the mere perception that nuclear capabilities face new strategic challenges would nonetheless elicit distrust between nuclear-armed adversaries—particularly where strategic force asymmetries exist. Moreover, DARPA’s Sea Hunter demonstrates how the emerging generation of autonomous weapons is expediting the completion of the iterative targeting cycle to support joint operations, thus increasing the uncertainty about the reliability and survivability of states’ nuclear second-strike capability and potentially triggering use-them- or- lose- them situations.

Conceptually speaking, the most destabilizing impact of AI on nuclear deterrence would be the synthesis of autonomy with a range of machine-learning- augmented sensors, undermining states’ confidence in the survival of their second-strike capabilities and in extremes triggering a retaliatory first strike.55 Enhanced by the exponential growth in computing performance and coupled with advances in machine learning techniques that can rapidly process data in real time, AI will empower drone swarms to perform increasingly complex missions, such as hunting hitherto hidden nuclear deterrence forces.56 In short, the ability of future iterations of AI able to predict based on the fusion of expanded and dispersed data sets and then to locate, track, and target strategic missiles such as mobile ICBM launchers in underground silos, on board stealth aircraft, and in SSBNs is set to grow.57

The following four scenarios illustrate the possible strategic operations AI-augmented drone swarms would execute.58 First, drone swarms could be deployed to conduct nuclear ISR operations to locate and track dispersed (nuclear and nonnuclear) mobile missile launchers and their attendant enabling C3I systems.59 Specifically, swarms incorporating AI-infused ISR, autonomous sensor platforms, ATR, and data analysis systems may enhance the effectiveness and speed of sensor drones to locate mobile missiles and evade enemy defenses.

Second, swarming could enhance legacy conventional and nuclear weapons delivery systems (e.g., ICBMs and SLBMs), possibly incorporating hypersonic variants (discussed below).60 AI applications will likely enhance the delivery system targeting and tracking and improve the survivability of drone swarms against the current generation of missile defenses.

Third, swarming tactics could bolster a state’s ability to disable or suppress an adversary’s defenses (e.g., air, missile, and antisubmarine warfare defenses), clearing the path for a disarming attack.61 Drone swarms might be armed with cyber or EW capabilities (in addition to antiship, antiradiation, or regular cruise and ballistic missiles) to interfere with or destroy an adversary’s early warning detection and C3I systems in advance of a broader offensive campaign.62 Conversely, drone swarms might enhance states’ missile defenses as countervails to these offensive threats. For example, swarms could form a defensive wall to absorb incoming missile salvos, intercepting them or acting as decoys to throw them off course with mounted laser technology.63

Finally, in the maritime domain, unmanned underwater vessels (UUV), unmanned surface vessels (USV), and UAVs supported by AI-enabled intra-swarm communication and ISR systems could be deployed simultaneously in both offensive and defensive antisubmarine warfare operations to saturate an enemy’s defenses and to locate, disable, and destroy its nuclear-armed or nonnuclear attack submarines.64 Despite continued advances in sensor technology design (e.g., reduced size and extended detection ranges) to overcome quieting challenges, other technical challenges still remain. These include communicating underwater between multiple systems, processing power requirements, generating battery life and energy, and scaling the system.65

While some experts do not expect a technically reliable and effective capability of this kind will be operational for at least a decade, others are more optimistic.66 From a tactical perspective, drone swarms would not need ocean-wide coverage (or full ocean transparency) to effectively detect and track submarines. According to UK rear admiral John Gower, a relatively even spread of sensors might be sufficient to enable “a viable search and detection plan . . . conceived for the open ocean” (emphasis added).67 Moreover, advances in mobile sensing platforms could enable drones in swarms to locate submarines through chokepoints (or gateways) as they emerge from ports. Due to the current slowness of drones with extended sea ranges, however, trailing them autonomously seems implausible.68 Future iterations of machine-learning- augmented UUVs and USVs may eventually complement, and perhaps replace entirely, the traditional role of general-purpose nuclear-powered submarines (SSN) and manned surface vehicles in tracking and trailing submarines of adversaries at chokepoints while simultaneously mounting sparsely distributed and mobile distributed network systems (DNS) sensors on UUVs.69

If a state views the credibility of its survivable nuclear weapons (especially nuclear-armed submarines) to be at risk,70 conventional capabilities such as drone swarms will likely have a destabilizing effect at a strategic level.71 Thus, even if swarm sorties were not intended as (or indeed technically capable of) a disarming first strike, the perception alone of the feasibility of such an operation would be destabilizing nonetheless. Moreover, the speed of AI could put the defender at a distinct disadvantage, creating additional incentives to strike first (or preemptively) technologically superior military rivals. Consequently, the less secure a nation considers its second-strike capabilities to be, the more likely it is to countenance the use of autonomous systems within its nuclear weapons complex to bolster the survivability of its strategic forces. According to analyst Paul Scharre, “winning in swarm combat may depend upon having the best algorithms to enable better coordination and faster reaction times, rather than simply the best platforms” (emphasis added).72

Combining speed, persistence, scope, coordination, and battlefield mass, AWSs will offer states attractive asymmetric options to project military power within contested A2/AD zones.73 Enhanced by sophisticated machine learning neural networks, China’s manned and unmanned drone teaming operations could potentially impede future US freedom of navigation operations in the South China Seas.74 Its air- and sea-based drones linked to sophisticated neural networks could, for example, support the People’s Liberation Army’s manned and unmanned teaming operations. Were China to infuse its cruise missiles and hypersonic glide capabilities with AI and autonomy, close-range encounters in the Taiwan Straits and the East and South China Seas would become more complicated, accident-prone, and destabilizing—at both a conventional and nuclear level.75 China is reportedly developing and deploying UUVs to bolster its underwater monitoring and antisubmarine capabilities as part of a broader goal to establish an “underwater Great Wall” to challenge US undersea military primacy. US AI-enhanced UUVs could, for example, theoretically threaten China’s nuclear ballistic and nonnuclear attack submarines.76

#### Second is hard power collapse—US military spending high now but Chinese LAW development is the largest threat to overturn American hard power dominance—they view war as inevitable and will try to win the arms race at all costs.

