# Lethal Autonomous Weapons System (LAWS) Affirmative



## 1AC

### 1AC – Inherency

#### We are at an incredibly dangerous crossroads with the use of artificial intelligence and military weaponry. Lethal Autonomous Weapons Systems, more commonly referred to as LAWS, are dangerously close to becoming the future of war. This would have devastating consequences that must be stopped.

Trager and Luca (Robert F. Trager is an associate professor of political science at the University of California, Los Angeles, and a Centre for the Governance of AI representative to the U.N. Convention on Certain Conventional Weapons; Laura M. Luca is a graduate student in political science at the University of California, Los Angeles, and a former delegate of Romania to the U.N. Convention on Certain Conventional Weapons.) “Killer Robots Are Here—and We Need to Regulate Them” May 11, 2022 https://foreignpolicy.com/2022/05/11/killer-robots-lethal-autonomous-weapons-systems-ukraine-libya-regulation/

Swarms of robots with the ability to kill humans are no longer only the stuff of science fiction. Lethal autonomous weapons systems (LAWS) are here. In Ukraine, Moscow has allegedly deployed an artificial intelligence (AI)-enabled Kalashnikov ZALA Aero KUB-BLA loitering munition, while Kyiv has used Turkish-made Bayraktar TB2 drones, which have some autonomous capabilities. Although it’s always hard to determine whether a weapon’s autonomous mode is used, these technologies have reportedly been employed in at least one conflict: Last year, a United Nations report suggested Turkey used autonomous firing by its Kargu-2 drones to hunt fleeing soldiers in Libya’s civil war (though the CEO of the Turkish company that produced the drone denies it is capable of this). Unlike traditional drones, these systems have the ability to navigate on their own, and some can select targets. Although a human controller can still decide whether or not to strike, such weapons are acquiring ever more autonomous capabilities. Now that militaries and paramilitaries worldwide have taken note, these technologies are poised to spread widely. The world today stands at the very moment before much more advanced versions of these technologies become ubiquitous. So far, at least Israel, Russia, South Korea, and Turkey have reportedly deployed weapons with autonomous capabilities—though whether this mode was active is disputed—and Australia, Britain, China, and the United States are investing heavily in developing LAWS with an ever-expanding range of sizes and capabilities. Already, some LAWS can loiter in an area to find targets that machine-learning algorithms have trained them to recognize, including enemy radar systems, tanks, ships, and even specific individuals. These weapons can look vastly different: For instance, the Turkish Kargu-2 drone, which was introduced in 2020 and used in Libya’s war, is 2 feet long, weighs around 15 pounds, and can swarm in groups. Autonomous systems can also be much larger, such as unmanned AI-driven fighter jets like the modified L-39 Albatros, and much smaller, such as rudimentary commercial drones repurposed with autonomous software. Once these technologies have spread widely, they will be difficult to control. The world thus urgently needs a new approach to LAWS. So far, the international community has done nothing more than agree that the issue needs to be discussed. But what it really needs to do is take a page from the nuclear playbook and establish a nonproliferation regime for LAWS. Currently, countries at the forefront of LAWS development resist any calls for their ban. The United States has claimed that existing international humanitarian laws are sufficient to govern LAWS; the U.S. Defense Department’s policy is that they must be designed to ensure “appropriate levels of human judgment over the use of force.” China has remained ambiguous, stating the importance of “full consideration of the applicability of general legal norms” while insisting on a narrow definition of LAWS. Russia, meanwhile, refuses to even consider the issue, using diplomatic procedural tools to stall and reduce the time the United Nations devotes to debating the subject. But most countries have called for a ban on developing and using LAWS—or, at a minimum, regulating them. In 2019, U.N. Secretary-General António Guterres said LAWS are “politically unacceptable, morally repugnant, and should be prohibited by international law.” There are many reasons countries, international nongovernmental organizations, scholars, and AI experts worry about LAWS. Although they do not all agree in their predictions of how such weapons could affect society, there’s a growing consensus that their spread could bring substantial and harmful consequences. First, LAWS could facilitate violence on a large scale since they’re not restricted by the number of people available to man them. Second, in combination with facial recognition and other technologies, they can target individuals or groups that fit certain descriptions, which could appeal to violent groups and state militaries committing political assassinations and ethnic cleansing. Third, LAWS may make it easier for those who control them to hide their identities. LAWS thus have the potential to upend political orders and enable tighter authoritarian control. In addition, they can always malfunction, including by mistaking civilians for combatants. So far, the international community has attempted—and failed—to regulate LAWS. In December 2021, after eight years of technical discussions, government and civil society representatives met at the U.N. in Geneva to set an agenda for regulating LAWS for the first time in what was billed as a “historic opportunity.” Most attendees favored legally binding rules that apply equally to all states to govern the development and use of these technologies. Yet, by any standard, the meeting failed. Despite years of preparatory discussions within the framework of the U.N. Convention on Certain Conventional Weapons (CCW)—a forum for restricting the use of weapons considered to cause unnecessary or unjustifiable suffering to combatants or to affect civilians indiscriminately—the attendees barely managed to agree on 10 more days of discussion this March and July. This outcome was to be expected given the positions of the major powers and the CCW rules requiring consensus before action is taken. (Disclosure: Both authors have been affiliated with the CCW.) In response, a wide array of actors—from Amnesty International and Human Rights Watch to some of the states in favor of a LAWS ban, including Argentina and the Philippines—are calling for a process to develop legally binding prohibitions on these weapons outside of the CCW. Alternative approaches to prohibition treaties have had some success in the past, such as when countries agreed to give up land mines through the 1997 Ottawa convention; cluster munitions through the 2008 Oslo Accords; and even nuclear weapons through the 2017 Treaty on the Prohibition of Nuclear Weapons, which was the first treaty to completely ban nuclear weapons in line with international humanitarian law and establish pathways for current nuclear weapon states to renounce them. However, while many states signed these treaties, most of the powerful states did not. Unfortunately, even this limited success is likely to be elusive in the case of LAWS. The primary reason is that states are increasingly aware that these non-substitutable technologies may become crucial to their security and are thus unlikely to unilaterally abandon them. If states’ adversaries have them, they will likely believe they need them—and absent the sort of nonproliferation regime that exists for nuclear weapons, their adversaries will, in fact, continue to rapidly develop LAWS without much oversight.

### 1AC – Plan

#### Resolved: The United States federal government should substantially increase its security cooperation with the North Atlantic Treaty Organization by banning Lethal Autonomous Weapons Systems.

### 1AC – Solvency

#### Despite current development by nation states, a weapons ban would be effective and guarantee global follow on. The result of the ban is a global ban on lethal autonomous weapons systems

Mary Wareham (advocacy director in the arms division at Human Rights Watch) “Summary: Stopping Killer Robots” August 10, 2020 https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

Their active engagement in the CCW talks on killer robots demonstrates growing awareness of and concerns about removing human control from the use of force. There is widespread acknowledgment that technological developments are enabling militaries to incorporate autonomy into weapons systems. China, Israel, Russia, South Korea, the United Kingdom, and the United States are investing heavily in the development of various autonomous weapons systems, while Australia, Turkey, and other countries are also making investments. Despite this development, the vast majority of countries that have spoken to date regard human decision-making, control, or judgment as critical to the acceptability and legality of weapons systems. There is now widespread agreement about the need to retain some form of human control over the use of force, including over individual attacks. In 2018, Austria, Brazil, and Chile recommended launching negotiations on a legally binding instrument to ensure meaningful human control over the critical functions of weapons systems.[11] Banning fully autonomous weapons means prohibiting weapons systems that lack meaningful human control. Since 2013, 30 countries have called for a ban on such fully autonomous weapons: Algeria, Argentina, Austria, Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Cuba, Djibouti, Ecuador, Egypt, El Salvador, Ghana, Guatemala, Holy See, Iraq, Jordan, Mexico, Morocco, Namibia, Nicaragua, Pakistan, Panama, Peru, State of Palestine, Uganda, Venezuela, and Zimbabwe. China has called for a treaty to ban the use of lethal autonomous weapons systems, but not their development or production, which is unsurprising given that it is also among the nations most advanced in pursuing such weapons. Several groups of states have endorsed statements calling for a ban on killer robots. The Non-Aligned Movement (NAM), which is comprised of approximately 125 member states, has called for a “legally binding international instrument stipulating prohibitions and regulations on lethal autonomous weapons systems” several times since 2018.[13] Benin spoke in April and August 2018 on behalf of a group of African states to recommend launching negotiations on a legally binding instrument on fully autonomous weapons “at the earliest” as weapons systems “that are not under human control should be banned.”[14] All CCW meetings on killer robots in 2014-2019 saw strong interest or convergence on the importance of retaining human control over weapons systems and the use of force. This is reflected in a principle on human-machine interaction that CCW states agreed to in 2019.[15] Human-machine interaction attracted the greatest interest by far during the virtual Berlin Forum on lethal autonomous weapons systems attended by more than 60 countries on April 1-2, 2020. There was widespread recognition at the Rio Seminar on autonomous weapons on February 20, 2020 that human control is where states should focus their collective work. A legally binding instrument is the optimal framework for dealing with the many serious challenges raised by fully autonomous weapons. A new international ban treaty could lay down explicit rules to ensure appropriate constraints on autonomy in weapons systems and resolve differing views on human control over the use of force. Most importantly, a new treaty would show that states are serious about responding appropriately and with urgency to this existential threat to humanity.

#### LAWS are not accurate, undermining any positive benefit that could theoretically exist. We cannot allow this unregulated and dangerous technology.

Zachary Kallenborn (research affiliate with the Unconventional Weapons and Technology Division of the National Consortium for the Study of Terrorism and Responses to Terrorism, a policy fellow at the Schar School of Policy and Government, and a U.S. Army Training and Doctrine Command “Mad Scientist.”) “Applying arms control frameworks to autonomous weapons” October 05, 2021 https://www.brookings.edu/techstream/applying-arms-control-frameworks-to-autonomous-weapons/

In an autonomous weapon, the system decides when to engage by processing environmental stimuli. Landmines, for example, use simple pressure sensors—the sensor sensitivity determines whether the heft of a tank or the hands of a child are enough to trigger the explosion. Conversely, an anti-radar loitering munition homes in on radar signals. The risk of error—and by extension the arms control concern—depend on the type of environmental stimuli, how the stimuli is processed, and the type of decisions made. Emerging autonomous weapons using machine learning process stimuli in more complex ways. Machine learning systems rely on large amounts of data to draw conclusions about what the system observes. But the data dependence also makes them brittle. Color differences, tree branches, or foggy days may confound the ability of the system to correctly identify a target. Although some states may adopt robust verification and testing programs to increase reliability, others may not. As autonomous weapons are deployed in larger numbers, arms control advocates fear a higher likelihood of something going horrifyingly wrong.

### 1AC – Terrorism Advantage

**The use of lethal autonomous weapons systems make terrorism inevitable. The affirmative has four ways they solve terror.**

**First, hacks.**

#### Lethal Autonomous Weapons systems are susceptible to hacks by terror groups and other nefarious actors. Only banning them solves.

Coley Felt (International Policy Institute Cybersecurity Fellow) “Autonomous Weaponry: Are Killer Robots in Our Future?” February 14, 2020 https://jsis.washington.edu/news/autonomous-weaponry-are-killer-robots-in-our-future/

In respect to the unclear line of accountability as an argument against development, the concept of the war algorithm is a key component to discussing autonomous weapons systems. According to the Harvard Law School, a war algorithm is “any algorithm that is expressed in computer code, that is effectuated through a constructed system, and that is capable of operating in relation to armed conflict” (Lewis, Blum, & Modirzadeh, 2016). When linking the war algorithm to accountability, the line stretches from states and their armed forces, to developers, operators, lawyers, industry bodies and more. As these algorithms continue to advance, they challenge some of the fundamental legal concepts that underpin the regulation of armed conflict. Thus, the development of fully autonomous weapons presents the possibility of “replacing human judgement with algorithmically-derived decisions” on the battlefield (Lewis et al., 2016). Furthermore, there is always a risk of vulnerabilities which raises concern about the potential of a hacker takeover (Lewis et al., 2016). Not only would decisions made by these machines be the product of an algorithm, but ensuring the security and reliability of that algorithm presents a new set of issues. The capabilities that these weapons would attain could be especially attractive to malicious actors, whether it be other states or individuals. These unique characteristics rooted in autonomous weapons systems suggest the need for a specific legal category that can oversee both the design and the behavior of the machines.

#### Second, the proliferation of autonomous weapons system development makes leaks inevitable. The more people that have the technology, the more likely it is for terrorists to get it.

Jacob Ware (master’s degree in security studies from Georgetown University and an MA (Hons) in international relations and modern history from the University of St Andrews) “TERRORIST GROUPS, ARTIFICIAL INTELLIGENCE, AND KILLER DRONES” September 24, 2019 https://warontherocks.com/2019/09/terrorist-groups-artificial-intelligence-and-killer-drones/

Firstly, modern terrorist organizations have advanced scientific and engineering departments, and actively seek out skilled scientists for recruitment. ISIL, for example, has appealed for scientists to trek to the caliphate to work on drone and AI technology. The individual technologies behind swarming killer robots — including unmanned aerial vehicles, facial recognition, and machine-to-machine communication — already exist, and have been adapted by terrorist organizations for other means. According to a French defense industry executive, “the technological challenge of scaling it up to swarms and things like that doesn’t need any inventive step. It’s just a question of time and scale and I think that’s an absolute certainty that we should worry about.” Secondly, autonomous weapons technology will likely proliferate through sales. Because AI research is led by private firms, advanced AI technology will be publicly sold on the open market. As Michael Horowitz argues, “militant groups and less-capable states may already have what they need to produce some simple autonomous weapon systems, and that capability is likely to spread even further for purely commercial reasons.” The current framework controlling high-tech weapons proliferation — the Wassenaar Arrangement and Missile Technology Control Regime — is voluntary, and is constantly tested by great-power weapons development. Given interest in developing AI-guided weapons, this seems unlikely to change. Ultimately, as AI expert Toby Walsh notes, the world’s weapons companies can, and will, “make a killing (pun very much intended) selling autonomous weapons to all sides of every conflict.” Finally, autonomous weapons technology is likely to leak. Innovation in the AI field is led by the private sector, not the military, because of the myriad commercial applications of the technology. This will make it more difficult to contain the technology, and prevent it from proliferating to nonstate actors. Perhaps the starkest warning has been issued by Paul Scharre, a former U.S. defense official: “We are entering a world where the technology to build lethal autonomous weapons is available not only to nation-states but to individuals as well. That world is not in the distant future. It’s already here.”

#### Third, terror recruitment

#### Lethal autonomous weapons cause massive radicalization—even a small increase in recruitment would trigger the impact

John Feffer, 5-25-2016, "The Coming Drone Blowback", Institute for Policy Studies, <https://ips-dc.org/coming-drone-blowback/> <John Feffer is director of Foreign Policy In Focus at the Institute for Policy Studies.>, ke

The U.S. drone campaign isn’t exactly a covert operation, though the CIA has generally refused to acknowledge its role in the attacks (the Pentagon is more open about its use of drones for strikes on more conventional military targets). But critics of drone attacks — myself included — have long argued that all the civilian casualties caused by drone attacks will produce blowback. Drone strikes and the anger they generate effectively serve to recruit people into the Taliban and other extremist organizations. Even those involved in the program have come to the same conclusion. Consider, for instance, this impassioned plea to President Obama from four Air Force veterans who piloted drones. “The innocent civilians we were killing only fueled the feelings of hatred that ignited terrorism and groups like ISIS, while also serving as a fundamental recruitment tool,” they argued in a letter last November. “The administration and its predecessors have built a drone program that is one of the most devastating driving forces for terrorism and destabilization around the world.” But now along comes Aqil Shah, a professor at the University of Oklahoma, who has just published a report attempting to debunk this claim. According to a set of 147 interviews he conducted in North Waziristan, an area in Pakistan’s FATA that has sustained the largest number of drone strikes, 79 percent of respondents support the campaign. A majority believes that the strikes rarely kill non-combatants. Further, according to experts cited by Shah, “most locals prefer drones to the Pakistan military’s ground and aerial offensives that cause more extensive damage to civilian life and property.” I don’t doubt these findings. Most people in Pakistan have no sympathy for the Taliban. According to a recent Pew poll, 72 percent of respondents in Pakistan had an unfavorable view of the Taliban (with earlier polls suggesting that this lack of support extends to FATA). Drones are no doubt better than Pakistan’s military operations, just as they represent an improvement over the scorched-earth policies used by the United States in the Vietnam War to destroy large sections of Southeast Asia. Shah’s research was not exactly scientific. He admits that his interviews were “not statistically representative” — and then goes on to draw conclusions about the entire population of FATA. It’s also true that several other polls suggest that Pakistanis throughout the country oppose the drone program and believe that it encourages militancy, but these polls have generally not included FATA. But Shah’s most controversial conclusion is that the high level of support for the drone program means that no blowback has taken place. Even if his interviews were statistically representative, I don’t understand this analytical leap. Blowback doesn’t require universal opposition. Only a small percentage of the mujahedeen went on to fight with Osama bin Laden. Only a certain number of Contras were involved in operations that pumped drugs into the United States. It’s not as if the entire population of FATA is going to join the Taliban. If only a couple thousand young men join the Taliban out of anger over drone strikes, that counts as blowback. There are over 4 million people living in the FATA. A fighting force of 4,000 people is 1 percent of the population — and that easily falls within the 21 percent of respondents who disapproved of drones in Shah’s findings. And what of the suicide bomber who embarks on his path of extremism because a drone strike took out his brother? The Times Square bomber, Faisal Shahzad, was motivated at least in part by drone strikes in Pakistan, even though they hadn’t killed anyone in his family. Ultimately, blowback can be just one angry and determined person who makes his mark on history without first showing up in a survey.