[John Brock (4-13-2017), Major in the US Army, MS in Advance Military Studies from the US Army Command and General Staff College, "Why the United States Must Adopt Lethal Autonomous Weapon Systems," United States Army, [https://apps.dtic.mil/dtic/tr/fulltext/u2/1038884.pdf]//CHS](https://apps.dtic.mil/dtic/tr/fulltext/u2/1038884.pdf%5d//CHS) PK

Currently, United States military spending dwarfs the rest of the world. The United States spends over one-third of the world's military budget and more than the next 14 countries combined. Regardless, the US military is still the smallest since the Interwar Period and will continue to shrink as soldier costs grow. While the United States’ military spending continues to remain high, its technological superiority continues to shrink. The United States’ rising personnel costs are not giving an improved capability, but instead are reducing funding available for the research and development of new technologies. In contrast, countries such as Russia and China are using artificial intelligence and robotics modernization strategies to level the military playing field at a fraction of the cost. Russia’s modernization strategy prioritizes the adoption of autonomous weapon systems and artificial intelligence. Russia has committed to developing a technologically superior robotic military force capable of fighting in the 21st century. Russia’s Chief of the Generals Staff stated, “In the near future, it is possible that a complete robotic unit will be capable of independently conducting military operations.”107 Demonstrating this belief, Russia announced plans to deploy armed autonomous sentry robots to protect five strategic missile installations.108 These sentry robots will use artificial intelligence to make decisions on their own and require no human operators. Russia recognizes that artificial intelligence and robots are resulting in a third military revolution and fundamentally changing warfare. Russia’s modernization strategy is now moving away from crewed vehicles and is transitioning to fully autonomous vehicles. Their defense industry plans to release an autonomous T14 tank prototype within the next two years.109 To accelerate these changes, Russia’s Army Chief of Staff announced that they plan to robotize onethird of their military by the year 2020.110 Though Russia will probably not achieve this automation goal, it signals Russia's vision of modern warfare and how future wars will likely be won.111 China has also prioritized the development of Lethal Autonomous Weapon Systems. The US Deputy Secretary of Defense, Bob Work recognizes that China views Lethal Autonomous Weapon Systems differently than the United States. Work stated “We know that China is already investing heavily in robotics and autonomy.”112 China has invested in artificial intelligence because it wants a military capable of winning future wars against the United States. Chinese General Chi Haitian asserts "War with the United States is inevitable; we cannot avoid it.”113 To win this war, China will use ‘unrestricted warfare’ with no rules, no boundaries, and no moral concerns in the use of Lethal Autonomous Weapon Systems. The People’s Liberation Army insists “War is still the ground of death and life, the path of survival and destruction and even the slightest innocence is not tolerated.”114 China believes that the United States’ current technological advantage will become nonexistent as time goes on. The primary reason for this belief stems from the US military's “ultimate concern” of protecting innocent civilian lives and the environment. These concerns result in the United States continually developing weapons to become "kinder" not "stronger." China also contends that the United States only considers the short-term uses of new technology and fails to adopt novel technologies into future weapon systems. China concludes that the consequences of the United States’ technology shortsightedness will result in the US military being forced to fight yesterday’s war with outdated technologies. In contrast, China examines all emerging and novel technologies to determine how they could be used to develop new weapon systems. They seek new technologies that could be a prelude to a revolution in military affairs giving them an advantage over the United States. China believes yesterday's "high technology" likely represents today's "low technology," while today's "new technology" will turn into tomorrow's "old technology."115Throughout history, there are numerous examples of militaries refusing to acknowledge that a new technology had completely transformed war. Jean De Bloch, a Polish banker and railway financier, authored Is War Now Impossible? in 1898. In his book, Bloch argued that advancements in weapons technology during the industrial revolution made previous Napoleonic open warfare impossible. Bloch concluded that for armies to survive in the 20th century, they must resort to trench warfare. Bloch was an outspoken voice who predicted the carnage that would occur in Europe during World War I. He anticipated the change in the operational environment, but could not convince the world’s leaders that the current methods of warfare were no longer feasible.116 As a result of this failure to adapt, 17 million soldiers and civilians died during World War I.117 Innumerable lives could have been saved if leaders had been quicker to accept the new realities in warfare. Johnson & Johnson CEO Alex Gorsky summarized it best: “You must understand when the environment you are in changes, because you must change also, and if you don’t, you will die.”118 During World War I, the ‘cult of the bayonet' dominated military thinking for the way to fight wars. The European ‘cult of the bayonet’ represents one of history’s prime examples illustrating the flawed belief that a soldier with enough determination will always prevail regardless of warfare’s technological advancements. The European military professionals believed a passionate soldier wielding a bayonet had proven an undefeatable terror weapon during the wars of the 18th and 19th -century.119 However, by the 20th century, the development of machine guns, artillery fire, and poison gas had rendered bayonets only useful for chopping wood, opening tin cans, and hanging up clothing.120 During World War I, senior officers refused to accept that these new technologies made mass infantry bayonet charges irrelevant. Officers with no comprehension of the fundamental changes in warfare continued to send their soldiers on heroic charges, only to die in the thousands.121 The Battle of the Somme illustrates this point where British commanders foolishly ordered a bayonet charge at the machine gun defended German lines, resulting in 60,000 casualties.122 The French operated on a similar tactical doctrine believing infantry morale was superior to firepower. This misconception resulted in over 500,000 French casualties in August 1914.123 Following World War I, even with these staggering European casualties, some US officers still argued that spirited bayonet-wielding soldiers and horses should remain the US military’s decisive capability.124 During World War II, the Japanese believed the human aspect of their Bushido warrior culture could defeat the United States’ superior military technology and firepower. The successful Japanese use of ‘banzai’ bayonet charges against the numerically superior Chinese reinforced these beliefs of the ‘invincible’ Japanese human spirit. Tragically, similar to World War I, these spirited attacks resulted in horrific losses for the Japanese army, which could not overcome the superior American technology and firepower.125 During the Battle of Guadalcanal, the Japanese conducted banzai charges towards the American lines protecting Henderson Field. These charges resulted in the horrific losses of Japanese soldiers. Japan’s Admiral Raizo Tanaka commented "This tragedy should have taught us the hopelessness of ‘bamboo spear’ tactics."126 These historical examples should serve as a dire warning to the United States. Similar to Jean de Bloch’s World War I predictions, a third military revolution will render modern warfare no longer feasible without tremendous United States’ casualties. General Patton once asserted “Many, who should know better, think that wars can be decided by soulless machines, rather than by the blood and anguish of brave men.”127 However, the US military’s people, institutions, and culture are no longer enough to overcome the technological advantages provided by Lethal Autonomous Weapon Systems. The United States must acknowledge that warfare’s environment has changed and begin to adapt. The United States’ Third Offset Strategy currently doubles down on Patton’s military of the past. Over the past 5,000 years of war, the tempo of warfare has grown with the development of new technologies. Soldiers transitioned from walking, to riding horses, to riding in rail cars, to driving in trucks, to flying in aircraft. The speed with which wars are now won or lost depends directly on these new technologies.128 During the 1870-1871 Franco-Prussian War, Prussian Prince Otto von Bismarck required over nine months to force the French surrender.129 In contrast, during World War II, Adolf Hitler only needed forty-six days to force the French capitulation.130 Current technology already allows militaries to fight wars across vast distances, during the nighttime, in adverse weather, and in extreme temperatures. The only limiting factor to increasing the speed of future warfare are the human soldiers fighting it. Due to biology, people require rest and can only maintain a high tempo for short periods of time. These biological human constraints will no longer remain relevant with the development of Lethal Autonomous Weapon Systems. Future lethal autonomous armies will be capable of fighting continuously, at tremendous speeds, and require no breaks or rest.

#### Otherwise risks great power war with China – multipolarity is only stable in the squo because of American hard power—collapse makes it unstable and collapses deterrence

**Forsyth 19** [Jim Forsyth currently serves as dean of Air Command and Staff College, Maxwell AFB, Alabama. He earned his PhD from the University of Denver, Josef Korbel School of International Studies. He has written and published extensively on great power war, intervention, and nuclear issues. “Through the Glass—Darker”, Strategic Studies Quarterly , Vol. 13, No. 4 (WINTER 2019), pp. 18-36, JSTOR]//recut CHS PK

As the article argued in 2007, “technological shifts have continuously altered the methods of war,” but in the end, “political arrangements matter, and the deterrent effect of any weapon should be evaluated within the context of the structure of the international system.”20 This claim is as true now as it was then. Indeed, one might conclude that structure matters even more now than it did 10 years ago, given the shift to multipolarity.21 Under “lopsided” multipolarity—where the United States outweighs both China and Russia militarily—it will maintain power advantages on some fronts, but at smaller margins than it did during the unipolar moment when it reigned supreme. Power diffusion, and related great power competition concerns, will be governed by the continued growth of Asian economic and military clout predominantly from China and India and the relative decline of Western economic influence.22 As China continues to translate economic gains into military modernization, the US will “focus mainly on countering China.”23 Avoiding the perils of security competition will require that the US be more cautious about exercising its power abroad.24

Yet exercising diplomacy and restraint could prove to be challenging. Even scholars who adopt a more circumspect view of emerging multipolarity, and the implications of growing military-technological parity, acknowledge its underlying risks. Barry Posen, who questions the assumption that multipolarity is inherently unstable, nonetheless acknowledges that growing parity will only “mute” great power competition. The diffusion of power will not eradicate “great power adventures.”25 China’s rise is apt to entail alliance reconfigurations and temptations to employ conventional military power.26 In fact, just as the original article predicted, the United States and India, Russia and China, and France and Germany have taken steps toward tightening their security relationships. China’s progress toward narrowing its power gap with the US has already met with a return to US defense budget growth and the establishment of new US defense cooperation commitments—notably with India. In parallel, China and Russia have grown closer, with Presidents Xi Jinping and Vladimir Putin meeting three times in 2018 and China sending a “strong supporting contingent” to Russia’s Vostok-2018 military exercises.27

Given the complexities and uncertainties of multipolarity, the US arsenal of advanced conventional weapons (and those of other great powers) may not only prove ill suited to deterring great power war but also provide occasion for its inadvertent onset. The stealth, speed, and lethality of advanced conventional technologies—allowing for quick and decisive US victories in the Persian Gulf (1991), Kosovo (1999), and Afghanistan (2001)—have proven increasingly enticing to other great powers. Russia and China drew similar lessons from these conflicts, each embarking on military modernization programs geared toward antiaccess/area-denial (A2/AD) and grey zone strategies.28 Advanced conventional weapons already undergird Russia’s and China’s respective salami-slicing campaigns in Eastern Europe and the South China Sea. Russia began modernizing its military following its 2008 war with Georgia, enhancing its ground force readiness and updating its integrated air defense system. The improvements have allowed for significant defensive and force-projection gains (against border states).29 Though Russia has since dialed back modernization efforts in the wake of its economic downturn, China continues to seek avenues for undermining the United States’ conventional weapons edge. The People’s Liberation Army (PLA) still trails the United States in the areas of innovation and operational proficiency. Its modernization achievements, though—especially the development of intermediate-range missiles that threaten US forward bases and carrier strike groups—have substantially augmented China’s “advantage of proximity in most plausible conflict scenarios.”30

As great power rivals continue to chip away at the United States’ once considerable smart-weapons advantage, national security experts are reevaluating the viability of deterrence. On this front, the diffusion of capabilities, as well as the expansion of competition to the space and cyber domains, do more than complicate appraisals of the balance of power; they threaten to upend the foundations of deterrence.31 The arrival of dualcapable hypersonic weapons (and delivery systems)—currently being designed and tested by the US, China, and Russia—will arguably risk jeopardizing strategic stability. Their ultrahigh velocity could reduce warning time to the extent that “a response would be required on first signal of attack”; likewise, their deployment in ready-to-launch mode could trigger preemptive strikes, as others might perceive it as a sign of impending attack.32 Further, cyber weapons’ potential for disabling an opponent’s “early warning and command systems” may diminish the expected costs of first strike under crisis conditions.33 Autonomous weapons also have the potential to fundamentally alter the psychological underpinnings of strategy And, as Kenneth Payne notes, there is no “a priori reason” to expect that substituting artificial intelligence (AI) for human intelligence—that rapid, accurate, and unbiased information processing and responses—“will necessarily be safer.” Because AI limits the risks of using force, it could make conflict more acceptable to risk-averse states; because its speed and precision favor the offense, it could prove more conducive to aggression than deterrence; and because it shapes a host of processes and technologies rather than a single weapon or system, its effects on strategy (and the challenges of its regulation) could prove counter to deterrence.34