**Fourth, ending the strategy of needless intervention and the war on terror**

Matthew Anzarouth (Harvard Political Review) “Robots that Kill: The Case for Banning Lethal Autonomous Weapon Systems” December 02, 2021 https://harvardpolitics.com/robots-that-kill-the-case-for-banning-lethal-autonomous-weapon-systems/

The Danger in Killer Robots. The use of LAWS would lower the threshold for states going to war, increasing the likelihood of conflict. Many philosophers, political scientists and governments have expressed the concern that militaries will resort to conflict more often if they do not need to rely on soldiers and can use LAWS instead. Domestic populations will be less wary of conflict if it no longer means seeing fellow citizens risk their lives on the battlefield. The threshold-lowering effect of LAWS is particularly relevant in the context of a current bipartisan trend in the U.S. against intervention. It is plausible that without LAWS, the era of U.S. unilateral interventions and the war on terror would come to an end. Recognizing the failures of wars in Vietnam, Iraq and Afghanistan, politicians on both sides of the political spectrum are pushing not to send troops abroad to risk their lives. But the option of using LAWS and sidestepping the costs to a country’s soldiers threatens to reverse this anti-war trend and provide militaries with a politically palatable way of fighting wars. There could be catastrophic consequences if we liberate militaries from political constraints preventing them from going to war. The first wave of the proliferation of LAWS may simply look like the natural progression of our current drone capabilities. For instance, Russia may have already used autonomous drones to attack targets in Syria, but these weapons are only different from current semi-autonomous drones in the greater degree of risk assumed by eliminating human intervention. In other instances, however, the use of LAWS will present substantial advantages that make them different in kind from drones as we know them. Consider, for example, Azerbaijan’s use of Israeli-supplied IAI Harop drones in the war with Armenia in 2020. The loitering munition system used by the military allowed tiny and hardly-detectable autonomous drones to circle over the enemy’s defense line, pick out targets and attack them, an ability that proved decisive in Azerbaijan’s victory in the war. To understand what a world with LAWS will look like in the long term requires a bit of imagination. Perhaps a post-withdrawal Afghanistan will involve weapons like the Harop drones constantly roaming the skies and diving into the ground to take out targets. Or maybe we will see the chilling predictions of science fiction come true. In their book AI 2041, writers Chen Qiufan and Kai-Fu Lee express their fear that LAWS will fall into the hands of armed groups and terrorists. They describe a “Unabomber-like scenario in which a terrorist carries out the targeted killing of business elites and high-profile individuals,” using autonomous drones that rely on facial recognition to identify their targets. Leading expert in artificial intelligence Toby Walsh warns of these weapons falling into the hands of dictators and being used as tools of ethnic cleansing. Even if we assume that LAWS are operated primarily by legitimate militaries, additional complications arise when we consider what happens in the case of unjust killings. Philosopher Robert Sparrow argues that the autonomy of LAWS makes it impossible to hold anyone accountable for illegitimate killings they commit. If the robot acted autonomously, tracing accountability back to another agent seems morally objectionable and legally infeasible. But it would also be unjust to not punish illegitimate killings. This dilemma presents a so-called ‘responsibility gap’, where no one can be held responsible for illegitimate killings, and wrongful acts of war go undeterred.

#### And a ban is key to set international norms. Even if terror groups can access the weapons, they won’t use them. Its try or die for the affirmative

Jacob Ware (master’s degree in security studies from Georgetown University and an MA (Hons) in international relations and modern history from the University of St Andrews) “TERRORIST GROUPS, ARTIFICIAL INTELLIGENCE, AND KILLER DRONES” September 24, 2019 https://warontherocks.com/2019/09/terrorist-groups-artificial-intelligence-and-killer-drones/

Secondly, the international community could look to ban AI use in the military through an international treaty sanctioned by the United Nations. This has been the strategy pursued by activist groups such as the Campaign to Stop Killer Robots, while leading artificial intelligence researchers and scientific commentators have published open letters warning of the risk of weaponized AI. That said, great powers are not likely to refrain from AI weapons development, and a ban might outlaw positive uses of militarized AI. The international community could also look to stigmatize, or delegitimize, weaponized AI and lethal autonomous weapons sufficiently to deter terrorist use. Although modern terrorist groups have proven extremely willing to improvise and innovate, and effective at doing so, there is an extensive list of weapons — chemical weapons, biological weapons, cluster munitions, barrel bombs, and more — accessible to terrorist organizations, but rarely used. This is partly down to the international stigma associated with those munitions — if a norm is strong enough, terrorists might avoid using a weapon. However, norms take a long time to develop, and are fragile and untrustworthy solutions. Evidently, good counter-terrorism options are limited. The U.S. government and its intelligence agencies should continue to treat AI and lethal autonomous weapons as priorities, and identify new possible counter-terrorism measures. Fortunately, some progress has been made: Nicholas Rasmussen, former director of the National Counterterrorism Center, admitted at a Senate Homeland Security and Governmental Affairs Committee hearing in September 2017 that “there is a community of experts that has emerged inside the federal government that is focused on this pretty much full time. Two years ago this was not a concern … We are trying to up our game.” Nonstate actors are already deploying drones to attack their enemies. Lethal autonomous weapon systems are likely to proliferate to terrorist groups, with potentially devastating consequences. The United States and its allies should urgently address the rising threat by preparing stronger defenses against possible drone and swarm attacks, engaging with the defense industry and AI experts warning of the threat, and supporting realistic international efforts to ban or stigmatize military applications of artificial intelligence. Although the likelihood of such an event is low, a killer robot attack could cause massive casualties, strike a devastating blow to the U.S. homeland, and cause widespread panic. The threat is imminent, and the time has come to act.

**Terrorism causes nuclear war and turns all impacts**

**Arguello and Buis 2018.** Irma Arguello and Emiliano J. Buis, 2018, Arguello is founder and chair of the NPSGlobal Foundation, and head of the secretariat of the Latin American and Caribbean Leadership Network. She holds a degree in physics, a Master’s in business administration, and completed graduate studies in defense and security. Arguello previously worked on nuclear projects for the Argentine National Atomic Energy Commission. She is a member of the Steering Committee of the Fissile Materials Working Group, and a Chatham House Associate Fellow. Since 2010, she has participated in all the official non-governmental events at the Nuclear Security Summits. Buis is a lawyer specializing in international law. He holds a PhD from the University of Buenos Aires (UBA), a Master’s in Human and Social Sciences from the University of Paris/Panthéon-Sorbonne, and a postgraduate diploma in national defense from the National Defense School. Currently he is a professor in international law at UBA, and co-director of the UNICEN Center for Human Rights in Azul. He is also a researcher and professor at the NPSGlobal Foundation. “The global impacts of a terrorist nuclear attack: What would happen? What should we do?” Bulletin of Atomic Scientists. [https://www.tandfonline.com/doi/full/10.1080/00963402.2018.1436812?scroll=top&needAccess=true]/mnw

Though hard to accept, the detonation of a nuclear device – by states or non-state actors – is today a plausible scenario. And while much of the world’s focus has been on the current nuclear weapons arsenals possessed by states – about 14,550 warheads, all of which carry the risk of intentional or unintentional use – **the threat of nuclear terrorism is here and increasing.** For more than a decade, Al Qaeda, Aum Shinrikyo, and other terrorist groups have expressed their desire to acquire fissile material to build and detonate an improvised nuclear bomb. None of them could fulfill that goal – so far. But that does not mean that they will not succeed in the future. Making matters worse, there is evidence of an illicit market for nuclear weapons-usable materials. There are sellers in search of potential buyers, as shown by the dismantlement of a nuclear smuggling network in Moldova in 2015. There certainly are plenty of sites from which to obtain nuclear material. According to the 2016 Nuclear Security Index by the Nuclear Threat Initiative, 24 countries still host inventories of nuclear weapons-usable materials, stored in facilities with different degrees of security. And in terms of risk, it is not necessary for a given country to possess nuclear weapons, weapons-usable materials, or nuclear facilities for it to be useful to nuclear terrorists: Structural and institutional weaknesses in a country may make it favorable for the illicit trade of materials. Permeable boundaries, high levels of corruption, weaknesses in judicial systems, and consequent impunity may give rise to a series of transactions and other events, which could end in a nuclear attack. The truth is that, at this stage, no country in possession of nuclear weapons or weapons-usable materials can guarantee their full protection against nuclear terrorism or nuclear smuggling. Because we live in a world of growing insecurity, where explicit and tacit agreements between the relevant powers – which upheld global stability during the postCold War – are giving way to increasing mistrust and hostility, a question arises: How would our lives be affected if a current terrorist group such as the Islamic State (ISIS), or new terrorist groups in the future, succeed in evolving from today’s Manchester style “low-tech” attacks to a “high-tech” one, involving a nuclear bomb, detonated in a capital city, anywhere in the world? We attempted to answer this question in a report developed by a high-level multidisciplinary expert group convened by the NPSGlobal Foundation for the Latin American and Caribbean Leadership Network. We found that there would be multiple harmful effects that would spread promptly around the globe (Arguello and Buis 2016); a more detailed analysis is below, which highlights the need for the creation of a comprehensive nuclear security system. The consequences of a terrorist nuclear attack A small and primitive 1-kiloton fission bomb (with a yield of about one-fifteenth of the one dropped on Hiroshima, and certainly much less sophisticated; cf. Figure 1), detonated in any large capital city of the developed world, would cause an unprecedented catastrophic scenario. An estimate of direct effects in the attack’s location includes a death toll of 7,300-to-23,000 people and 12,600-to-57,000 people injured, depending on the target’s geography and population density. Total physical destruction of the city’s infrastructure, due to the blast (shock wave) and thermal radiation, would cover a radius of about 500 meters from the point of detonation (also known as ground zero), while ionizing radiation greater than 5 Sieverts – compatible with the deadly acute radiation syndrome – would expand within an 850-meter radius. From the environmental point of view, such an area would be unusable for years. In addition, radioactive fallout would expand in an area of about 300 square kilometers, depending on meteorological conditions (cf. Figure 2). But the consequences would go far beyond the effects in the target country, however, and promptly propagate worldwide. Global and national security, economy and finance, international governance and its framework, national political systems, and the behavior of governments and individuals would all be put under severe trial. The severity of the effects at a national level, however, would depend on the countries’ level of development, geopolitical location, and resilience. Global security and regional/national defense schemes would be strongly affected. An increase in global distrust would spark rising tensions among countries and blocs, that could even lead to the brink of **nuclear weapons use by states** (if, for instance, a sponsor country is identified). The consequences of such a shocking scenario would include a decrease in states’ self-control, an escalation of present conflicts and the emergence of new ones, accompanied by an increase in military unilateralism and military expenditures. Regarding the economic and financial impacts, a severe global economic depression would rise from the attack, likely lasting for years. Its duration would be strongly dependent on the course of the crisis. The main results of such a crisis would include a 2 percent fall of growth in global Gross Domestic Product, and a 4 percent decline of international trade in the two years following the attack (cf. Figure 3). In the case of developing and less-developed countries, the economic impacts would also include a shortage of high-technology products such as medicines, as well as a fall in foreign direct investment and a severe decline of international humanitarian aid toward low-income countries. We expect an increase of unemployment and poverty in all countries. Global poverty would raise about 4 percent after the attack, which implies that at least 30 million more people would be living in extreme poverty, in addition to the current estimated 767 million. In the area of international relations, we would expect a breakdown of key doctrines involving politics, security, and relations among states. These international tensions could lead to a collapse of the nuclear order as we know it today, with a consequent setback of nuclear disarmament and nonproliferation commitments. In other words, the whole system based on the Nuclear Non- Proliferation Treaty would be put under severe trial. After the attack, there would be a reassessment of existing security doctrines, and a deep review of concepts such as nuclear deterrence, no-firstuse, proportionality, and negative security assurances. Finally, the behavior of governments and individuals would also change radically. Internal chaos fueled by the media and social networks would threaten governance at all levels, with greater impact on those countries with weak institutional frameworks. Social turbulence would emerge in most countries, with consequent attempts by governments to impose restrictions on personal freedoms to preserve order – possibly by declaring a state of siege or state of emergency – and legislation would surely become tougher on human rights. There would also be a significant increase in social fragmentation – with a deepening of antagonistic views, mistrust, and intolerance, both within countries and towards others – and a resurgence of large-scale social movements fostered by ideological interests and easily mobilized through social media. Prevention, preparedness, response Given the severity of the impacts, no country in possession of nuclear weapons or weapons-usable materials can guarantee its full protection against nuclear terrorism or nuclear smuggling for proliferation purposes. Nor is it realistic to conceive of full compensation to others in the international community, if a catastrophic event happens because of any country’s acts or omissions. Therefore, we consider that prevention is the only acceptable way forward to preserve global stability. Consequently, it is essential for countries to make every effort to prevent nuclear terrorists from fulfilling their goals. It is true that the “primitivism” of currently active terrorist organizations gives a certain space to do what is necessary to enhance the current nuclear security effort concerning prevention and response. However, the perception of the “low likeliness” of a nuclear terrorist attack neutralizes the required sense of urgency in decision-making. Being in fact a “high-risk” scenario, it is imperative that governments consider this reality when setting priorities and making decisions about nuclear security.

### 1AC – Democracy Advantage

**LAWS are a unique threat to human rights and democracy.**

Kyle **Matthews** (Executive Director of the Montreal Institute for Genocide and Human Rights at Concordia University. Alexandrine Royer is a Youth Fellow at the Montreal Institute for Genocide and Human Rights Studies.) “Artificial intelligence has been weaponized in China. That should be a wake-up call for the world” May 21, **2019** https://www.cbc.ca/news/opinion/ai-china-1.5140612

Beyond its use by repressive regimes, AI can directly interfere with human rights in democratic and open societies. The infinite collection of personal data by AI systems for micro-ad targeting limits the rights of privacy. AI-enabled online content monitoring impedes freedom of expression and opinion, as access to and the sharing of information by users is controlled in opaque and inscrutable ways. Vast AI-powered disinformation campaigns — from troll bots to deepfakes (altered video clips) — threaten societies' access to accurate information, can disrupt elections and erode social cohesion. An equally frightening scenario is the use of AI in conflict situations. Human Rights Watch has warned that AI could be used in the future to target certain populations in war zones through deploying lethal autonomous weapon systems, commonly known as killer robots.

**Continued democratic decline causes great power conflict**

Larry **Diamond**, 20**19**, writing democracy good cards since ’88, also has a PhD in Sociology from Stanford, and Senior Fellow at the Hoover Institution. “Ill Winds: Saving Democracy from Russian Rage, Chinese Ambition, and American Complacency” Accessed 2-19-2020. [https://www.amazon.com/Ill-Winds-Democracy-Ambition-Complacency-ebook/dp/B07HLR7R7F]/mnw

In such a near future, my fellow experts would no longer talk of “democratic erosion.” We would be spiraling downward into a time of democratic despair, recalling Daniel Patrick Moynihan’s grim observation from the 1970s that liberal democracy “is where the world was, not where it is going.” 5 The world pulled out of that downward spiral—but it took new, more purposeful American leadership. The planet was not so lucky in the 1930s, when the global implosion of democracy led to a **catastrophic world war**, between a rising axis of emboldened dictatorships and a shaken and economically depressed collection of self-doubting democracies. These are the stakes. Expanding democracy—with its liberal norms and constitutional commitments—is a crucial foundation for **world peace and security**. Knock that away, and our most basic hopes and assumptions will be imperiled. The problem is not just that the ground is slipping. It is that we are perched on a **global precipice.** That ledge has been gradually giving way for a decade. If the erosion continues, we may well reach a tipping point where democracy goes bankrupt suddenly—plunging the world into depths of **oppression and aggression** that we have not seen since the end of **World War II.** As a political scientist, I know that our theories and tools are not nearly good enough to tell us just how close we are getting to that point—until it happens.