As noted in the original article, nuclear weapons helped sustain the “cold peace” during the Cold War—not because of their awesome destructive power but because that awesome destructive power helped buttress bipolarity.35 The simplicity of bipolarity and superpower balancing, in turn, limited “the dangers of miscalculation and overreaction.”36 Multipolarity, though, makes for complexity; additional great power players provide additional opportunities for miscalculation and overreaction. Given these conditions and the perceived “usability” of advanced conventional weapons relative to nuclear weapons, it seems likely that they will fall short of yielding “the kinds of political structures necessary to enhance deterrence.”37 To counter Posen, the diffusion of advanced conventional technology may well have cheapened the near-term costs and risks of going to war, and particularly engaging in hybrid warfare. Even if the US manages to avoid a direct confrontation with Russia or China, it seems increasingly plausible that it could be dragged into a conflict involving one or more of their allies.

#### AND a Chinese sphere of influence causes great power war

**Brands 20** [HAL BRANDS is Henry A. Kissinger Distinguished Professor of Global Affairs at the Johns Hopkins School of Advanced International Studies (SAIS), a resident scholar at the American Enterprise Institute, and a Bloomberg Opinion columnist. “Don’t Let Great Powers Carve Up the World Spheres of Influence Are Unnecessary and Dangerous”, [https://www.foreignaffairs.com/articles/china/2020-04-20/dont-let-great-powers-carve-world]//recut](https://www.foreignaffairs.com/articles/china/2020-04-20/dont-let-great-powers-carve-world%5D//recut) CHS PK

Opposition to spheres of influence, in other words, is a part of U.S. diplomatic DNA. The reason for this, Charles Edel and I argued in 2018, is that spheres of influence clash with fundamental tenets of U.S. foreign policy. Among them is the United States’ approach to security, which holds that safeguarding the country’s vital interests and physical well-being requires preventing rival powers from establishing a foothold in the Western Hemisphere or dominating strategically important regions overseas. Likewise, the United States’ emphasis on promoting liberty and free trade translates to a concern that spheres of influence—particularly those dominated by authoritarian powers—would impede the spread of U.S. values and allow hostile powers to block American trade and investment. Finally, spheres of influence do not mesh well with American exceptionalism—the notion that the United States should transcend the old, corrupt ways of balance-of-power diplomacy and establish a more humane, democratic system of international relations.

Of course, that intellectual tradition did not stop the United States from building its own sphere of influence in Latin America from the early nineteenth century onward, nor did it prevent it from drawing large chunks of Europe, East Asia, and the Middle East into a global sphere of influence after World War II. Yet the same tradition has led the United States to run its sphere of influence far more progressively than past great powers, which is why far more countries have sought to join that sphere than to leave it. And since hypocrisy is another venerable tradition in global affairs, it is not surprising that Americans would establish their own, relatively enlightened sphere of influence while denying the legitimacy of everyone else’s.

That endeavor reached its zenith in the post–Cold War era, when the collapse of the Soviet bloc made it possible to envision a world in which Washington’s sphere of influence—also known as the liberal international order—was the only game in town. The United States maintained a world-beating military that could intervene around the globe; preserved and expanded a global alliance structure as a check on aggression; and sought to integrate potential challengers, namely Beijing and Moscow, into a U.S.-led system. It was a remarkably ambitious project, as Allison rightly notes, but it was the culmination of, rather than a departure from, a diplomatic tradition reaching back two centuries.

GIVE THEM AN INCH…

The post–Cold War moment is over, and the prospect of a divided world has returned. Russia is projecting power in the Middle East and staking a claim to dominance in its “near abroad.” China is seeking primacy in the western Pacific and Southeast Asia and using its diplomatic and economic influence to draw countries around the world more tightly into its orbit. Both have developed the tools needed to coerce their neighbors and keep U.S. forces at bay.

Allison is one of several analysts who have recently advanced the argument that the United States should make a virtue of necessity—that it should accept Russian and Chinese spheres of influence, encompassing some portion of eastern Europe and the western Pacific, as the price of stability and peace. The logic is twofold: first, to create a cleaner separation between contending parties by clearly marking where one’s influence ends and the other’s begins; and second, to reduce the chances of conflict by giving rising or resurgent powers a safe zone along their borders. In theory, this seems like a reasonable way of preventing competition from turning into outright conflict, especially given that countries such as Taiwan and the Baltic states lie thousands of miles from the United States but on the doorsteps of its rivals. Yet in reality, a spheres-of-influence world would bring more peril than safety.

Russia’s and China’s spheres of influence would inevitably be domains of coercion and authoritarianism. Both countries are run by illiberal, autocratic regimes; their leaders see democratic values as profoundly threatening to their political survival. If Moscow and Beijing dominated their respective neighborhoods, they would naturally seek to undermine democratic governments that resist their control—as China is already doing in Taiwan and as Russia is doing in Ukraine—or that challenge, through their very existence, the legitimacy of authoritarian rule. The practical consequence of acceding to authoritarian spheres of influence would be to intensify the crisis of democracy that afflicts the world today.

The United States would suffer economically, too. China, in particular, is a mercantilist power already working to turn Asian economies toward Beijing and could one day put the United States at a severe disadvantage on the world’s most economically dynamic continent. Washington should not concede a Chinese sphere of influence unless it is also willing to compromise the “Open Door” principles that have animated its statecraft for over a century.