**The best analysis proves democratic peace theory**

Dan **Reiter**, 20**17**, Professor at the Department of Political Science at Emory University. "Is Democracy a Cause of Peace?" Oxford Research Encyclopedia. Accessed 2-19-2020 [https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-287]/mnw

This is not to take a maximalist position that quasi-experiments add nothing, or that adding variables is never advised. It does suggest, however, considering other means of assessing causation, in addition to the conventional approach of seeing if adding plausible exogenous variables renders the democracy-peace correlation to be statistically insignificant. Scholars have explored other means of assessing causation in the democratic peace, and have amassed three other types of evidence that support the conclusion that democracy causes peace: evidence demonstrating support for other empirical patterns suggested by democratic peace theory; evidence produced using experimental methods; and evidence produced using case studies. The first type of evidence explores for the existence of other empirical patterns predicted by democratic peace theory. If a theory predicts the existence of a variety of empirical patterns and these patterns are demonstrated through tests, we can be more confident in the validity of the theory, and in turn that observed correlations are causal and not just spurious. And, indeed, there is a wide array of quantitative empirical studies that provide support for various assumptions or implications of democratic peace theory, especially for institutionalist accounts of the democratic peace. Perhaps the central institutionalist explanation of the democratic peace proposes that elected leaders are motivated to avoid fighting wars, because the costs of wars will incite popular discontent in turn threatening their hold on power. Studies have demonstrated a number of empirical patterns consistent with this view. **Democracies fight shorter wars** (Reiter & Stam, 2002, ch. 7). **Democracies suffer fewer casualties when they fight wars** (Valentino et al., 2010), and when they fight, **popular support for the leadership declines as casualties escalate** (Mueller, 1973). The benefits of victorious wars may sometimes push democratic publics to accept the costs of war when they are confident of victory, and accordingly democracies almost never start wars they go on to lose (Reiter & Stam, 2002). During war, public support erodes as the perceived likelihood of victory declines (Gelpi et al., 2009). As the institutional explanation of the democratic peace would predict, variations of institutional and leadership form within democracies also affects conflict behavior, as in general more constrained states are less conflict prone (Reiter & Tillman, 2002). Consistent with the audience costs explanation, democracies can more effectively signal their resolve than at least some kinds of autocratic states (Schultz, 2001; Weeks, 2014). There are also some studies supporting elements of the normative explanation. For example, some studies have found that democracies are especially likely to use mediation or binding arbitration to resolve interstate disputes (Dixon, 1993; Raymond, 1994, 1996). In total, though there are certainly scholarly debates about some of these observed patterns,6 this collection of studies improves our confidence that democracy is causing peace in the manners described by democratic peace theory. The second type of evidence uses experimental methods. Some have proposed that **experimental methods enjoy critical advantages over the analysis of observational data in assessing causation**. **Experimental methods are able largely to skirt some of the biggest causal inference problems associated with quasi-experimental methods, such as biased samples and nonrandom assignments of treatment**. That said, the limitation of experimental methods is that, especially in international relations, they can only be used to test some arguments, or some components of arguments. For example, regarding the democratic peace an experimenter cannot take a set of states and then randomly assign some to be democratic and others to be non-democratic. That said, scholars have thus far been able to conduct survey and laboratory experiments that have tested some elements of the democratic peace. A number of surveys have found support for one of the core assertions of dyadic democratic peace theory: that **citizens of democracies are significantly less likely to support the use of force against democracies as compared to using force against non-democracies** (Geva et al., 1993; Johns & Davies 2012; Lacina & Lee, 2013; Mintz & Nehemia, 1993; Rousseau, 2005, pp. 219–232; Tomz & Weeks, 2013) Other experiments have tested elements of the audience costs variant of the democratic peace, showing that the public does inflict audience costs on leaders who back down in a crisis (Horowitz & Levendusky, 2012; Tomz, 2007; Trager & Vavreck, 2011). A third empirical means of demonstrating causation is to engage in process tracing through case studies. Scholars have presented several individual case studies of the democratic peace in events such as 19th-century American diplomatic crises, the 1898 Fashoda Crisis, the onset of World War II, the Spanish-American War, and many others (see Elman, 1997; Owen, 1997; Ray, 1995; Risse-Kappen, 1995; Rousseau, 2005; Schultz, 2001; for case studies presenting evidence against the democratic peace, see Layne, 1994). Some of these case studies demonstrate specific parts of the causal logic of the democratic peace, such as the ability of democracies to signal more effectively through invoking greater audience costs (Schultz, 2001), or the inability of elected leaders to manipulate public opinion or secretly drag their nations into wars the public would otherwise avoid (Reiter, 2012a). Perhaps the most striking case study of democratic peace dynamics is the pacification of Western Europe after World War II, democracy helping to dissolve immediately and completely one of the most violent interstate conflicts in modern history, the France-Germany rivalry (Russett & Oneal, 2001).

### 1AC – War Escalation Advantage

#### Failure to ban lethal autonomous weapons locks us into a cycle of ever-increasing conflict. Every new interaction could lead to a dramatic escalation

Matthew Anzarouth (Harvard Political Review) “Robots that Kill: The Case for Banning Lethal Autonomous Weapon Systems” December 02, 2021 https://harvardpolitics.com/robots-that-kill-the-case-for-banning-lethal-autonomous-weapon-systems/

Preventing the Next Arms Race. Despite these grave concerns, countries are pushing ahead in the research and development of LAWS. With large military powers leading the race, there are two potential outcomes if this trend goes uninterrupted. One is that LAWS become tools with which powerful militaries destabilize other regions, starting a new chapter of the ‘forever wars’ without boots on the ground. The second potential outcome is that LAWS become front and centre in conflict between the large military powers leading the race. They may drag us into a new war between superpowers without the mutually assured destruction that prevents nuclear warfare since LAWS can engage in a series of smaller, yet still extremely impactful, attacks that will not be deterred by the threat of retaliation. The movement against LAWS is small, but it is growing. More and more countries have expressed concern about the destabilizing effects of these weapons and stressed the need for a collective agreement to rule them out, much like existing treaties that limit chemical, biological and intermediate-range nuclear weapons. However, military powers like the U.S. and Russia have blocked regulations on LAWS at the Convention on Conventional Weapons and are quietly leading what some are calling the third revolution in warfare. The challenge in regulating or banning LAWS, as with many forms of international cooperation, is overcoming collective action problems. The development of LAWS seems like a textbook example of a “security dilemma,” wherein one country perceives heightened security measures by another as a threat and decides to adopt similar measures in response. Together, these factors increase the risk of escalation to an outcome neither party desires. Our best hope in confronting this dilemma is to foster discussions in international negotiations that expose to military superpowers the great risks that LAWS present. While many countries may fear falling behind if they make the first move to disarm and de-escalate, it is possible that when the stakes are sufficiently high and it is clear that nobody, including dominant powers, is immune to the dangers of LAWS, we may see sufficient international will to address them. While LAWS still appear to be in their infancy, we are running out of time to prevent their uncontrolled proliferation. Once one country uses these weapons to significantly tilt the playing field in its favor, others may have no choice but to follow suit. It is therefore imperative that we switch off the robots before they take over the battlefield and the horrors of science fiction become reality.

#### Autonomous weapons will inevitably become weapons of mass destruction. This makes global war inevitable.

Stuart Russell (professor of computer science at the University of California, Berkeley, and coauthor of the standard textbook "Artificial Intelligence: A Modern Approach.") “Lethal Autonomous Weapons Exist; They Must Be Banned” June 16, 2021 https://spectrum.ieee.org/lethal-autonomous-weapons-exist-they-must-be-banned

We produced “Slaughterbots" to educate the public and policymakers alike about the potential imminent dangers of small, cheap, and ubiquitous lethal autonomous weapons systems. Beyond the moral issue of handing over decisions over life and death to algorithms, the video pointed out that autonomous weapons will, inevitably, turn into weapons of mass destruction, precisely because they require no human supervision and can therefore be deployed in vast numbers. (A related point, concerning the tactical agility of such weapons platforms, was made in Spectrum last month in an article by Natasha Bajema.) Furthermore, like small arms, autonomous weaponized drones will proliferate easily on the international arms market. As the “Slaughterbots" video's epilogue explained, all the component technologies were already available, and we expected militaries to start deploying such weapons very soon. That prediction was essentially correct. The past few years have seen a series of media reports about military testing of ever-larger drone swarms and battlefield use of weapons with increasingly autonomous functions. In 2019, then-Secretary of Defense Mark Esper, at a meeting of the National Security Commission on Artificial Intelligence, remarked, “As we speak, the Chinese government is already exporting some of its most advanced military aerial drones to the Middle East.

#### A ban now is key – continued development of lethal autonomous weapons could be catastrophic

Michael T. Klare (professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association) “Autonomous Weapons Systems and the Laws of War” March 2019 https://www.armscontrol.org/act/2019-03/features/autonomous-weapons-systems-laws-war

Assessing the Risks Given the likelihood that China, Russia, the United States, and other nations will deploy increasingly autonomous robotic weapons in the years ahead, policymakers must identify and weigh the potential risks of such deployments. These include not only the potential for accident and unintended escalation, as would be the case with any new weapons that are unleashed on the battlefield, but also a wide array of moral, ethical, and legal concerns arising from the diminishing role of humans in life-and-death decision-making. The potential dangers associated with the deployment of AI-empowered robotic weapons begin with the fact that much of the technology involved is new and untested under the conditions of actual combat, where unpredictable outcomes are the norm. For example, it is one thing to test self-driving cars under controlled conditions with human oversight; it is another to let such vehicles loose on busy highways. If that self-driving vehicle is covered with armor, equipped with a gun, and released on a modern battlefield, algorithms can never anticipate all the hazards and mutations of combat, no matter how well “trained” the algorithms governing the vehicle’s actions may be. In war, accidents and mishaps, some potentially catastrophic, are almost inevitable. Extensive testing of AI image-classification algorithms has shown that such systems can easily be fooled by slight deviations from standardized representations—in one experiment, a turtle was repeatedly identified as a rifle9—and are vulnerable to trickery, or “spoofing,” as well as hacking by adversaries. Former Navy Secretary Richard Danzig, who has studied the dangers of employing untested technologies on the battlefield, has been particularly outspoken in cautioning against the premature deployment of AI-empowered weaponry. “Unfortunately, the uncertainties surrounding the use and interaction of new military technologies are not subject to confident calculation or control,” he wrote in 2018.10 This danger is all the more acute because, on the current path, autonomous weapons systems will be accorded ever-greater authority to make decisions on the use of lethal force in battle. Although U.S. authorities insist that human operators will always be involved when life-and-death decisions are made by armed robots, the trajectory of technology is leading to an ever-diminishing human role in that capacity, heading eventually to a time when humans are uninvolved entirely. This could occur as a deliberate decision, such as when a drone is set free to attack targets fitting a specified appearance (“adult male armed with gun”), or as a conditional matter, as when drones are commanded to fire at their discretion if they lose contact with human controllers. A human operator is somehow involved, by launching the drones on those missions, but no human is ordering the specific lethal attack. These principles pose a particular challenge to fully autonomous weapons systems because they require a capacity to make fine distinctions in the heat of battle. It may be relatively easy in a large tank-on-tank battle, for example, to distinguish military from civilian vehicles; but in many recent conflicts, enemy combatants have armed ordinary pickup trucks and covered them with a tarpaulins, making them almost indistinguishable from civilian vehicles. Perhaps a hardened veteran could spot the difference, but an intelligent robot? Unlikely. Similarly, how does one gauge proportionality when attempting to attack enemy snipers firing from civilian-occupied tenement buildings? For robots, this could prove an insurmountable challenge. Advocates and critics of autonomous weaponry disagree over whether such systems can be equipped with algorithms sufficiently adept to distinguish between targets to satisfy the laws of war. “Humans possess the unique capacity to identify with other human beings and are thus equipped to understand the nuances of unforeseen behavior in ways that machines, which must be programmed in advance, simply cannot,” analysts from Human Rights Watch (HRW) and the International Human Rights Clinic of Harvard Law School wrote in 2016.12 Another danger arises from the speed with which automated systems operate, along with plans for deploying autonomous weapons systems in coordinated groups, or swarms. The Pentagon envisions a time when large numbers of drone ships and aircraft are released to search for enemy missile-launching submarines and other critical assets, including mobile ballistic missile launchers. At present, U.S. adversaries rely on those missile systems to serve as an invulnerable second-strike deterrent to a U.S. disarming first strike. Should Russia or China ever perceive that swarming U.S. drones threaten the survival of their second-strike systems, those countries could feel pressured to launch their missiles when such swarms are detected, lest they lose their missiles to a feared U.S. first strike.

#### That escalates and causes extinction

**Starr 17** [Steven Starr is the director of the University of Missouri's Clinical Laboratory Science Program, as well as a senior scientist at the Physicians for Social Responsibility, 1-9-2017, "Turning a Blind Eye Towards Armageddon — U.S. Leaders Reject Nuclear Winter Studies," FAS, [https://fas.org/2017/01/turning-a-blind-eye-towards-armageddon-u-s-leaders-reject-nuclear-winter-studies]](https://fas.org/2017/01/turning-a-blind-eye-towards-armageddon-u-s-leaders-reject-nuclear-winter-studies%5d)

The detonation of an atomic bomb with this explosive power will instantly ignite fires over a surface area of three to five square miles. In the recent studies, the scientists calculated that the blast, fire, and radiation from a war fought with 100 atomic bombs could produce direct fatalities comparable to all of those worldwide in World War II, or to those once estimated for a “counterforce” nuclear war between the superpowers. However, the long-term environmental effects of the war could significantly disrupt the **global weather** for at least a decade, which would likely result in a **vast global famine**. The scientists predicted that nuclear **firestorms** in the burning cities would cause at least five million tons of **black carbon smoke** to quickly rise above cloud level into the stratosphere, where it could not be rained out. The smoke would circle the Earth in less than two weeks and would form a **global** stratospheric smoke **layer** that would remain for more than a **decade**. The smoke would absorb warming **sunlight**, which would heat the smoke to temperatures near the boiling point of water, producing **ozone losses** of 20 to 50 percent over populated areas. This would almost double the amount of UV-B reaching the most populated regions of the mid-latitudes, and it would create UV-B indices **unprecedented in** ~~human~~ [humyn} history. In North America and Central Europe, the time required to get a painful sunburn at mid-day in June could decrease to as little as six minutes for fair-skinned individuals. As the smoke layer blocked warming sunlight from reaching the Earth’s surface, it would produce the **cold**est average surface **temperatures** in the last 1,000 years. The scientists calculated that global food production would decrease by 20 to 40 percent during a five-year period following such a war. Medical experts have predicted that the shortening of growing seasons and corresponding decreases in agricultural production could cause up to **two billion** people to **perish** from famine. The climatologists also investigated the effects of a nuclear war fought with the vastly more powerful modern thermonuclear weapons possessed by the United States, Russia, China, France, and England. Some of the thermonuclear weapons constructed during the 1950s and 1960s were 1,000 times more powerful than an atomic bomb. During the last 30 years, the average size of thermonuclear or “strategic” nuclear weapons has decreased. Yet today, each of the approximately 3,540 strategic weapons deployed by the United States and Russia is seven to 80 times more powerful than the atomic bombs modeled in the India-Pakistan study. The smallest strategic nuclear weapon has an explosive power of 100,000 tons of TNT, compared to an atomic bomb with an average explosive power of 15,000 tons of TNT. Strategic nuclear weapons produce much larger nuclear firestorms than do atomic bombs. For example, a standard Russian 800-kiloton warhead, on an average day, will ignite fires covering a surface area of 90 to 152 square miles. A war fought with hundreds or thousands of **U.S. and Russian** strategic nuclear weapons would ignite immense nuclear firestorms covering land surface areas of many thousands or tens of thousands of square miles. The scientists calculated that these fires would produce up to 180 million tons of black carbon soot and smoke, which would form a dense, global stratospheric smoke layer. The smoke would remain in the stratosphere for 10 to 20 years, and it would block as much as 70 percent of sunlight from reaching the surface of the Northern Hemisphere and 35 percent from the Southern Hemisphere. So much sunlight would be blocked by the smoke that the noonday sun would resemble a full moon at midnight. Under such conditions, it would only require a matter of days or weeks for daily minimum temperatures to fall **below freezing in the largest agricultural areas** of the Northern Hemisphere, where freezing temperatures would occur every day for a period of between one to more than two years. Average surface temperatures would become colder than those experienced 18,000 years ago at the height of the last Ice Age, and the prolonged cold would cause average rainfall to decrease by up to 90%. Growing seasons would be completely eliminated for more than a decade; it would be too cold and dark to grow food crops, which would **doom the majority of the ~~human~~ [humyn] population**. NUCLEAR WINTER IN BRIEF The profound cold and darkness following nuclear war became known as nuclear winter and was first predicted in 1983 by a group of NASA scientists led by Carl Sagan. During the mid-1980s, a large body of research was done by such groups as the Scientific Committee on Problems of the Environment (SCOPE), the World Meteorological Organization, and the U.S. National Research Council of the U.S. National Academy of Sciences; their work essentially supported the initial findings of the 1983 studies. The idea of nuclear winter, published and supported by prominent scientists, generated extensive public alarm and put political pressure on the United States and Soviet Union to reverse a runaway nuclear arms race, which, by 1986, had created a global nuclear arsenal of more than 65,000 nuclear weapons. Unfortunately, this created a backlash among many powerful military and industrial interests, who undertook an extensive media campaign to brand nuclear winter as “bad science” and the scientists who discovered it as “irresponsible.” Critics used various uncertainties in the studies and the first climate models (which are primitive by today’s standards) as a basis to criticize and reject the concept of nuclear winter. In 1986, the Council on Foreign Relations published an article by scientists from the National Center for Atmospheric Research, who predicted drops in global cooling about half as large as those first predicted by the 1983 studies and described this as a “nuclear autumn.” The nuclear autumn studies were later shown to be deeply flawed, but the proof came too late to stop a massive smear campaign that effectively discredited the initial studies. Nuclear winter was subject to criticism and damning articles in the Wall Street Journal and Time magazine. In 1987, the National Review called nuclear winter a “fraud.” In 2000, Discover Magazine published an article that described nuclear winter as one of “The Twenty Greatest Scientific Blunders in History.” The endless smear campaign was successful; the general public, and even most anti-nuclear activists, were left with the idea that nuclear winter had been scientifically disproved. REJECTION BY LEADERS Yet the scientists did not give up. In 2006, they returned to their labs to perform the research I have previously described. Their new research not only upheld the previous findings but also found that the earlier studies actually underestimated the environmental effects of nuclear war. Dr. Robock of Rutgers and Dr. Toon of the University of Colorado have spent years attempting to bring official attention to their work and get follow-up research studies done by appropriate agencies in the federal government. In a recent (2016) interview, Dr. Toon stated: The Department of Energy and the Department of Defense, which should be investigating this problem, have done absolutely nothing. They have not published a single paper, in the open literature, analyzing this problem … We have made a list of where we think the important issues are, and we have gone to every [federal] agency we can think of with these lists, and said “Don’t you think someone should study this?” Basically, everyone we have tried so far has said, “Well that’s not my job.” In the same interview, Dr. Robock also noted: The Department of Homeland Security really should fund this. They will fund you to study one terrorist bomb in New York City. When you explain to them that a war between India and Pakistan is a much greater threat to the U.S. homeland than one terrorist bomb, as horrible as that is, they respond with “Oh, well that’s not my job, go talk to some other program manager” — who, of course, doesn’t exist. After the more recent series of studies were published in 2007 and 2008, Drs. Robock and Toon also made a number of requests to meet with members of the Obama administration. The scientists offered to brief Cabinet members and the White House staff about their findings, which they assumed would have a great impact upon nuclear weapons policy. Their offers were met with indifference. Finally, after several years of trying, Drs. Robock and Toon were allowed an audience with John Holdren, Senior Advisor to President Barack Obama on Science and Technology. Dr. Robock also eventually met with Rose Gottemoeller, then Under Secretary of State for Arms Control and International Security. Dr. Robock has written to me that, after these meetings, he and Dr. Toon were left with the impression that neither Holdren nor Gottemoeller think the nuclear winter research “is correct.” But it is not only Holdren and Gottemoeller who reject the nuclear winter research. Greg Mello, of the Los Alamos Study Group, cites a source who confirms that the group that determines the “full range of activities related to the development, production, maintenance (upkeep) and elimination (retirement, disassembly and disposal) of all United States nuclear weapons — the members of the U.S. Nuclear Weapons Council — have stated that “the predictions of nuclear winter were disproved years ago.” The members of the U.S. Nuclear Weapons Council include: Under Secretary of Defense for Acquisition, Technology, and Logistics Vice ~~Chairman~~ [Chairperson} of the Joint Chiefs of Staff Under Secretary for Nuclear Security of the Department of Energy Under Secretary of Defense for Policy Commander of the United States Strategic Command It is important to understand that some members of this group — especially the Commander of the U.S. Strategic Command (USSTRATCOM) — also develop the policies that guide the use of nuclear weapons. Perhaps General John Hyten, Head of USSTRATCOM, who is in charge of the U.S. nuclear triad, and General Paul Selva, Vice ~~Chairman~~ [Chairperson] of the Joint Chiefs of Staff, the second highest ranking officer in the United States, have never seen or heard of the 21st century nuclear winter studies. Perhaps when they hear a question about “nuclear winter,” they only remember the smear campaigns done against the early studies. Or, maybe, they just choose not to accept the new scientific research on nuclear winter, despite the fact that it has withstood the criticism of the global scientific community. Regardless, the rejection of nuclear winter research by the top leaders of the United States raises some profoundly important questions: Do U.S. military and political leaders fully understand the consequences of nuclear war? Do they realize that even a “successful” nuclear first-strike against Russia could cause most Americans to die from nuclear famine? In 2010, Drs. Toon and Robock wrote in Physics Today: We estimate that the direct effects of using the 2012 arsenals would lead to hundreds of millions of fatalities. The indirect effects would likely eliminate the majority of the ~~human~~ [humyn] population. In 2013, Drs. Toon and Robock wrote in the Bulletin of Atomic Scientists that: A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in Self-Assured Destruction. RENEWED COLD WAR Although president-elect Trump appears to favor a return to the policy of détente with Russia, many if not most U.S. political leaders appear to support the Obama administration’s policies of direct confrontation with Putin’s Russia. Mainstream corporate media, including the editorial boards of The New York Times and The Washington Post, routinely engage in anti-Russian and anti-Putin rhetoric that surpasses the hate speech of the McCarthy era. Under President Obama, the United States has renewed the **Cold War** with Russia, with little or no debate or protest, and has subsequently engaged in **proxy wars** with Russia in **Ukraine and Syria,** as well as threatening **military action against China** in the **South China Sea**. In response to what NATO leaders describe as Russia’s “dangerous and aggressive actions,” NATO has built up a **“rapid-response force”** of 40,000 troops on the Russian border in the Baltic States and Poland. This force includes hundreds of tanks, armored vehicles, and heavy artillery. NATO troops stationed in Estonia are within **artillery range of St. Petersburg**, the second largest city of Russia. The United States has deployed its **Aegis** Ashore Ballistic Missile Defense (**BMD**) system in **Romania** and is constructing another such BMD system in **Poland**. The Mark 41 launch system used in the Aegis Ashore systems can be used to launch a variety of missiles, including **long-range nuclear-armed cruise missiles**. In other words, the United States has built and is building **launch sites for nuclear missiles on the Russian border**. This fact has been widely reported on Russian TV and has infuriated the Russian public. In June, Russian President Putin specifically warned that Russia would be **forced to retaliate** against this threat. While Russian officials maintain that its actions are normal and routine, Russia now appears to be **preparing for war**. On October 5, 2016, Russia conducted a nation-wide civil defense drill that included 40 million of its people being directed to fallout shelters. Reuters reported two days later that Russia had moved its Iskander nuclear-capable missiles to **Kaliningrad**, which borders Poland. While the United States ignores the danger of nuclear war, Russian scholar Stephen Cohen reports that the danger of war with the United States is the leading news story in Russia. Cohen states: Just as there is no discussion of the most existential question of our time, in the American political class — the possibility of war with Russia — it is the only thing being discussed in the Russian political class . . . These are two different political universes. In Russia, all the discussion in the newspapers, and there is plenty of free discussion on talk show TV, which echoes what the Kremlin is thinking, online, in the elite newspapers, and in the popular broadcasts, the number 1, 2, 3, and 4 topics of the day are the possibility of war with the United States. Cohen goes on to say: I conclude from this that the leadership of Russia **actually believes** now, in reaction to what the United States and NATO have said and done over the last two years, and particularly in reaction to the breakdown of the proposed cooperation in Syria, and the rhetoric coming out of Washington, that **war is a real possibility**. I can’t remember when, since the Cuban Missile Crisis, that the Moscow leadership came to this conclusion in its collective head. Perhaps this narrative will change under president-elect Trump. However, he is inheriting a situation **fraught with danger**, which retains the possibility of **direct military conflict** with **Russia in Ukraine and Syria**, as well as increasingly militarized confrontation with **China in the South China Sea**.

### 1AC – NATO Cohesion Advantage

#### Disagreements exist but the overwhelming consensus is that LAWS need to be banned.

Congressional Research Service “Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems” November 17, 2021 https://crsreports.congress.gov/product/pdf/IF/IF11150

In addition, approximately 30 countries and 165 nongovernmental organizations have called for a preemptive ban on LAWS due to ethical concerns, including concerns about operational risk, accountability for use, and compliance with the proportionality and distinction requirements of the law of war. The U.S. government does not currently support a ban on LAWS and has addressed ethical concerns about the systems in a March 2018 white paper, “Humanitarian Benefits of Emerging Technologies in the Area of Lethal Autonomous Weapons.” The paper notes that “automated target identification, tracking, selection, and engagement functions can allow weapons to strike military objectives more accurately and with less risk of collateral damage” or civilian casualties.

#### The multilateral framework can create positive norms on LAWS and solve internal struggle

Jay Ettinger, 20, (Jay Ettinger, Jay is JD & Legal Intern, UN High Commissioner for Human Rights, Fall 2020, “Overcoming International Inertia: The Creation of War Manual for Lethal Autonomous Weapons Systems,” Minnesota Journal Of International Law, https://minnjil.org/wp-content/uploads/2021/09/Ettinger-MACRO.pdf, 6-27-2022) SCade

\*IHL = International Humanitarian Law

B. Challenges Facing the Existing Approach to Building a Legal Framework for LAWS Development and Use. With many nations aggressively pursuing LAWS technology, there is an urgent need to develop standards to influence and regulate the testing and deployment of this new technology.162 The current UN-focused approach is not progressing quickly enough to provide meaningful guidance to States.163 As stated by one observer, “the pace of diplomacy [is] falling behind the speed of technological advancement.”164 Historically, the development of IHL has been heavily dependent on state practice and consequently takes a significant amount of time for custom to ripen.165 Additionally, given the high stakes of creating a body of law that grants the use of deadly force in the name of national security, the codification of state practice into multilateral treaties is a highly sensitive and contested process.166 The process is also highly pluralistic, which while valuable for accounting for diverse interests, can make progress challenging.167 As described by Michael Schmitt, “[c]onfronted with a cacophony of inputs—private and public, military and civilian, domestic and international—the IHL lawyer frequently finds clarity and consensus elusive.”168

**NATO cooperation and cohesion solves pandemics, bioD loss and climate change**

Sherri **Goodman and** Katarina **Kertysova, 22**, (Sherri Goodman, Katarina Kertysova, 2-1-2022, NATO Review, NATO Review, https://www.nato.int/docu/review/articles/2022/02/01/nato-an-unexpected-driver-of-climate-action/index.html, 6-27-2022) SCade

NATO’s climate security agenda

Climate change has long been known as a threat multiplier and is increasingly recognised as a “shaping threat” that dramatically alters the environments in which Allied militaries will have to operate in the coming decades. From higher frequency and intensity of storms, through extreme heat and cold, to reduced supplies of drinking water and faster wear and tear of military equipment, climate change has significant implications for NATO on the tactical, operational and strategic levels. In addition to **climate-related risks to military infrastructure and force readiness**, more **extreme weather events** can also **increase conflict and migration potential** in and beyond NATO’s immediate neighbourhood. Born of the Cold War and designed to defend its members against any external aggression, NATO is evolving to reflect the new security reality of actorless threats, **such as pandemics, biodiversity loss and climate change**. As a security organisation, NATO cannot be indifferent to these challenges. For NATO to be able to fulfil its core mission of keeping the Euro-Atlantic space safe, building resilience to the impacts of a changing climate and integrating sustainable practices into military planning and capability development is a necessity, not a choice. Evolving consensus The good news is that **the Alliance is not starting from scratch**. For over 50 years now, NATO has been paying attention to environmental challenges, mostly through a wide range of scientific research activities. NATO has also developed six environmental protection standards (STANAGs) that concern military camps, management of waste, and sustainability of military training areas. Climate change was written into the 2010 Strategic Concept and has been factored into summit declarations since then. In 2014, NATO adopted a Green Defence Framework and integrated energy efficiency and other environmental considerations into the design of the current NATO headquarters, which was completed in 2018. **The building blocks for a more ambitious and visible role with respect to climate security are already there**. However, NATO as an alliance of 30 countries works by consensus, which is always evolving. As a former UN Special Envoy on Climate Change, Jens Stoltenberg began advocating for NATO to take greater climate-related action many years ago, but his efforts may have been stymied during the previous U.S. administration. The growing number of climate and weather related disasters, which continue to impact lives and livelihoods both within and outside of NATO’s borders, has marked an evident shift in awareness and acceptance of climate change as an issue of national security across the Alliance. In view of increasing societal pressure and the current political momentum, which includes the renewed U.S. leadership on climate change, NATO is now **poised to push a more ambitious climate agenda**.

**Warming outweighs---its *irreversible* and exacerbates biodiversity loss, conflict, disease**

**Torres 16** (Phil Torres; author, Affiliate Scholar @ Institute for Ethics and Emerging Technologies, founder of the X-Risks Institute, published articles for Bulletin of the Atomic Scientists, Salon, Journal of Future Studies, and the Journal of Evolution and Technology; 7-22-2016, "Op-ed: Climate Change Is the Most Urgent Existential Risk," FLI - Future of Life Institute, http://futureoflife.org/2016/07/22/climate-change-is-the-most-urgent-existential-risk/, accessed 8-9-2016)

For example, **according to the** **I**ntergovernmental **P**anel on **C**limate **C**hange, the effects of climate change will be “severe,” “pervasive,” and “**irreversible**.” Or, as [a 2016 study](http://www.climate.unibe.ch/~stocker/papers/clark16natcc.pdf) **published in Nature** and authored by over twenty scientists puts it, the consequences of climate change “will extend longer than the entire history of human civilization thus far.” Furthermore, [a recent article](http://advances.sciencemag.org/content/1/5/e1400253.full?con=&dom=pscau&src=syndication) in Science Advances confirms that humanity has already escorted the biosphere into the sixth mass extinction event in life’s 3.8 billion year history on Earth. Yet [another study](http://www.nature.com/nature/journal/v486/n7401/full/nature11018.html) suggests that **we could be approaching a sudden,** irreversible, **catastrophic collapse of the global ecosystem**. If this were to occur, **it could result in “widespread** social **unrest, economic instability and** loss of human life**.”** Given the potential for environmental degradation to **elevate the likelihood of nuclear war**s**, nuclear terrorism,** engineered **pandemics**, a superintelligence takeover, and perhaps even an [impact winter](https://en.wikipedia.org/wiki/Impact_winter), it ought to take precedence over all other risk concerns — at least in the near-term. Let’s make sure we get our priorities straight.

## Case Extensions

### Inherency

#### Action now is key to prevent the most catastrophic impacts

Coley Felt (International Policy Institute Cybersecurity Fellow) “Autonomous Weaponry: Are Killer Robots in Our Future?” February 14, 2020 https://jsis.washington.edu/news/autonomous-weaponry-are-killer-robots-in-our-future/

Furthermore, an open letter calling for “a ban on offensive autonomous weapons beyond meaningful human control” was signed by Elon Musk, Stephen Hawking and more than 3,000 AI and robotics experts in 2017 (Etzioni, 2017). The letter highlights that the development of this technology requires no costly or hard-to-obtain raw materials, raising concern about how easy it is to produce these types of weapons. Furthermore, researchers emphasize that LAWS are ideal for certain malicious tasks such as assassinations, reducing populations, destabilizing nations and selectively killing specific groups (Busby, 2018). In the United States, tension is high between Silicon Valley and the federal government around this controversial topic. For example, the United States’ Project Maven aims to invest billions of dollars into artificial intelligence research and development pertaining to the military. After Google was originally contracted to work on the project, an employee protest led to the company pulling out once the contract expired. Many Google employees are not supportive of fully autonomous weaponry and refused to be part of its possible development (Fryer-Biggs, 2018).