Such costs might be acceptable in exchange for peace and security. But spheres of influence during the Cold War did not prevent the Soviets from repeatedly testing American redlines in Berlin, causing high-stakes crises in which nuclear war was a real possibility. Nor did those spheres prevent the two sides from competing sharply, and sometimes violently, throughout the “Third World.” Throughout history, spheres-of-influence settlements, from the Thirty Years’ Peace between Athens and Sparta to the Peace of Amiens between the United Kingdom and Napoleonic France have often ended, sooner or later, in war.

#### Deterrence still effective and is independently key to a slew of hotspots—hard power is necessary and sufficient to shape the cost-benefit calculus of potential aggressors—the alternative is WW3

Royal 17

Todd Royal, Todd Royal, M.P.P. is the Managing Partner for Energy development, Oil & Gas, and Renewables for Ascendance Strategies, a global threat assessment and political consulting firm that is based in Los Angeles, California, Deterrence Works and We Need to Get It Back, January 17, 2017, https://www.geopoliticalmonitor.com/deterrence-works-and-we-need-to-get-it-back/

During the Cold War and World War II (WW II), the world was safe because of deterrence. A balance of power existed between aligned nations cloaked in vibrant, robust militaries ready to defend their countries. The enemies of peaceful nations knew the costs, as President John F. Kennedy echoed that sentiment during his famous inaugural address about defending freedom and defeating foes. Those days are now gone, however, they can be revived again using deterrence that keeps worldwide war at bay. We are living in treacherous times, and war could break out anywhere on the seven continents across the world. Our current predicaments are beginning to make the early 1930s look pale in comparison to what is happening today, because deterrence has been allowed to linger and stall since the collapse of the Soviet Union. Collectively, we seem to have thought that history has stopped since the East and West German divide came down; but instead, we are witnessing a sharp upticks in wars, constant belligerence from the Middle East, the South China Sea dispute, and Mexico’s unending drug war. New threats are doing away with the resources to cope with refugee problems, the spread of terrorism, but most importantly the embrace of negative constructivism to resolve conflict. Foreign Affairs magazine describe ten hotspots for 2017, or flashpoints globally that if not dealt with swiftly and even harshly could lead to war. Interestingly enough, Foreign Affairs didn’t mention China, North Korea, Russia or Iran. It can be argued that North Korea claiming they can fire an ICBM anytime and outgoing Secretary Kerry saying, “the U.S. may need more forceful ways of dealing with North Korea,” is a hotter spot than Ukraine. Deterrence is the best answer for dealing with those nations. The type of deterrence at the forefront of the Cold War, which had far-reaching geopolitical implications, otherwise the future is cloaked in profoundly destabilizing actions by those four nations. Gambling with the four above-mentioned nations without proper deterrence won’t work, but if done forcefully, then the other ten described foreign policy unknowns can be solved. If not, then jittery states from Europe to East Asia will begin to parse out safe real estate for their citizens if someone doesn’t step up. Historically that has been the United States (U.S.) since World War II. The U.S. structured a system based upon mutually agreed upon principles between major powers to keep World War III at bay. Certainly that order has been was in flux recently, and disagreements rage about how this new discombobulating order began. There isn’t a correct answer. Moreover, add in the Rwanda genocide, the Yugoslavia breakup, and leaving Iraq after a brutal, tentative victory was achieved, and still there aren’t answers, which is the problem. But this cooperative, championed order, leading to unprecedented prosperity and peace, is suffering its share of dire crisis unless deterrence is restored. And Washington’s and NATO’s retrenchment is only leading to what will eventually see Japan, South Korea, and the Sunni coalition led by the Saudis join the nuclear club. Let’s also not forget about India and Pakistan, who play a daily nuclear cat and mouse game in Kashmir. If Kashmir explodes, then does the U.S. intervene? China has an interest, and believes they can overtake India quickly. If China commits troops would other countries in the region follow suit? Another dangerous tightrope situation without a net while the basics of geopolitics continue forward wondering who will do the heavy lifting to sustain the international system. Furthermore, will it be U.S. hard power or European soft power that restores deterrence? The perceived threats that the Iran nuclear deal were supposed to buffer haven’t kept the Islamic Republic from buying uranium and keeping oil prices low by taking advantage of OPEC’s weakness to boost their market share. The Russians have seen fit to meddle in U.S., European, and former Soviet satellite elections at will while still threatening Ukraine. If Ukraine goes back to the Russians and out of NATO’s orbit then Europe will have to grow NATO and American troop presence more than it has in recent years. The echoes of Russian aggression will have returned to Cold War levels, but it’s the correct move for deterrence to work, moving troops into Poland and Norway. The world wants peace, and this is a perfect example of military moves bolstering deterrence without a single shot being fired. The European structure is being shaken as never before, and while some see a messy Brexit, that’s not what the facts say. Recently it was reported Britain has the number one growing advanced economy in the world. Yet what happens if Germany, the Netherlands and France leave the EU based upon these facts? Can the world afford to lose the European voice, its large economy, and its reliance upon soft power? Will Europe become splintered and fractured at best, and at worst, allow regional historical rivalries to return, sparking conflicts that could make the proxy wars taking place in Syria, Iraq and Yemen seem tame**.** The balance Europe brings can’t afford to be lost. Here’s why the international system needs robust deterrence without war. Terrorism is the pretense of a common enemy, but that model can’t sustain itself. It is an illusion for nations to endlessly fight without a tactic to define a strategy. World War II was decisive, because there was a common, definable enemy that allowed for tactics and strategy leading to victory. Today’s terrorism fight has none of those modalities in place. Thriving on chaos will not lead to building blocks for a stable future. This type of tactical bargaining has no long-term strategy or common values within their policies. Maybe a Turkish-Russian rapprochement holds promise, but historical enmity more than likely will win over long-term solutions being offered in Syria through this false promise. Considering Beijing’s war-like posture towards East Asia, the incoming Trump administration, Africa, and Latin America – what the world needs is overwhelming deterrence when dealing with China. Chaos can be managed, but only through deterrence. Realpolitik and deal-making isn’t a guide to stable long-term solutions. Economic sanctions were crippling Iran until they were removed, and can work again if world powers have the vision to do what is necessary. That is a great example of soft power deterrence backed by hard power. Yet deals, like fluid relationships, can be broken, and our world is now made up of diverse states with globalized, vested interests. It can’t be stated enough that someone has to step up and keep the order with military-powered deterrence or with crippling economic sanctions to pull these nonstate actors and proxies off the world stage. Many would say no single power could have singularity when it comes to controlling major powers or events. Manipulation can take place in the case of Libya when NATO, led somewhat by the U.S., bombed them into a fractured society. But real deterrence with military hard power had brought Gadhafi to his senses. He was working with the Americans, Europeans, and democratized Asian countries to denounce his nuclear program and terrorism. That only came about because he saw what happened to Saddam Hussein. That was lethal deterrence in force, and not a sanitized environment that brought Gadhafi to his senses. Here’s what should immediately happen for deterrence to be restored. First, build a large, lethal blue-water navy, as the incoming U.S. administration is proposing. Iran, Russia, China, and North Korea have to be checked globally, and a fully equipped naval presence from freedom-loving nations accomplishes that task. Next, other NATO alliance members should follow the example of Norway, and their policy of burden sharing toward Europe’s collective defense. They pay their fair share when so many others don’t. NATO led by the U.S. has to demand every alliance member dedicates 2% of their budget to their military, which assists keeping the NATO alliance intact. Economically, push infrastructure and energy portfolios led by fossil fuel with renewables in the background while they overcome their problems. If developing nations pushed natural gas as soft power deterrence, and worked on infrastructure bottlenecks delivering inexpensive natural gas from the Marcellus shale in the U.S. to exporting LNG across the globe then the most basic component of modern life – cheap, scalable energy – is secured. Nations that thrive economically are less willing to interrupt their prosperity with war and hostility towards other nations. Not every deterrence-issue has to have the big impact of a weapon to be effective. No major, world power, such as the U.S., or China can single-handedly control world events. NATO, the U.S., the IMF, World Bank, and other post WW II conflict-negating entities can’t contain every fire,but with deterrence they can keep sparks from igniting into flames. Our globalized, messy world is now a fact, and deterrence is the best tool to keep our world from entering World War III.