## Solvency

### Solvency – General

#### The use of a moratorium creates a period to expand security cooperation- solves for LAWS destruction

**Arkin**, Ronald C, **et al**. October 20**19** “A Path towards Reasonable Autonomous Weapons Regulation.” IEEE Spectrum, IEEE Spectrum, 21 Oct. 2019, spectrum.ieee.org/a-path-towards-reasonable-autonomous-weapons-regulation. Accessed 28 June 2022. ([Ronald C. Arkin](http://www.cc.gatech.edu/aimosaic/faculty/arkin/), an IEEE Fellow, is Regents' Professor, Director of the Mobile Robot Laboratory, and Associate Dean for Research in the College of Computing at the Georgia Institute of Technology. His research focuses on multiagent robotic systems, and he's published numerous articles and book chapters on human-robot interaction and robot ethics. Cutby:neigh)

Component 1: States should consider adopting a five-year, renewable moratorium on the development, deployment, transfer, and use of anti-personnel lethal autonomous weapon systems. Anti-personnel lethal autonomous weapon systems are defined as weapons systems that, once activated, can select and engage dismounted human targets without further intervention by a human operator, possibly excluding systems such as: Fixed-point defensive systems with human supervisory control to defend human-occupied bases or installations Limited, proportional, automated counter-fire systems that return fire in order to provide immediate, local defense of humans Time-limited pursuit deterrent munitions or systems Autonomous weapon systems with size above a specified explosive weight limit that select as targets hand-held weapons, such as rifles, machine guns, anti-tank weapons, or man-portable air defense systems, provided there is adequate protection for non-combatants and ensuring IHL compliance[5](https://spectrum.ieee.org/a-path-towards-reasonable-autonomous-weapons-regulation#footnote-5) The moratorium would not apply to: Anti-vehicle or anti-materiel weapons Non-lethal anti-personnel weapons Research on ways of improving autonomous weapon technology to reduce non-combatant harm in future anti-personnel lethal autonomous weapon systems Weapons that find, track, and engage specific individuals whom a human has decided should be engaged within a limited predetermined period of time and geographic region Motivation: This moratorium would pause development and deployment of anti-personnel lethal autonomous weapons systems to allow states to better understand the systemic risks of their use and to perform research that improves their safety, understandability, and effectiveness.

#### No autonomous weapons now – they are not inevitable and it is not too late to stop them

Michael T. Klare (professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association) “Autonomous Weapons Systems and the Laws of War” March 2019 https://www.armscontrol.org/act/2019-03/features/autonomous-weapons-systems-laws-war

Autonomous weapons systems are lethal devices that have been empowered by their human creators to survey their surroundings, identify potential enemy targets, and independently choose to attack those targets on the basis of sophisticated algorithms. Such systems require the integration of several core elements: a mobile combat platform, such as a drone aircraft, ship, or ground vehicle; sensors of various types to scrutinize the platform’s surroundings; processing systems to classify objects discovered by the sensors; and algorithms directing the platform to initiate attack when an allowable target is detected. The U.S. Department of Defense describes an autonomous weapons system as a “weapons system that, once activated, can select and engage targets without further intervention by a human operator.”2 Few weapons in active service presently exhibit all of these characteristics. Many militaries employ close-in naval defense weapons such as the U.S. Phalanx gun system that can fire autonomously when a ship is under attack by enemy planes or missiles. Yet, such systems cannot independently search for and strike enemy assets on their own, and human operators are always present to assume control if needed.3 Many air-to-air and air-to-ground missiles are able to attack human-selected targets, such as planes or tanks, but cannot hover or loiter to identify potential threats. One of the few systems to possess this capability is Israel’s Harpy airborne anti-radiation drone, which can loiter for several hours over a certain area to search for and destroy enemy radars.4 Autonomy, then, is a matter of degree, with machines receiving ever-increasing capacity to assess their surroundings and decide what to strike and when. As described by the U.S. Congressional Research Service, autonomy is “the level of independence that humans grant a system to execute a given task.” Autonomy “refers to a spectrum of automation in which independent decision-making can be tailored for a specific mission.” Put differently, autonomy refers to the degree to which humans are taken “out of the loop” of decision-making, with AI-empowered machines assuming ever-greater responsibility for critical combat decisions. This emphasis on the “spectrum of automation” is important because, for the most part, nations have yet to deploy fully autonomous weapon systems on the battlefield. Under prevailing U.S. policy, as enshrined in a November 2012 Defense Department directive, “autonomous and semi-autonomous weapons systems shall be designed to allow commanders and operators to exercise appropriate levels of human judgment over the use of force.” Yet, this country, like others, evidently is developing and testing weapons that would allow for ever-diminishing degrees of human control over their future use.

### Solvency – NATO Key/Says Yes

#### Banning lethal autonomous weapons systems should be your moral and ethical imperative – multilateral action key to effectiveness

Mary Wareham (advocacy director in the arms division at Human Rights Watch) “Summary: Stopping Killer Robots” August 10, 2020 https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

Weapons systems that select and engage targets without meaningful human control are unacceptable and need to be prevented. All countries have a duty to protect humanity from this dangerous development by banning fully autonomous weapons. Retaining meaningful human control over the use of force is an ethical imperative, a legal necessity, and a moral obligation. In the period since Human Rights Watch and other nongovernmental organizations launched the Campaign to Stop Killer Robots in 2013, the question of how to respond to concerns over fully autonomous weapons has steadily climbed the international agenda.[1] The challenge of killer robots, like climate change, is widely regarded as a grave threat to humanity that deserves urgent multilateral action.[2] A growing number of legislators, policymakers, private companies, international and domestic organizations, and ordinary individuals have endorsed the call to ban fully autonomous weapons.[3] Since 2018, the United Nations Secretary-General António Guterres has repeatedly urged states to prohibit weapons systems that could, by themselves, target and attack human beings, calling them “morally repugnant and politically unacceptable.”

### Solvency – Ban Works

#### Now is key – LAWS are coming in mass now unless a ban is put into place immediately

Michael T. Klare (professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association) “Autonomous Weapons Systems and the Laws of War” March 2019 https://www.armscontrol.org/act/2019-03/features/autonomous-weapons-systems-laws-war

Yet another approach gaining attention is a concentrated focus on the ethical dimensions of fielding fully autonomous weapons systems. This outlook holds that international law and common standards of ethical practice ordain that only humans possess the moral capacity to justify taking another human’s life and that machines can never be vested with that power. Proponents of this approach point to the Martens clause of the Hague Convention of 1899, also inscribed in Additional Protocol I of the Geneva Conventions, stating that even when not covered by other laws and treaties, civilians and combatants “remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of human conscience.” Opponents of fully autonomous weapons systems claim that such weapons, by removing humans from life-and-death decision-making, are inherently contradicting principles of humanity and dictates of human conscience and so should be banned. Reflecting awareness of this issue, the Defense Department has reportedly begun to develop a set of guiding principles for the “safe, ethical, and responsible use” of AI and autonomous weapons systems by the military services. Today, very few truly autonomous robotic weapons are in active combat use, but many countries are developing and testing a wide range of machines possessing high degrees of autonomy. Nations are determined to field these weapons quickly, lest their competitors outpace them in an arms race in autonomy. Diplomats and policymakers must seize this moment before fully autonomous weapons systems become widely deployed to weigh the advantages of a total ban and consider other measures to ensure they will never be used to commit unlawful acts or trigger catastrophic escalation.

### Solvency – Accuracy

**A2: Humans are more accurate but they believe the tech so it has to be removed**

Shira **Ovide** (New York Times) “A Case for Banning Facial Recognition” June 09, **2020** https://www.nytimes.com/2020/06/09/technology/facial-recognition-software.html?auth=login-google

But a police officer or eyewitness could also look at surveillance footage and mug shots and misidentify someone as Jim Smith. Is software more accurate or less biased than humans? That depends. Our analysis showed that for many, facial recognition was way less accurate than humans. The other problem is something called automation bias. If your intuition tells you that an image doesn’t look like Smith, but the computer model tells you that it is him with 99 percent accuracy, you’re more likely to believe that model. There’s also an imbalance of power. Facial recognition can be completely accurate, but it can still be used in a way that is detrimental to certain groups of people. The combination of overreliance on technology, misuse and lack of transparency — we don’t know how widespread the use of this software is — is dangerous.

### Solvency – Modeling

#### China agrees

Mary Wareham (advocacy director in the arms division at Human Rights Watch) “Summary: Stopping Killer Robots” August 10, 2020 https://www.hrw.org/report/2020/08/10/stopping-killer-robots/country-positions-banning-fully-autonomous-weapons-and

At the Human Rights Council in May 2013, China supported beginning multilateral talks on lethal autonomous weapons systems, which it described as “highly complex.”[65] China has highlighted the potential for fully autonomous weapons to upset the international strategic balance and affect arms control.[66] In December 2016, China said it that such weapons “present considerable uncertainties” for compliance with international humanitarian law and expressed its desire for precautionary measures, highlighting the precedent provided by the ban on blinding lasers.[67] In April 2018, China called for a ban on fully autonomous weapons, but later clarified its call was limited to use only and not development and production.[68] Since then, China has not explicitly repeated its call for a new international treaty to ban fully autonomous weapons. China participated in every CCW meeting on killer robots in 2014-2019.

**LAWS meet only one part of the IHL threshold – do not meet on targeting law – their evidence**

**Ettinger, 20** (Jay Ettinger, 2020, accessed on 6-29-2022, 30 Minn. J. Int'L. 153, "1. NOTE: Overcoming International Inertia: The Creation of War Manual for Lethal Autonomous WeaponsSystems, 30 Minn. J. Int'l L. 153", <file:///C:/Users/ncb12/Downloads/Nathan%20Boyle%20Overcoming%20International%20Inertia_%20The%20Creation%20of%20War%20Manual%20for%20Lethal%20Autonomous%20Weapons%20Sy.PDF>) (NB)

In order for LAWS to be compliant with IHL "targeting law," "they must be able to reliably and predictably distinguish between combatants and non-combatants, as well as make rapid judgments on the proportionality of an attack against its potential collateral harms. 67First, there is a question as to whether computer algorithms will be able to gauge the complex, context-dependent, and humanistic clues that soldiers must use to distinguish combatants and non-combatants in the modern battlefield where combatants often attempt to conceal their identities. 68Second, even if such a distinction is technically [\*163] feasible, there is a question as to whether these systems can reliably make sound decisions given the vast array and often rapidly changing nature of battlefield contexts. 69For example, one potential risk to the system's reliability is the introduction of bias to decision-making originating in the data sets used to train the AI system. 70Even if both of these technical feasibility questions can be adequately addressed, there is a further question as to whether lethal decision-making inherently requires human involvement under IHL. 71And if there is such a requirement, what degree of human involvement is sufficient to meet IHL obligations must also be determined.

### Solvency – DOD Allows Use

#### DOD policy does not prevent use

Gregory Allen (AI Governance Project and Senior Fellow - Center for Strategic and International Studies) “DOD Is Updating Its Decade-Old Autonomous Weapons Policy, but Confusion Remains Widespread” June 06, 2022 https://www.csis.org/analysis/dod-updating-its-decade-old-autonomous-weapons-policy-confusion-remains-widespread

In November 2012, the Department of Defense (DOD) released its policy on autonomy in weapons systems: DOD Directive 3000.09 (DODD 3000.09). Despite being nearly 10 years old, the policy remains frequently misunderstood, including by leaders in the U.S. military. For example, in February 2021, Colonel Marc E. Pelini, who at the time was the division chief for capabilities and requirements within the DOD’s Joint Counter-Unmanned Aircraft Systems Office, said, “Right now we don't have the authority to have a human out of the loop. Based on the existing Department of Defense policy, you have to have a human within the decision cycle at some point to authorize the engagement." He is simply wrong. No such requirement appears in DODD 3000.09, nor any other DOD policy. Misconceptions about DODD 3000.09 appear to extend even to high-ranking flag officers. In April 2021, General Mike Murray, the then-four-star commander of Army Futures Command, said, “Where I draw the line—and this is, I think well within our current policies—[is], if you’re talking about a lethal effect against another human, you have to have a human in that decision-making process.” Breaking Defense, a news outlet that reported on Murray’s remarks at the time, stated that the requirement to have a human in the decisionmaking process is “official Defense Department policy.” It is not. DODD 3000.09 does not ban autonomous weapons or establish a requirement than U.S. weapons have a “human in the loop.” In fact, that latter phrase never appears in DOD policy. Instead, DODD 3000.09 formally defines what an autonomous weapon system is and requires any DOD organization proposing to develop one to either go through an incredibly rigorous senior review process or meet a qualifying exemption. Regarding the latter, cyber weapons systems, for example, are exempted.

## Terrorism Advantage

### Terrorism Advantage – Recruitment

#### Drone strikes increase terrorism and anti-us sentiment in Pakistan

Rafat Mahmood (University of Western Australia and Pakistan Institute of Development Economics), Michael Jetter (University of Western Australia, IZA and CESifo) APRIL 2019 IZA Institute of Labor economics, “Military Intervention via Drone Strikes” Accessed 7/2/2019 \*mw\*

This paper introduces an empirical strategy to isolate the causal effects of drone strikes in Pakistan on subsequent terrorism, anti-US sentiment, and radicalization, employing wind as the key IV. We hypothesize that wind decreases the likelihood of the US military employing a drone strike, conditional on observable characteristics, whereas wind is otherwise orthogonal to terrorist activities. Both assumptions receive support in our sample of 4,018 days from 2006 to 2016. Results from 2SLS estimations suggest drone strikes increase the number of terror attacks in Pakistan in the upcoming days and weeks. This finding prevails in a host of alternative estimations and robustness checks. Extending the timeframe of subsequent terrorism, we find evidence indicating drone strikes do not just affect the timing of attacks (e.g., by moving forward planned attacks) but rather increase the total number of attacks. In terms of magnitude, one drone strike today causes over four additional terror attacks per day in the next seven days which implies drone strikes are responsible for 16 percent of all terror attacks in Pakistan. A back-of-the-envelope calculation suggests 2,964 people died from terror attacks because of drone strikes. We then explore mechanisms, distinguishing between insiders, i.e., those who already belong to terrorist organizations, and outsiders, i.e., regular Pakistanis. Specifically, we study anti-US sentiment in the major English-language newspaper in Pakistan, anti-US protests, and online searches for terms that may be indicative of radicalization (jihad, Taliban video, and Zarb-e-Momin). In line with the blowback hypothesis, results from 2SLS estimations suggest the general populace increasingly turns to anti-US and radical expressions after drone strikes as all these measures rise substantially because of drone strikes. It is important to put the results pertaining to Pakistani news and Google search behavior in context. We are not suggesting Google Trends as the perfect yardstick to measure radical attitudes – an online search for a radical term does not make a terrorist. Further, identifying more negative emotions and anger 33 in US-related articles does not necessarily prove anti-US attitudes. For instance, articles mentioning the US may systematically apply negative language to their enemies. However, the persistency with which we identify signs of radicalization and anti-US sentiment because of drone strikes in the general Pakistani populace is consistent with the hypothesis that drone strikes systematically turn Pakistanis toward radical groups and against the US. In fact, given a literacy rate of 58 percent (Government of Pakistan, 2017) and the hypothesis that the tendency to radicalize usually decreases with education in Pakistan (Fair et al., 2014), studying an English-language newspaper and online search behavior (requiring literacy and internet access) may actually present a lower bound estimate of anti-US sentiment. To our knowledge, this is the first empirical analysis that is able to isolate causal effects of drone strikes. Contrary to the current opinion in the US military which suggests drone strikes curb terrorism, we find evidence to the contrary: Drone strikes (i) lead to more terrorism, (ii) make the US more unpopular in Pakistan, and (iii)steer Pakistanis toward radical ideas. In other words, not only are insidersretaliating against the US but outsiders appear to change their attitudes. As a consequence, the pool of militants may grow, if anything. As the US military continues to build and expand its drone program (e.g., in Yemen), we hope our research provides useful insights into the underlying consequences.

#### Each drone attack amounts to even more terrorist attacks in the future

Anouk S. Rigterink, 18, Rigterink S., Anouk. (Postdoctoral Research Fellow at the University of Oxford and has Ph.D. at the London School of Economics and Political Science) “The Wane of Command∗: Evidence on drone strikes and control within terrorist organizations.” Department of Economics: University of Oxford. 10-30-18. Accessed 7-1-19. (Pembrokehill-MLT)

Targeting terrorist leaders has become a commonly used US counterterrorism policy since 9/11. According to the US National Strategy for Counterterrorism 2018, targeting key terrorists remains the number one priority action. An underlying goal of this policy is to undermine control within terrorist organizations: the ability of individuals higher up the hierarchy – or more central to the organization – to determine what others in the organization do. This policy is primarily implemented using armed drones, Unmanned Aerial Vehicles, which can surveil and kill targets. The US now owns hundreds of these armed drones, and 28 other countries have acquired weaponized drones in the last ten years. Targeted killing of terrorist leaders is also referred to as “cutting off the head of the snake”, implying that if one does so, the body will die. The snake analogy portrays the terrorist group as a single organism: a unitary actor. Many theoretical models similarly considering terrorist groups as unitary actors straightforwardly predict that targeting terrorist leaders, and undermining control within terrorist organizations, decreases terrorism (Sandler and Arce, 2003; Sandler and Siqueira, 2006; Powell, 2007; Bandyopadhyay and Sandler, 2011). However, if we consider terrorist organizations as non-unitary actors, predictions are less straightforward. Models that consider terrorist groups as organizations subject to collective action and principal-agent problems, which I will call problems of control for short, suggest that undermining control within terrorist groups may not be effective, or may even backfire. This leaves an empirical question, which this paper addresses: how does counterterrorism which undermines control within terrorist organizations affect terrorism? Specifically, this paper investigates how drone strikes killing terrorist leaders affect terrorist attacks. To investigate this empirically, this paper exploits a natural experiment provided by drone strikes ‘hitting’ and ‘missing’ terrorist leaders in the Federally Administered Tribal Areas (FATA) of Pakistan, which is inspired by Jones and Olken (2009). I construct a new dataset of drone attempts on terrorist leaders’ lives, executing several cross-checks to safeguard data quality. This dataset captures variation across time and terrorist organizations. I argue that conditional on a drone attempt to kill a terrorist leader, drone ‘hits’ and ‘misses’ are quasirandom. Drone hits and misses are not statistically significantly different from one another on an extensive range of characteristics, including pre-trends in terrorist violence. Narratives of why drones miss also suggest that misses are largely driven by chance. This enables a difference-in-difference design, investigating changes in attacks by a terrorist organization before and after a drone hit on its leader, compared to before and after a miss. Results indicate that a drone hit on a terrorist organization’s leader is associated with an increase in the number of terrorist attacks by this organization, compared to a miss. Estimates indicate that this increase amounts to 29 additional terrorist attacks in total across the world in the six months after a drone hit, an increase of 43% compared to the six months after a miss. This result cannot be explained by terrorist organizations ‘speeding up’ the timing of attacks, or by a decrease in the lethality of attacks. Results are robust to estimating the main test statistic using randomization inference, including leader-fixed effects, alternative aggregations of terrorist groups, controlling for Pakistani military action and peace agreements between the terrorist group and the Pakistani government, and using alternative econometric specifications. Several game-theoretical models provide explanations for the results obtained. A first family of models considers problems of control. A principal-agent model by Shapiro (2013) suggests that leader killing, by increasing the costs for the leader to control his operatives, could lead to increased terrorist violence if operatives have a greater preference for (indiscriminate) violence than the leader. Modelling terrorist violence as a public good to terrorists, Enders and Jindapon (2010) suggest that terrorist networks strategically decrease the number of network connections in response to targeted leader killing, leading individual nodes to increase their efforts to commit attacks as they can no longer free-ride on the efforts of others in the network. Other families of models provide alternative explanations of why targeted leader killing may increase terrorist violence: terrorist groups may respond to a loss in capacity by substituting a few high-capacity attacks with many low-capacity attacks, pro-active counterterrorism policies that result in civilian casualties may create backlash if they spur terrorist recruitment, and terrorist organizations may commit more terrorist attacks after their leader has been killed to signal strength. Further analysis suggests that problems of control explain the main result better than alternative theoretical mechanisms. The observed increase in terrorist attacks is primarily driven by attacks that leaders of terrorist organizations do not favour: attacks on civilian and private targets – which terrorist leaders repeatedly instruct their followers to avoid – and attacks by its members that the organization does not publicly claim responsibility for. The observed effect is also stronger for terrorist organizations and leaders that rely more strongly on central control. Furthermore, a drone hit is associated with proxies for network breakdown: an increase in group splintering and infighting. Simultaneously however, results suggest that a drone strike on one group’s leader is associated by an increase in terrorist attacks by other groups, affiliates in its network. A considerable number of existing papers investigate empirically the impact of targeted killing of leaders of terrorist organizations, yet results are mixed. Some authors conclude that targeted leader killing is effective, either because it speeds up the decline of terrorist organizations (Price, 2012) or diminishes the number or intensity of terrorist attacks (Jaeger and Paserman, 2009; Johnston, 2012). Others conclude that it has no effect (Jordan, 2009; Mannes, 2008; Hafez and Hatfield, 2006), or even an adverse effect – either on terrorist organizations in general or on particular categories of terrorist organizations (Kaplan et al., 2006; Jordan, 2009; Mannes, 2008; Abrahms and Potter, 2015; Abrahms and Mierau, 2017).

#### The US failing to address the drone problem strengthens terrorist groups

Abdulrasheed Al-Faqih, 18, (Abdulrasheed Al-Faqih is the Executive Director of Mwatana Organization for Human Rights, an independent Yemeni organization aiming to defend and protect human rights in Yemen.) Abdulrasheed Al-Faqih. "Civilian Casualties and Effectiveness of U.S. Drone Strikes in Yemen." Just Security. 4-3-2018. 7-1-2019. <https://www.justsecurity.org/54464/ civilian-casualties-effectiveness-u-s-drone-strikes-yemen-part/> (PembrokeHill-MLT)

In 2017, the United States military said that it [carried out](https://www.defense.gov/News/Article/Article/1401445/centcom-officials-provide-update-on-recent-counterterrorism-strikes-in-yemen/) more than 120 strikes in Yemen, more than three times as many as strikes as [2016](https://www.thebureauinvestigates.com/projects/drone-war/yemen). For many years, we at the [Mwatana Organization for Human Rights](http://mwatana.org/en) documented the impact of U.S. drone strikes in Yemen through detailed field research. In 2017 we [investigated](http://mwatana.org/ar/2512018679) eight drone strikes and ground operations and found that U.S. operations were responsible for the deaths of at least 32 civilians – including 16 children and six women – and injured ten others, including five children. (The results of these investigations will be released in a forthcoming report.) The 32 civilian deaths and ten injuries are the latest in a long list of victims harmed by U.S. military operations in Yemen who have been waiting for justice for many years. Incidents of civilian harm in Yemen continue to negatively affect the reputation of the United States in the country and push local communities to consider violence and revenge as the only solution to the harm they suffer. With U.S. operations in Yemen [continuing](http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1433499/centcom-updates-) in 2018, it is time for much greater attention to be given to the civilians harmed and the effects of this unwise and destructive policy. Documenting U.S. strikes The United States [began](https://www.thebureauinvestigates.com/drone-war/data/yemen-reported-us-covert-actions-2001-2011) targeted killing operations in Yemen in 2002 under the Bush administration, which [increased](https://www.thebureauinvestigates.com/projects/drone-war/yemen) dramatically within the first few years of the Obama administration. Under President Trump, strikes have again soared. Within Yemen, U.S. operations have raised a great deal of questions, about the [secrecy](https://www.outoftheshadowsreport.com/), ethics, objectives, results, effectiveness, effects, and legality of these strikes. Human rights advocates have also [questioned](http://www.mwatana.org/en/1442015397) the U.S. government about the fate of the hundreds of civilian victims, about the government’s lack of acknowledgment and accountability, and the ways to ensure no new victims are added to the growing list. So far, the U.S. government’s response to many of these questions remains inadequate or nonexistent. During 2013 and 2014, I worked on a team researching civilian victims of U.S. drone strikes. We visited areas and villages in different parts of Yemen that had been affected by U.S. actions. We interviewed witnesses, survivors, doctors, and local social leaders. We inspected the scenes of the attacks, the remains of the munitions, and the effects of such operations on the lives of civilians. We released our findings in a report, Death by Drone: Civilian Harm Caused by U.S. Targeted Killings in Yemen, which we co-authored with the Open Society Justice Initiative. It included the results of our field research as well as recommendations to ensure U.S. operations comply with the law and provide accountability for civilians harmed by U.S. strikes. Sadly, many of those whom we spoke to would speak of the harsh reality of their lives. Our village is poor. We do not have schools, hospitals, roads, or any type of public services. The only thing that we have in the way of progress and development in a modern world are these deadly missiles. This is what Muhammad Nasser Al Jarrah, a villager from Sailat Al Jarrah [told](http://www.mwatana.org/en/1912017603) us during our visit to his remote village on May 31, 2013, after an alleged U.S. strike hit a home full of women and children. Our visit to Sailat Al Jarrah was nearly five years ago, but Muhammad’s somber sentiment was shared with us by a number of survivors and witnesses over the years and in different parts of Yemen. It is now sixteen years after the first U.S. drone strike in Yemen, and we are still working on documenting new attacks and researching their effect on civilians. With Trump’s renewed effort to increase lethal operations in Yemen, it seems that the U.S. has still not learned lessons to prevent civilian harm in the country. Release the kill list: A tool to reduce civilian harm Strikes that we documented across Yemen, from Sana’a, to Dhamar, to [Rada’a](http://www.newsweek.com/wedding-became-funeral-us-still-silent-one-year-deadly-yemen-drone-strike-291403) highlight the problematic use of U.S. drone strikes and other counterterrorism operations in what—contrary to the U.S. claim that it is in a global conflict against Al Qaeda and ISIS—is better understood as a local, social, and political conflict. From time to time, some of the people we met would also suggest ways that the U.S. could better protect civilians in Yemen. One of the demands that survivors of drone strikes would ask for is a list of wanted individuals. A list that is clear and available to the public so that they can avoid targeted individuals, protect their children, and not allow U.S. targets to have a presence in their areas. Some of the local residents we would interview would claim that a number of the attacks targeted children or ordinary civilians that were not doing anything that might cause suspicion or indicate that they were dangerous or involved in terrorist acts. To them, having a list of wanted individuals would perhaps prevent further civilian harm. Nasser Mabkhout is one of two survivors of an alleged U.S. drone strike on December 2, 2012. He was driving a group of civilians from a market back to the village of Al Sabool, when the car was hit by a U.S. drone. At the time, the attack was one of the deadliest strikes ever, killing 12 civilians, including three children and a pregnant woman. Two civilians were also injured. During an interview at his home in Al Sabool, Nasser told us: “I was not worried at all when I saw the plane flying above us. I was sure that they had specific targets, and that these targets were members of terror groups, while we are just vendors and workers. I had heard a lot that these planes were very smart, and that they knew their targets and were very accurate in their strikes. While we were watching the plane, we were laughing and making jokes until we were stopped by one of its missiles, which hit my car and devastated the people in it.” Local security officials, social leaders, and witnesses of U.S. drone strikes in Yemen told us that the strikes targeted individuals in areas and conditions where it was possible for them to be arrested, investigated, and tried in a court of law. As recently as late last year, the Governor of Mareb [told](https://www.justsecurity.org/47103/yemen-strike-raises) researchers that the United States carried out a drone strike in November 2017 against a target that his security forces could access. The Governor lamented the failure of the U.S. government to provide information to local forces that might have led to the capture of terrorism suspects. This leads to a number of questions. How dangerous are the suspects that are targeted in these operations? How feasible is it to arrest, investigate, and try them in court? What do American agencies use to determine who is a suspect when they make the kill list? These and many other questions remain unanswered. Cycle of violence Our research team also traveled to a village in the area of Qaifah, Yemen on May 26, 2013. This area is one that has been targeted the most by drone strikes. While we were there, we heard a number of men who were relatives of the civilian victims of a drone strike loudly discussing whether they should kidnap us to pressure the U.S. government to look into the cases of Yemeni drone strike victims. The group that had this idea was trying to convince the rest of the men that we were working for an American organization, the [Open Society Foundations](https://www.opensocietyfoundations.org/), and that this organization could pressure the U.S. government to look into cases of Yemeni drone strike victims. We were lucky that one of the village men, who was also our guide in the area, told the others that he could not allow them to kidnap us because we were his guests and under his protection. Ultimately, we were able to leave the area without any problems. The incident, however, shows how the families of the victims, many of whom are poor farmers who have waited so long for an acknowledgment for the harm they suffered, and for justice through legal means, begin to consider violent “solutions” to their problems. The U.S. government should realize that Yemenis on the ground feel that U.S. practices that ignore civilian harm are not only dehumanizing but are also counter-productive to the United States’ long-term counterterrorism objectives. Acknowledgment of accidental civilian deaths can be a vital step toward preventing further acts of violence. I’ve seen some cases where the relatives of civilian drone strike victims are first convinced that the attack was a mistake, that the United States and its Yemeni government ally will officially apologize for the attack, and provide the victims with justice and a remedy. When this apology and remedy does not come, the relatives work to draw attention to their case to highlight that their relatives are civilian victims. And when there is no reaction or response from the U.S. government after those attempts, the families are left only with thoughts of revenge. In these moments, Al Qaeda and similar jihadist groups stand ready to capitalize and exploit these feelings of discontent and injustice. The potential for violent groups to take advantage of civilian discontent has only grown in recent years. Since the start of the current conflict involving the sectarian Houthi group on one side, and the Saudi-led coalition supported by its international partners on the other, Yemen has been torn apart and its institutions almost completely destroyed. This environment has made it easier for jihadist groups to prosper. The war has allowed Al Qaeda to come out of isolation and expand, so it is now more present in areas that, as the crisis in Yemen drags on, will become more friendly to such groups—not least if the United States continues raining down drone strikes and launching lethal raids on the people of Yemen. We are fortunate that, in the different areas in which we have worked, it was clear to us that many people, for now, reject Al Qaeda and jihadist groups, even as they are outraged that drone strikes killed their civilian relatives. This has limited Al Qaeda’s influence in Yemen. But every time the U.S. fails to acknowledge a drone strike that harms civilians, the risk that people will turn to Al Qaeda only grows.

### Terrorism Advantage – Impact

**Terrorist attacks are poised to go nuclear**

**Ayson 2010** (Robert Ayson, Professor of Strategic Studies and Director of the Centre for Strategic Studies: New Zealand at the Victoria University of Wellington, “After a Terrorist Nuclear Attack: Envisaging Catalytic Effects,” Studies in Conflict & Terrorism, Volume 33, Issue 7, July, Available Online to Subscribing Institutions via InformaWorld)

A terrorist nuclear attack, and even the use of nuclear weapons in response by the country attacked in the first place, would not necessarily represent the worst of the nuclear worlds imaginable. Indeed, there are reasons to wonder whether nuclear terrorism should ever be regarded as belonging in the category of truly existential threats. A contrast can be drawn here with the global catastrophe that would come from a massive nuclear exchange between two or more of the sovereign states that possess these weapons in significant numbers. Even the worst terrorism that the twenty-first century might bring would fade into insignificance alongside considerations of what a general nuclear war would have wrought in the Cold War period. And it must be admitted that as long as the major nuclear weapons states have hundreds and even thousands of nuclear weapons at their disposal, there is always the possibility of a truly awful nuclear exchange taking place precipitated entirely by state possessors themselves. But these two nuclear worlds—a non-state actor nuclear attack and a catastrophic interstate nuclear exchange—are not necessarily separable. It is just possible that some sort of terrorist attack, and especially an act of nuclear terrorism, could precipitate a chain of events leading to a massive exchange of nuclear weapons between two or more of the states that possess them. In this context, today’s and tomorrow’s terrorist groups might assume the place allotted during the early Cold War years to new state possessors of small nuclear arsenals who were seen as raising the risks of a catalytic nuclear war between the superpowers started by third parties. These risks were considered in the late 1950s and early 1960s as concerns grew about nuclear proliferation, the so-called n+1 problem. It may require a considerable amount of imagination to depict an especially plausible situation where an act of nuclear terrorism could lead to such a massive inter-state nuclear war. For example, in the event of a terrorist nuclear attack on the United States, it might well be wondered just how Russia and/or China could plausibly be brought into the picture, not least because they seem unlikely to be fingered as the most obvious state sponsors or encouragers of terrorist groups. They would seem far too responsible to be involved in supporting that sort of terrorist behavior that could just as easily threaten them as well. Some possibilities, however remote, do suggest themselves. For example, how might the United States react if it was thought or discovered that the fissile material used in the act of nuclear terrorism had come from Russian stocks,40 and if for some reason Moscow denied any responsibility for nuclear laxity? The correct attribution of that nuclear material to a particular country might not be a case of science fiction given the observation by Michael May et al. that while the debris resulting from a nuclear explosion would be “spread over a wide area in tiny fragments, its radioactivity makes it detectable, identifiable and collectable, and a wealth of information can be obtained from its analysis: the efficiency of the explosion, the materials used and, most important … some indication of where the nuclear material came from.”41 Alternatively, if the act of nuclear terrorism came as a complete surprise, and American officials refused to believe that a terrorist group was fully responsible (or responsible at all) suspicion would shift immediately to state possessors. Ruling out Western ally countries like the United Kingdom and France, and probably Israel and India as well, authorities in Washington would be left with a very short list consisting of North Korea, perhaps Iran if its program continues, and possibly Pakistan. But at what stage would Russia and China be definitely ruled out in this high stakes game of nuclear Cluedo? In particular, if the act of nuclear terrorism occurred against a backdrop of existing tension in Washington’s relations with Russia and/or China, and at a time when threats had already been traded between these major powers, would officials and political leaders not be tempted to assume the worst? Of course, the chances of this occurring would only seem to increase if the United States was already involved in some sort of limited armed conflict with Russia and/or China, or if they were confronting each other from a distance in a proxy war, as unlikely as these developments may seem at the present time. The reverse might well apply too: should a nuclear terrorist attack occur in Russia or China during a period of heightened tension or even limited conflict with the United States, could Moscow and Beijing resist the pressures that might rise domestically to consider the United States as a possible perpetrator or encourager of the attack?