#### Extinction – nuclear winter, crude oil amplifies, smoke covers the world

Snyder and Ruyle 17 (Brian F.Snyder and Leslie E. Ruyle, 12-15-2017, [Brian F. Snyder. Department of Environmental Science, Louisiana State University, United States. Leslie E. Ruyle. Center on Conflict and Development, Texas A&M University, United States]"The abolition of war as a goal of environmental policy," No Publication, <https://www.sciencedirect.com/science/article/pii/S0048969717316431?via%3Dihub)//CHS> PK

While the precise impacts of a hypothetical nuclear war are difficult to predict, the detonation of the world's nuclear weapons would plausibly kill all or nearly all humans on Earth and initiate a mass extinction event. There are a total of about 9400 nuclear warheads in active service around the world, with approximately 8300 of these weapons in U.S. and Russian arsenals (Kristensen and Norris, 2017a). Because of government secrecy, it is difficult to reliably estimate the total explosive power contained in these warheads, but in most cases, each warhead ranges between 100 and 1200 kt of TNT equivalent (for comparison, the bombs dropped on Hiroshima and Nagasaki had yields of approximately 15–20 kt). The combined arsenals of the U.S. and Russia likely have a yield of at least 2–3 billion tons of TNT equivalent (Kristensen and Norris, 2017b,c). 2.1. Nuclear winter In the 1980s climate scientists used simple and early climate models to estimate the effects of large-scale nuclear wars on climate. The estimates they derived were catastrophic. For example, Turco et al. (1983) reported temperature reductions of 43 °C for 4 months in the Northern Hemisphere following nuclear war using the explosive power of 10 billion tons of TNT.1 As the cold war ended, interest in modelling the climate effects of nuclear war declined and some policy-makers considered the threat of nuclear winter to be either disproved or exaggerated (Martin, 1988). Toon et al. (2007) and Robock et al. (2007) reignited interest in the climate effects of nuclear war. Toon et al. (2008) modeled the effects of a medium scale nuclear war with a total explosive yield of 440 million tons of explosive yield (far less than current U.S. and Russian arsenals) and estimated global soot2 emissions of 180 Tg. Using a more conservative estimate of 150 Tg of soot, Toon et al. estimated that this emission would be sufficient to reduce global temperatures by about 8 °C and energy flux by 150 W/m2 ; for comparison, the cumulative greenhouse gas emissions to the atmosphere since the industrial revolution have increased energy flux by 3 W/m2 (Butler and Montzka, 2017). Robock et al. (2007) modeled a similar 150 Tg smoke emission and found similar results including temperature reduction of about 8 °C lasting for several years. Low temperatures reduced evapotranspiration and weakened the global hydrological cycle and Hadley cells. As a result, precipitation decreased globally by 45% with especially dramatic decreases in the agricultural areas of the United States. In the Northern Hemisphere, growing seasons would be shortened by about 100 days for about 3 years. This would preclude most food production over most of the world for several years. Mills et al. (2014) conducted a detailed analysis of the effects of a small (1.5 million ton) regional exchange lofting just 5 Tg of soot into the atmosphere. This war would be equivalent to an exchange of 100 Hiroshima-sized bombs between, for example, India, Pakistan, or China. Mills et al. found global temperature decreases of 1.6 °C. To our knowledge, no one has studied the effects of a multi-billion ton nuclear exchange using modern atmospheric models. If, as Toon et al. and Robock et al. suggest, a 440 million ton war results in temperature reductions of 8 °C for a decade and a 100 day reduction in the growing season, it is reasonable to assume that a one to five billion ton war would not be survivable for the majority of people on earth. However, as populations and population centers grow, the effects of nuclear wars on the biosphere will also grow. The consequences of nuclear winter increase as the amount of fuel (buildings, cars, biomass, liquid and solid fuels) added to a targeted area increase. As population centers grow and densify over time, the amount of soot added to the stratosphere as the result of any given nuclear exchange may increase (depending in part on building materials). As a result, the nuclear winter resulting from a 400 million ton yield global war in 2020 may be far more severe than if the same war occurred in 2000. Further, there are reasons to believe that the soot emissions from a hypothetical nuclear exchange are conservative because they focus on urban areas and often do not incorporate non-urban energy infrastructure. For example, if ignited and burned completely, the U.S. Strategic Petroleum Reserve (SPR) alone contains about 14.5 Tg of soot emissions.3 Including all crude held in U.S. commercial facilities, the potential soot emissions increase to 24 Tg. Thus, incorporating crude oil storage in the U.S. alone would increase soot generation estimates by about 16%. Similarly, nuclear war planners would be likely to target coal, oil and gas fields in the U.S., Russia, and their allies. This unaccounted for fuel could increase the total soot contribution to the atmosphere, potentially deepening the resulting nuclear winter. 2.2. Acute effects of particulate matter Studies of nuclear winter typically focus on the effects of smoke lofted into the stratosphere during nuclear firestorms. However, a larger proportion of smoke following nuclear war will be trapped in the troposphere where it would have significantly acute impacts on human and non-human species. Crutzen et al. (1984) calculated that following a major nuclear war (about 5 billion tons of explosives, roughly the combined U.S. and Russian deployed nuclear arms as of 2017) smoke would cover about 30–40% of the earth's surface with airborne smoke concentrations on the order of 5 mg/m3 . While initially this smoke would be composed of very small particles (b0.1 μm), the particles would rapidly coalesce into the 0.1 to 3 μm range, roughly consistent with the wellstudied PM2.5. For comparison, the EPA's National Ambient Air Quality standard for PM2.5 is 0.012 mg/m3 and as of 2017, the highest PM2.5 concentrations in Asia are typically around 0.3 to 1 mg/m3 .