**Nuclear terrorism leads to extinction – retaliation – terrorists have capabilities**

**Dobbins 15** (William Dobbins, Graduate Fellow, Countering Weapons of Mass Destruction National Defense University, Major USMC, 2015. “Right of Boom: The Aftermath of Nuclear Terrorism”, http://thesimonscenter.org/wp-content/uploads/2015/05/IAJ-6-2-Spring-2015-77-79.pdf)

Right of Boom: The Aftermath of Nuclear Terrorism provides a glimpse of the issues associated with responding to a nuclear terrorist attack, in this case, the detonation of a small nuclear weapon in Washington, D.C. Against this background, Benjamin Schwartz describes the inherent danger of a world with nuclear-armed states (some which may not have the will or capability to appropriately secure such weapons) and new types of terror threats, the lessons learned in nuclear deBterrence and counter terrorism, the **global impact** of a nuclear terror attack, and the “red lines” that would forever change as a result. What emerges is a **bleak** picture of potential political and policy consequences of both the terror attack and the American response. In the aftermath of a nuclear terrorist attack on the most important political capital in the world, the confusion, the desire for attribution and retaliation coupled together with the overarching question, “How did this happen?” combine to produce the environment that political leaders would face. At first glance, the author posits, the response to such an event seems straightforward: **The U.S. undergoes a nuclear attack, and the U.S. responds in kind**. However, the follow-on questions reveal that things are not nearly so simple: From where did the weapon come? In a terror attack in which attribution is not certain, against whom do national leaders direct a response? The history of international nuclear agreements, from the Non-Proliferation Treaty (NPT) to the Nunn-Lugar Cooperative Threat Reduction (CTR) program are all predicated on international relationships that operated at the nation-state level. **However**, the attack in question reveals that these state-to-state agreements **may no longer be sufficient in the face of nuclear terrorism**. The **prolif**eration of **nuclear knowledge** and technology now makes the nuclear terror threat **plausible**. Hence, Schwartz argues, “**we are more vulnerable to nuclear terrorism than at any time since the dawn of the nuclear age**.” Could an attack like this actually happen? On the one hand, Schwartz notes legitimate reasons for skepticism. After all, since 9-11, there have been no societally significant terror attacks and no nuclear terror attacks. Moreover, the continual crying of “wolves at the door” by national leaders only makes the lack of terrorist success more pronounced. The **failure of intelligence** regarding WMD threats—leading to the Global War on Terror—has also cast a pall over the intelligence community’s predictive powers. On the other hand, Schwartz also notes that neither past intelligence failures nor the absence of a nuclear terrorist attack changes the fact that the proliferation of knowledge and technology—especially dual-use technology—**increases the threat of nuclear terrorism**. Access to the knowledge necessary for nuclear proliferation has itself proliferated since World War II. Even if the hardest part of developing a nuclear weapon is acquiring fissile material, the plans for simple weapon systems can now be found with a quick internet search. Hence, Schwartz argues that, while the threat of thermonuclear war recedes into history, a new threat—like that of the detonation of a small nuclear weapon in a city such as Washington, D.C.—is actually growing. The breakup of the former USSR states created one of the most dangerous situations for the “loose nuke” phenomenon. While CTR provided one of the most successful bi-lateral programs to protect against that **possible threat**, nations, such as Pakistan or North Korea, outside the scope of CTR may provide **material support to terror organizations**, or they may simply have **insufficient control over their nuclear materials**. In light of these complexities, the question naturally, but uncomfortably, arises as to the ongoing role of nuclear deterrence. The working assumption has been that, when faced with total annihilation between two warring states, each opponent may be deterred from **nuc**lear weapon**s** employment. Although this very model arguably worked well for 60 years between the USSR and the United States, Schwartz highlights that **the present nuclear world is faced with a different problem**: How does a nation-state deter a stateless organization? For that matter, how does a nuclear nation-state deter even a non-nuclear nation-state committed to the support of nuclear terrorists? As a testament to such, since World War II, four out of the five NPT nuclear powers has “lost” a war to a non-nuclear foe without ever using nuclear weapons. In the immediate aftermath of a nuclear terror attack in the United States, **the political need to demonstrate control, resolve and to hold someone accountable will be intense**. Yet, how does the U.S. determine what objectives to pursue? It is simple to say, “Go kill the terrorists!” It is another to comply with that statement. Individual targets in multiple nations with multiple governments involved do not necessarily constitute an effective counter-terrorism program. How does the U.S. build an international coalition when political interests diverge and intelligence agencies have different opinions about governmental complicity? How does it create a coalition of allied governments whose very citizens may be involved? How does it counter terrorism when “terrorism” itself is an amorphous concept? On this account, Schwartz provides historical examples that run from the Comanche to the United States’ current fight with Al Qaeda and its affiliates. Countering terrorism will be the battle of the future; it will not be an easy one—particularly if it acquires a nuclear dimension. A nuclear terror attack on the United States will affect more than the U.S. It will re-write the international legal system. There may still be treaties and agreements, but **after a nuclear weapon detonates, they may simply be pieces of paper**. Establishing new arrangements and treaties will have to follow. The idea that what happens within the borders of another nation-state is only that nation-state’s business will be robustly challenged. The risk is simply too great to trust that another government would even be capable of keeping its nuclear issues within its borders. **The Peace of Westphalia may simply fade away**. Further, the people of the United States could be affected by unprecedentedly intrusive surveillance of goods, materials, and information being imported and exported. In this environment, it is possible that the Baruch plan—or a reasonable facsimile—may be pursued with broader support than it originally had. In the end, Schwartz suggests, an event like this would do more to change the global security calculus than did 9-11. “Catastrophic events”, particularly as the term gets applied to weapons of mass destruction events, are, curious as it may seem, easy to dismiss as someone else’s problem in the big, lumbering federal bureaucracy. This is so because the events thus characterized are so overwhelming that they befuddle the imagination (and certainly would exhaust the resources) of any one agency that sought to deal with them. However, it is this fact which, more than any other, makes the response to catastrophic events the quintessential interagency challenge. The present anthology assembles the work of some of America’s most insightful public servants and clearly demonstrates that every organ of government at every level—tribal, local, state, and federal—is remiss if it fails to ask the question, “What is my role when the unthinkable happens?” and “With whom should I be talking as I imagine the unthinkable?”

## Democracy Advantage

### Democracy Advantage - Link

**Facial recognition software is being used to undermine democracy and the right to protest.**

Shira **Ovide** (New York Times) “A Case for Banning Facial Recognition” June 09, **2020** https://www.nytimes.com/2020/06/09/technology/facial-recognition-software.html?auth=login-google

Timnit Gebru, a leader of Google’s ethical artificial intelligence team, explained why she believes that facial recognition is too dangerous to be used right now for law enforcement purposes. These are edited excerpts from our virtual discussion at the Women’s Forum for the Economy & Society on Monday. Ovide: What are your concerns about facial recognition? Gebru: I collaborated with Joy Buolamwini at the M.I.T. Media Lab, who led an analysis that found very high disparities in error rates [in facial identification systems], especially between lighter-skinned men and darker-skinned women. In melanoma screenings, imagine that there’s a detection technology that doesn’t work for people with darker skin. I also realized that even perfect facial recognition can be misused. I’m a black woman living in the U.S. who has dealt with serious consequences of racism. Facial recognition is being used against the black community. Baltimore police during the Freddie Gray protests used facial recognition to identify protesters by linking images to social media profiles.

### Democracy Advantage – Impact

**Democratic collapse is an existential threat --- controls every impact**

**Kasparov 17** (Garry Kasparov, Chairman of the Human Rights Foundation, former World Chess Champion, “Democracy and Human Rights: The Case for U.S. Leadership,” Testimony Before The Subcommittee on Western Hemisphere, Transnational Crime, Civilian Security, Democracy, Human Rights, and Global Women's Issues of the U.S. Senate Committee on Foreign Relations, February 16th, https://www.foreign.senate.gov/imo/media/doc/021617\_Kasparov\_%20Testimony.pdf)

As one of the countless millions of people who were freed or protected from totalitarianism by the United States of America, it is easy for me to talk about the past. To talk about the belief of the American people and their leaders that this country was exceptional, and had special responsibilities to match its tremendous power. That a nation founded on freedom was bound to defend freedom everywhere. I could talk about the bipartisan legacy of this most American principle, from the Founding Fathers, to Democrats like Harry Truman, to Republicans like Ronald Reagan. I could talk about how the American people used to care deeply about human rights and dissidents in far-off places, and how this is what made America a beacon of hope, a shining city on a hill. America led by example and set a high standard, a standard that exposed the hypocrisy and cruelty of dictatorships around the world. But there is no time for nostalgia. Since the fall of the Berlin Wall, the collapse of the Soviet Union, and the end of the Cold War, Americans, and America, have retreated from those principles, and **the world has become much worse off as a result**. American skepticism about America’s role in the world deepened in the long, painful wars in Afghanistan and Iraq, and their aftermaths. Instead of applying the lessons learned about how to do better, lessons about faulty intelligence and working with native populations, the main outcome was to stop trying. This result has been a tragedy for the billions of people still living under authoritarian regimes around the world, and it is based on faulty analysis. You can never guarantee a positive outcome— not in chess, not in war, and certainly not in politics. The best you can do is to do what you know is right and to try your best. I speak from experience when I say that the citizens of unfree states do not expect guarantees. They want a reason to hope and a fighting chance. People living under dictatorships want the opportunity for freedom, the opportunity to live in peace and to follow their dreams. From the Iraq War to the Arab Spring to the current battles for liberty from Venezuela to Eastern Ukraine, people are fighting for that opportunity, giving up their lives for freedom. The United States must not abandon them. The United States and the rest of the free world has an unprecedented advantage in economic and military strength today. What is lacking is the will. The will to make the case to the American people, the will to take risks and invest in the long-term security of the country, and the world. This will require investments in aid, in education, in security that allow countries to attain the stability their people so badly need. Such investment is far more moral and far cheaper than the cycle of **terror, war**, refugees, and **military intervention** that results when America leaves a vacuum of power. The best way to help refugees is to prevent them from becoming refugees in the first place. The Soviet Union was an existential threat, and this focused the attention of the world, and the American people. There **existential threat** today is not found on a map, but it **is very real**. The forces of the past are making steady progress against the modern world order. **Terrorist** movements in the Middle East, extremist parties across Europe, a paranoid tyrant in **North Korea threatening nuclear blackmail,** and, at the center of the web, an **aggressive KGB dictator in Russia**. They all want to turn the world back to a dark past because their survival is threatened by the values of the free world, epitomized by the United States. And **they are thriving as the U.S. has retreated**. The global freedom index has declined for ten consecutive years. No one like to talk about the United States as a global policeman, but **this is what happens when there is no cop on the beat. American leadership begins at home**, right here. America cannot lead the world on democracy and human rights if there is no unity on the meaning and importance of these things. **Leadership is required to make that case clearly and powerfully**. Right now, Americans are engaged in politics at a level not seen in decades. It is an opportunity for them to rediscover that making America great begins with believing America can be great. The Cold War was won on American values that were shared by both parties and nearly every American. Institutions that were created by a Democrat, Truman, were triumphant forty years later thanks to the courage of a Republican, Reagan. This bipartisan consistency created the decades of strategic stability that is the great strength of democracies. Strong institutions that outlast politicians allow for long-range planning. In contrast, dictators can operate only tactically, not strategically, because they are not constrained by the balance of powers, but cannot afford to think beyond their own survival. This is why a dictator like Putin has an advantage in chaos, the ability to move quickly. This can only be met by strategy, by long-term goals that are based on shared values, not on polls and cable news. The fear of making things worse has paralyzed the United States from trying to make things better. There will always be setbacks, but the United States cannot quit. The spread of **democracy is the only** proven **remedy for** nearly **every crisis that plagues the world today. War, famine, poverty, terrorism**–all are generated and exacerbated by authoritarian regimes. A policy of America First inevitably puts American security last. **American leadership is required because there is no one else**, and because it is good for America. There is no weapon or wall that is more powerful for security than America being envied, imitated, and admired around the world. Admired not for being perfect, but for having the exceptional courage to always try to be better. Thank you.

## War Escalation Advantage

### War Escalation – Conflict Multiplier

#### LAWS are a threat multiplier; everything is worse in the world of LAWS availability

Future of Life Institute “AUTONOMOUS WEAPONS: WHAT ARE THEY, AND WHY DO THEY MATTER?” Summer 2021 https://futureoflife.org/2021/11/30/an-introduction-to-the-issue-of-lethal-autonomous-weapons/

What’s the problem? Weapons that use algorithms to kill, rather than human judgement are immoral and a grave threat to national and global security. Immoral: Algorithms are incapable of comprehending the value of human life, and so should never be empowered to decide who lives and who dies. Indeed, the United Nations Secretary General António Guterres agrees that “machines with the power and discretion to take lives without human involvement are politically unacceptable, morally repugnant and should be prohibited by international law.” Threat to Security: Algorithmic decision-making allows weapons to follow the trajectory of software: faster, cheaper, and at greater scale. This will be highly destabilising on both national and international levels because it introduces the threats of proliferation, rapid escalation, unpredictability, and even the potential for weapons of mass destruction.

#### A2: We need a certain weapons system that already exists

#### The plan only ends fully autonomous systems – affirmative can still engage in necessary warfighting capabilities

USNI News “Report to Congress on Lethal Autonomous Weapon Systems” November 19, 2021 https://news.usni.org/2021/11/19/report-to-congress-on-lethal-autonomous-weapon-systems-3

DODD 3000.09 defines LAWS as “weapon system[s] that, once activated, can select and engage targets without further intervention by a human operator.” This concept of autonomy is also known as “human out of the loop” or “full autonomy.” The directive contrasts LAWS with human-supervised, or “human on the loop,” autonomous weapon systems, in which operators have the ability to monitor and halt a weapon’s target engagement. Another category is semi-autonomous, or “human in the loop,” weapon systems that “only engage individual targets or specific target groups that have been selected by a human operator.” Semi-autonomous weapons include so-called “fire and forget” weapons, such as certain types of guided missiles, that deliver effects to human-identified targets using autonomous functions.

#### Plan key to maintaining ethical norms and accountability to war crimes

Michael T. Klare (professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association) “Autonomous Weapons Systems and the Laws of War” March 2019 https://www.armscontrol.org/act/2019-03/features/autonomous-weapons-systems-laws-war

This poses obvious challenges because virtually all human ethical and religious systems view the taking of a human life, whether in warfare or not, as a supremely moral act requiring some valid justification. Humans, however imperfect, are expected to abide by this principle, and most societies punish those who fail to do so. Faced with the horrors of war, humans have sought to limit the conduct of belligerents in wartime, aiming to prevent cruel and excessive violence. Beginning with the Hague Convention of 1898 and in subsequent agreements forged in Geneva after World War I, international jurists have devised a range of rules, collectively, the laws of war, proscribing certain behaviors in armed conflict, such as the use of poisonous gas. Following World War II and revelations of the Holocaust, diplomats adopted additional protocols to the Hague and Geneva conventions intended to better define the obligations of belligerents in sparing civilians from the ravages of war, measures generally known as international humanitarian law. So long as humans remain in control of weapons, in theory they can be held accountable under the laws of war and international humanitarian law for any violations committed when using those devices. What happens when a machine makes the decision to take a life and questions arise over the legitimacy of that action? Who is accountable for any crimes found to occur, and how can a chain of responsibility be determined? These questions arise with particular significance regarding two key aspects of international humanitarian law, the requirement for distinction and proportionality in the use of force against hostile groups interspersed with civilian communities. Distinction requires warring parties to discriminate between military and civilian objects and personnel during the course of combat and spare the latter from harm to the greatest extent possible. Proportionality requires militaries to apply no more force than needed to achieve the intended objective, while sparing civilian personnel and property from unnecessary collateral damage.11

### War Escalation – Great Power War Impact

**Yes great power war** – realism, fear of worse alts, failed political processes, violent human nature – **their evidence twists definitions to exclude our scenarios**

-On point answer to Mueller, Pinker and Mandelbaum

**Lyon 14** {Rod, director of the strategy and international program at the Australian Strategic Policy Institute, executive editor of The Strategist, “No, Great Power War Isn’t Obsolete,” The Diplomat, 8/22, [http://thediplomat.com/2014/08/no-great-power-war-isnt-obsolete/](http://thediplomat.com/2014/08/no-great-power-war-isnt-obsolete/#THUR)}