### 1AC—Plan

#### Plan: The People’s Republic of China should ban Lethal Autonomous Weapons.

### 1AC—Solvency

#### The plan solves.

[Austin Wyatt (11-29-2019), PhD in IR from Australian Catholic University, Summa Cum Laude, BA in Security and Counter-Terror from Swinburne University, Research Associate in the Values in Defense and Security Technology group at The University of New South Wales at the Australian Defence Force Academy, “Charting great power progress toward a lethal autonomous weapon system demonstration point.” Defence Studies, Vol 20, Iss 1, 2020. Published Online: November 29, 2019. [https://www.tandfonline.com/doi/full/10.1080/14702436.2019.1698956?scroll=top&needAccess=true]//recut CHS](https://www.tandfonline.com/doi/full/10.1080/14702436.2019.1698956?scroll=top&needAccess=true%5d//recut%20CHS) PK

Balancing relative advantage and deterrence with LAWS

For great powers, the key purpose of pursuing major military innovations is to generate or maintain a sufficient capability edge in the resulting power projection paradigm to outmatch near-peer rivals alone or in alliance. The most obvious situation in which a fully autonomous weapon platform could be deployed is a direct but non-nuclear military confrontation between the United States and a near-peer military, especially if that peer has sophisticated A2AD capabilities or possesses autonomous weapon systems, for example, China. This scenario is reflected in US military documentation referring to a need for unmanned systems that can operate in denied environments.

Historically, developing states during the emergence of an RMA have been influenced by each other, as well as early deployments of precursor technologies. However, developers must balance secrecy against deterrent value because, while an offset strategy requires that a developer reveal or hint at capabilities in hopes of deterring a would-be adversary”, it must also maintain a sufficient hidden capability edge to acquire “a war winning advantage if deterrence fails” (Work and Grant 2019). This is particularly difficult in this case because it is inherently more difficult to demonstrate AWS capability to an adversary in an escalating crisis situation (Horowitz 2019). This is because the key enabler of AWS is its governing artificial intelligence software, which no state is likely to reveal given its comparative ease of diffusion and the resulting risk of exposing the system’s vulnerability to cyber-attack or deterioration (Horowitz 2019). Furthermore, the comparative lack of traditional acquisition chokepoints (Altmann and Sauer 2017) reduces the ability of a state to maintain a competitive dominance or capability edge if it publicly demonstrates the internal coding of its AWS.

There are, however, also incentives for the United States and China to demonstrate a level of capability in this emerging major military innovation, particularly given the enthusiasm with which autonomous weapon systems have been promoted by great power states as central to the next generation of warfare. From a geopolitical perspective, the United States needs to maintain the appearance of military dominance and the capacity to defend itself, as well as its allies and interests from near-peer rivals or combinations of rogue actors in order to preserve its hegemony and the liberal rules-based international order. Conversely, if China can demonstrate a superior capacity in AWS and parlay this into a credible capacity to offset and threaten the United States in the Pacific, it can discourage small-middle power states from bandwagoning against Chinese interests. Undermining the US security guarantee in this manner, while continuing to grow Chinese influence as a regional economic great power, would reduce confidence in the US as hegemonic patron, encouraging hedging, self-help behaviour or even defection from the liberal western order among ASEAN states. This would in turn contribute to China’s broader efforts to reduce US influence in the region without resorting to direct hostilities.++++

Secondly, from an economic perspective, becoming an active developer and meaningful first mover of increasingly autonomous weapon systems would give China or the United States greater influence over how AWS are perceived, deployed or potentially regulated once they begin to diffuse. This can be seen with remote piloted unmanned aircraft, where the US did not sufficiently capitalise on its initial lead in the field of armed unmanned aircraft to secure a dominance in the nascent export market, allowing China and Israel to assume market leading positions, with greater influence over how middlepower, follower-adopter states interacted with UCAVs.

Policy makers in the United States and China have recognised that successful adoption of increasingly autonomous weapon systems must be selectively demonstrated to gain geopolitical advantage while limiting the risk of capability edge deterioration. While substantial practical barriers remain to the demonstration point of Lethal Autonomous Weapon Systems, the incubation period has plainly begun.

Conclusion

Considering the status of LAWS as an RMA through the lens of current technology it becomes clear that the “hardware” component of this RMA has not sufficiently matured to trigger a demonstration point. It is clear that, even with the massive resource investment by multiple state and non-state actors, front line combat robots will continue to struggle in a dynamic ground combat environment. However, it is also clear, even from publicly available data, that the rate of technological development is rapidly bringing that point closer. The main factor in reaching sufficient technological maturity in this area to trigger a demonstration point will be related to improving the reliability and accuracy with which machines adapt to changing or unexpected conditions in a combat setting.

The development of LAWS operational concepts is clearly underway. To date, there has been a clear preference on incorporating AMT into a human-centric conception of warfare. Improving the efficiency and effectiveness of the OODA loop of human commanders will be vital as the operational tempo and complexity of warfare increases. It is interesting to note that even hawkish state military bodies recognise the risk of deploying unsupervised AWS in combat using current technology, prompting a focus on supportive roles and anti-material targeting. It will be interesting to see whether states continue to focus on the development of doctrine that preserves traditional combat assets and remains human-centric or follow the Chinese willingness to invest in AWS as part of their modernisation cycle.

In concluding this article, while it appears likely that only advanced great power states will have the infrastructure and resources to initially acquire and effectively deploy full LAWS, the emerging consensus among academic, industrial and policy literatures increasingly holds that, in the absence of a pre-emptive and effective development ban, autonomous weapon systems will mature and begin to proliferate. A study conducted by the US Joint Forces Command estimated that the LAWS demonstration point could arrive by 2025,11 an assessment shared by a senior Chinese defence executive (Allen 2019). After the emergence of LAWS, an RMA whose disruptive potential is based on highly diffusive software, it is likely that most states and even non-state actors will adopt some level of autonomous technology capability with an ease that simply wasn’t possible in prior RMAs, generating significant geopolitical instability beyond the confines of the current Sino–US tensions.

## 1AC—Framing

### 1AC—Base

#### The standard is maximizing expected well being.

**pleasure and pain are intrinsically valuable. People consistently regard pleasure and pain as good reasons for action, despite the fact that pleasure doesn’t seem to be instrumentally valuable for anything.**

**Moen 16** [Ole Martin Moen, Research Fellow in Philosophy at University of Oslo “An Argument for Hedonism” Journal of Value Inquiry (Springer), 50 (2) 2016: 267–281] SJDI

Let us start by observing, empirically, that **a widely shared judgment about intrinsic value and disvalue is that pleasure is intrinsically valuable and pain is intrinsically disvaluable.** **On virtually any proposed list of intrinsic values and disvalues (we will look at some of them below), pleasure is included among the intrinsic values and pain among the intrinsic disvalues.** This inclusion makes intuitive sense, moreover, for **there is something undeniably good about the way pleasure feels and something undeniably bad about the way pain feels, and neither the goodness of pleasure nor the badness of pain seems to be exhausted by the further effects that these experiences might have.** “Pleasure” and “pain” are here understood inclusively, as encompassing anything hedonically positive and anything hedonically negative.2 **The special value statuses of pleasure and pain are manifested in how we treat these experiences in our everyday reasoning about values.** If you tell me that you are heading for the convenience store, **I might ask: “What for?” This is a reasonable question, for when you go to the convenience store you usually do so**, not merely for the sake of going to the convenience store, but **for the sake of achieving something further that you deem to be valuable.** You might answer, for example: “To buy soda.” This answer makes sense, for soda is a nice thing and you can get it at the convenience store. I might further inquire, however: “What is buying the soda good for?” This further question can also be a reasonable one, for it need not be obvious why you want the soda. You might answer: “Well, I want it for the pleasure of drinking it.” **If I then proceed by asking “But what is the pleasure of drinking the soda good for?” the discussion is likely to reach an awkward end. The reason is that the pleasure is not good for anything further; it is simply that for which going to the convenience store and buying the soda is good.**3 As Aristotle observes**: “We never ask [a man] what his end is in being pleased, because we assume that pleasure is choice worthy in itself.**”4 Presumably, a similar story can be told in the case of pains, for if someone says “This is painful!” we never respond by asking: “And why is that a problem?” We take for granted that if something is painful, we have a sufficient explanation of why it is bad. If we are onto something in our everyday reasoning about values, it seems that **pleasure and pain are both places where we reach the end of the line in matters of value.**

**Moral uncertainty means preventing extinction should be our highest priority.  
Bostrom 12** [Nick Bostrom. Faculty of Philosophy & Oxford Martin School University of Oxford. “Existential Risk Prevention as Global Priority.” Global Policy (2012)]  
These reflections on **moral uncertainty suggest** an alternative, complementary way of looking at existential risk; they also suggest a new way of thinking about the ideal of sustainability. Let me elaborate.¶ **Our present understanding of axiology might** well **be confused. We may not** nowknow — at least not in concrete detail — what outcomes would count as a big win for humanity; we might not even yet **be able to imagine the best ends** of our journey. **If we are** indeedprofoundly **uncertain** about our ultimate aims,then we should recognize that **there is a great** option **value in preserving** — and ideally improving — **our ability to recognize value and** to **steer the future accordingly. Ensuring** that **there will be a future** version of **humanity** with great powers and a propensity to use them wisely **is** plausibly **the best way** available to us **to increase the probability that the future will contain** a lot of **value.** To do this, we must prevent any existential catastrophe.

## Underview

Aff gets 1AR theory - for clarity that refers to any issue where the violation is in the 1N

1. They can be infinitely abusive without a check in the 1N –
2. 1AR Theory is drop the debater to deter abuse
3. No RVIs because they could brute force us with double our time in the 2N – the 2ar can’t cover 6 min of an RVI in 3 min
4. Competing interps because reasonability is arbitrary and invites intervention even with a brightline
5. 1AR theory is the highest layer of the round – they get thirteen minutes on theory vs our seven minutes – they’ll say we can read 1ac theory but we can’t preempt every possible abuse story
6. no 2NR paradigm issues or recontextualizations to 1ar theory if paradigm issues were read in the 1ac – it’s equal to reading a new case turn in the 2n – you had the chance to answer the issues in the 1n which solves all of their offense - anything else creates a 6v3 skew and the 2n would always win.
7. Education is a voter because it controls the internal link to debate existing the first place – schools don’t fund uneducational games
8. Fairness is a voter because Debate is a game with a winner and a loser – we all have different motives for winning and fairness is the means for that motive