August has seen a wave of reflection on major war. It’s a question we seem to revisit every time the key anniversaries of WWI and WWII roll around, but especially this year because its the 100th anniversary of the outbreak of WWI. Some pundits are keen to draw parallels between 1914 and 2014—though on its face **it’s not apparent** to me why 2014 should be more like 1914 than 2013.¶ Academic strategists familiar with their disciplinary history will know that the issue of whether major war’s obsolete received a detailed coverage back in Survival magazine in the late 1990s. To save readers the trouble of digging through their archives, one contributor, John Mueller, argued that it was obsolete—gone the way of slavery and dueling—while others wrestled partly over how to define obsolescence and even more over how to define major war. Was the Vietnam War “major?” Was the Cold War a “war?” Michael Mandelbaum argued that perhaps major war was just a poor policy option nowadays—because of the steep rise in the costs and the thin rewards for success.¶ It’s intriguing that the question about the obsolescence of war is **typically qualified by the adjective “major**.” No one seems particularly keen to claim that nasty little wars—in particular, nasty little wars in faraway places—are obsolete, perhaps because **they patently aren’t**. From memory, Mueller didn’t want to call those conflicts “wars,” though; he saw those more as “opportunistic predation” (That’s the reason the cover of his book, The Remnants of War, features an image—from the Balkan conflict in 1991—of a thug swigging from a bottle.)¶ Then 9/11 came along and **sideswiped that whole debate**. The nasty little wars of the 1990s didn’t stay in faraway places. A **superpower got up and marched off to war**—albeit a war against al Qaeda, its supporters, and all its works. Somewhere along the line the mission became conflated with a host of other problems, and Washington ended up obsessing about the Global War on Terror for longer than it probably should have done. But Washington’s behavior at least answered one question related to the Big One: **did great powers still go to war? Yes**. Now, the question still unanswered—unanswered since 1945 if you think major war has to be hot; unanswered since 1991, if you think major war can be cold—is whether or not major powers still go to war with each other.¶ Psychologist Steven Pinker has recently argued that the better angels of our nature are making us turn away from violence. I’m not wholly convinced by his argument—the better angels of our nature **seem pretty militant to me, and always have been.** (See Ephesians, 6:12.) But academic research from a few decades back suggests that great-power wars against each other aren’t common. Jack Levy in his research on war in the international system between 1495 and 1975 found only nine of what he would call “world wars”—wars where almost all great powers were involved. Much more commonly, he found “interstate wars”—113 of which engaged a great power.¶ I cite those figures to underline two points. First, if world wars are rare, maybe we don’t need special explanations to say why there hasn’t been one since 1945 (hot) or 1991 (cold). Second, that definition of major war is still a problem.¶ Let’s put aside the academic arguments and look straight at the case that most worries us. Is a great-power war between the U.S. and China possible? I think we could answer that question directly: possible, **yes**; likely, no. Great powers, especially nuclear-armed ones, don’t go to war with each other lightly. But **sometimes wars happen**. And they aren’t accidents. **They’re about international order**. They’re about, as Raymond Aron said, the **life and death of states.** And the **principal** reason for fighting them is that not doing so looks like a worse alternative.¶ **Moreover**, the paths to war—including rare major-power war—are not reserved solely for conventionally-armed states. Where both powers are nuclear-armed we should expect a conflict, even one at the lower rungs of the escalation ladder, to be fought with a high degree of political control, and an understanding that the objectives of the conflict are limited. Naturally, it would help if both sides shared a common understanding of where the firebreaks were between conventional and nuclear conflict, and already had in place a set of crisis-management procedures, but **it’s possible that neither of those conditions might exist**. (Neither would prevent a war, but both would provide a better sense of the likely escalation dynamics of a particular conflict.) Indeed, it’s because major war **is possible** that we retain such a keen interest in war termination. Unconstrained escalation **doesn’t lead to a happy place.**

**Yes great power war---rising geopolitical rivalries.**

**Brands & Feaver 2017**—Hal Brands is the Henry A. Kissinger Distinguished Professor of Global Affairs at Johns Hopkins // Peter Feaver is Professor of Political Science and Public Policy at Duke and the director of the American Grand Strategy Program and the Triangle Institute for Security Studies [“Stress-Testing American Grand Strategy,” *Survival*, Vol. 58, No. 6, December/January, p. 104-105]

This **assumption** is now being **tested**, however, as the spectre of greatpower war **revives**. Russia and China – two key powers that were never fully reconciled to the post-Cold War order – are now **pushing back** against that order more **assertively** than ever before. Russian President Vladimir Putin has used force to halt the feared spread of Western influence and institutions into the former Soviet space. He has also used Russia’s revived military power to intimidate US allies in the Baltics and Eastern Europe, and to harass US and NATO forces in international waters and airspace. China, as noted previously, is likewise using military and paramilitary forces to coerce US allies, to adjust maritime boundaries by force and to exert pressure on neighbours from Japan to Vietnam.

Both Moscow and Beijing, moreover, are developing **warfighting capabilities** and strategies designed to deny Washington access to their ‘nearabroads’, and to prevail in a limited military conflict with the United States and its allies. As one US Navy official has noted, Chinese forces have been training for a ‘short sharp war’ with Japan – and presumably, by extension, with America as well.34 For its part, Moscow has regularly staged major military exercises along NATO’s eastern flank, and has re-emphasised nuclear weapons in its rhetoric and planning.35 In other words, neither Russia nor China is acting – or talking – like it believes that great-power war is obsolete. And neither, for that matter, is the United States, as the Pentagon invests in a Third Offset Strategy meant to re-establish American military dominance vis-à-vis great-power rivals.36

At present, few analysts believe that either Russia or China wants a war with Washington, and there are still powerful brakes on the possibility of great-power conflict. But it is clear that America once again has **great-power rivals**, that those rivals are increasingly willing to **assert** themselves even at risk of **heightened geopolitical tensions**, and that **the risk** of great-power conflict has therefore risen to a level **higher** than at any time since 1989. As the US National Military Strategy warned in 2015, ‘Today, the probability of US involvement in interstate war with a major power is assessed to be low but growing.’37 If great-power geopolitical competition continues to intensify in the coming 10–20 years – as most commentators expect it will – American **assumptions** about the obsolescence of major-power war, and the striking great-power peace that has characterised the post-Cold War era, will only be **further challenged**. We may find that the **seeming respite** from history that accompanied the end of the Cold War is finally **coming to an end**; the world, and the United States, may find itself heading ‘back to the future’ of international affairs, as John Mearsheimer predicted a quarter-century ago.38

**War still likely --- the world is more dangerous now than during the Cold War.**

Paul **Miller**, 12/20/**2011**. Assistant professor of international security studies at the National Defense University, former director for Afghanistan on the National Security Council and political analyst in the U.S. intelligence community, specializing in South Asia. “[How Dangerous is the World? Part IV](http://shadow.foreignpolicy.com/posts/2011/12/19/how_dangerous_is_the_world_part_iv),” Foreign Policy, http://shadow.foreignpolicy.com/posts/2011/12/19/how\_dangerous\_is\_the\_world\_part\_iv.

In my [previous](http://shadow.foreignpolicy.com/posts/2011/12/16/how_dangerous_is_the_world_part_i_by_paul_miller) [three](http://shadow.foreignpolicy.com/posts/2011/12/16/how_dangerous_is_the_world_part_ii) posts, I argued that **the world today is more dangerous than it was during the Cold War because the threat from Russia and China is still present, on top of which we face new threats from new nuclear autocracies hostile to the United States, including North Korea, soon Iran, and possibly Pakistan**.¶ **In addition to the old-fashioned state-centric threats of hostile nuclear powers, the United States now faces a whole new category of threats** that simply did not exist during the Cold War: **the threats that come when state failure meets globalization, when non-state actors can operate with impunity outside the write of any law but act with global reach because of new technology**. These are the threats that are the current fads of IR and security studies: pirates, organized crime, drug cartels, human traffickers, WikiLeaks, hackers, the global Islamist "pansurgency," and, yes, terrorists. (Throw in pandemic disease and ecological disaster and you get all the research funding you want.)¶ There is nothing new about the existence of many of these actors, of course. Pirates and terrorists have existed for centuries. However, their ability to present an immediate and large-scale threat to the United States is new, or at least greater than during the Cold War. Travel and communication is easier and weapons technology is more lethal, state failure is more widespread (giving them more space to operate with impunity), while U.S. and allied border, port, and infrastructure security has not kept up.¶ I earlier argued that the faddish, new-fangled theories about non-state actors were overstated. They are, but that doesn't mean they're completely wrong. Osama bin Laden and Julian Assange clearly did massive and irrevocable harm to the United States in ways literally inconceivable for a non-state actor during the Cold War; the same may be true of the drug gangs in Mexico today. Coupled with the United States' almost complete lack of homeland security, and there is a very real possibility of large-scale, massive, direct harm to the U.S. homeland from a globalized non-state actor.¶ The preeminent threat of this type is, of course, the global campaign by violent Islamist militants and terrorists to eject the "west" from "Muslim lands," overthrow secular governments and replace them with Islamic regimes, and establish the supremacy of their brand of Islam across the world. (I agree here with David Kilcullen's [characterization](http://smallwarsjournal.com/documents/kilcullen.pdf) of the conflict as a global insurgency). Violent Islamist movements have done most of their direct damage to people and states across the Middle East, North Africa, and South Asia. But those attacks certainly don't make the world safer for the United States, nor would their victory in, for example, Pakistan or Saudi Arabia. And the movement has, of course, directly attacked the United States and our European allies. Note that violent Islamist groups-whether al Qaida or Hamas or Hezbollah or al Shabaab or Lashkar-e Taiba-typically flourish in and around weak and failing states.¶ The only thing comparable to the global proliferation of Islamist insurgencies and terrorist movements over the last two decades was the Soviet Union's sponsorship of communist insurgencies around the world during the Cold War. But the Islamist insurgencies are likely to be more resilient, harder to defeat, and more dangerous because they are decentralized, because their ideology is not linked to the fate of one particular regime, because globalization has made it easier for them to operate on a global scale, and because of the higher risk that Islamists will acquire and use weapons of mass destruction since they are not accountable to a deterable sponsoring power.¶ Even setting the threat from violent Islamism aside, a host of other non-state actors threaten the world order and make American leadership more costly. In fact, **the aggregate effect of state failure multiplied across scores of states across the world is so great that "failed states may eventually present a systemic risk to the liberal world order, of which the United States is the principal architect ////** **and beneficiary**," as I argue in the [current issue of PRISM](http://www.ndu.edu/press/how-to-fix-failed-states.html). State failure and the rise of non-state actors-a problem non-existent during the cold war-is a threat to American national security.¶ Conclusion ¶ **Essentially, the United States thus faces two great families of threats today: first, the nuclear-armed authoritarian powers, of which there are at least twice as many as there were during the Cold War; second, the aggregate consequences of state failure and the rise of non-state actors in much of the world**, which is a wholly new development since the Cold War. **On both counts, the world is more dangerous than it was before 1989**. Essentially take the Cold War, add in several more players with nukes, and then throw in radicalized Islam, rampant state failure, and the global economic recession, and you have today.¶ **I recognize that the world doesn't feel as dangerous as it did during the Cold War**. During the Cold War we all knew about the threat and lived with a constant awareness-usually shoved to the back of ours minds to preserve our sanity-that we might die an instantaneous firey death at any moment. We no longer feel that way. ¶ **Our feelings are wrong. The Cold War engaged our emotions more because it was simple, easily understood, and, as an ideological contest, demanded we take sides and laid claim to our loyalties. Today's environment is more complex and many-sided and so it is harder to feel the threat the same way we used to. Nonetheless, the danger is real**.

**Yes it’s nuclear and escalates—multiple warrants and empirics provide a strong basis for our predictions**

**Lieber and Press 2013** [Keir A. Lieber¶ ¶ Associate Professor, Edmund A. Walsh School¶ ¶ of Foreign Service, Georgetown University¶ ¶ Daryl G. Press¶ ¶ Associate Professor of Government, Dartmouth College¶ ¶ Coordinator of War and Peace Studies at the John Sloan ¶ ¶ Dickey Center Spring 2013 Strategic Studies Quarterly “The New Era of Nuclear Weapons, Deterrence, and Conflict” http://www.au.af.mil/au/ssq/digital/pdf/spring\_13/lieber.pdf]

A second set of arguments stems from the problem of nuclear escalation and the future of the US nuclear arsenal. Our main claim is that deterring nuclear conflict will be much more difficult in the coming decades ¶ than many analysts realize. As nuclear weapons proliferate, it becomes ¶ increasingly likely that the United States will find itself in conventional conflicts with nuclear-armed adversaries. Those adversaries understand ¶ the consequences of losing a war to the United States—prison or death ¶ typically awaits enemy leaders.¶ 7¶ Coercive nuclear escalation as a means ¶ of creating stalemate and remaining in power is one of the only trump ¶ cards available to countries fighting the United States.¶ Some analysts might scoff at the notion that a rational leader would ¶ use nuclear weapons against a superpower like the United States. But ¶ that retort conflates the logic of peacetime deterrence with the logic ¶ of war, and it ignores history. During peacetime, almost any course of ¶ action is better than starting a nuclear war against a superpower. But ¶ during war—when that superpower’s planes are bombing command and ¶ leadership sites, and when its tanks are seizing territory—the greatest ¶ danger may be to refrain from escalation and let the war run its course. ¶ Leaders of weaker states—those unlikely to prevail on the conventional ¶ battlefield—face life-and-death pressures to compel a stalemate. And ¶ nuclear weapons provide a better means of coercive escalation than ¶ virtually any other.¶ The notion of countries escalating conflict to avoid conventional defeat may sound far-fetched, but it is well grounded in history. When ¶ nuclear-armed states face overwhelming conventional threats—or worry ¶ about the possibility of catastrophic conventional defeat—they often ¶ adopt coercive escalatory doctrines to deter war or stalemate a conflict ¶ that erupts. Pakistan openly intends to use nuclear weapons to counter ¶ an overwhelming conventional Indian invasion. Russia claims it needs ¶ theater nuclear weapons to counter NATO’s conventional advantages. ¶ Israel expects to win its conventional wars but retains the capability for ¶ nuclear escalation to prevent conquest in case its conventional forces ¶ suffer a catastrophic defeat. ¶ The discussion of coercive nuclear escalation should sound familiar ¶ to Western analysts, as it was NATO’s strategy for three decades. From ¶ the mid 1960s until the end of the Cold War, NATO planned to deter ¶ war, and stalemate it if necessary, through coercive nuclear escalation. ¶ NATO understood that—by the mid 1960s—it could no longer win a ¶ nuclear war against the Soviet Union, but it still based its national security ¶ strategy on coercive escalation because it believed Warsaw Pact conventional forces were overwhelming.¶ In short, the escalatory dynamics that existed during the Cold War exist ¶ today—and they are just as powerful. States still face the same critical ¶ national security problem they faced during the Cold War and throughout history: namely, how to prevent stronger countries from conquering them. The high-stakes poker game of international politics has not ¶ ended; the players and the cards dealt have merely changed. Those who ¶ were weak during the Cold War are now strong, and another set of ¶ militarily “weak” countries—such as North Korea, Iran, Pakistan, and ¶ even China and Russia—now clutch or seek nuclear weapons to defend ¶ themselves from overwhelming military might, just as NATO once did.¶ What can the United States do to mitigate the problem of escalation? ¶ Ideally, it should avoid wars against nuclear-armed enemies. But that ¶ option may not be possible given current US foreign policy and alliances. War may erupt on the Korean Peninsula, ensnaring the United ¶ States in a battle against a desperate nuclear-armed foe. In the future, ¶ Washington may fight a nuclear-armed Iran over sea lanes in the Persian ¶ Gulf. And the United States could someday be dragged into war by a ¶ clash between Chinese and Japanese naval forces near disputed islands. ¶ Alternatively, the United States could seek to develop conventional ¶ war plans designed to wage limited war without triggering enemy escalation. Development of alternative plans is sensible, but history shows ¶ that wars are difficult to contain, and modern conventional warfare is ¶ inherently escalatory. ¶ A third option to mitigate these dangers is to retain, and improve, ¶ US nuclear and nonnuclear counterforce capabilities. Fielding powerful ¶ counterforce weapons may help deter adversary escalation during war—¶ by convincing enemy leaders to choose a “golden parachute” rather than ¶ escalation—and would give US leaders better response options if deterrence failed. In particular, the United States should retain and develop ¶ nuclear weapons that bring together three key characteristics of counterforce: high accuracy, flexible yield, and prompt delivery.¶ To be clear, sharpening US counterforce capabilities is not a “solution” ¶ to the problem of adversary nuclear weapons. Although, ceteris paribus, ¶ it would be better to have excellent counterforce capabilities than to lack ¶ them, given enough time and motivation, many countries could greatly ¶ increase the survivability of their forces. But given the plausible prospect ¶ that the United States will find itself waging war against nuclear-armed ¶ states, and given the powerful incentives of US adversaries to brandish ¶ or use nuclear weapons, it would be reckless to proceed without a full ¶ suite of modern nuclear and nonnuclear counterforce capabilities.

## NATO Cohesion Advantage

### NATO Cohesion – Warming Impact

**Every bit of mitigation matters.**

**Nuccitelli 12** (Dana Nuccitelli is an environmental scientist at a private environmental consulting firm in the Sacramento, California area. This piece was originally published at Skeptical Science and was reprinted with permission. “Realistically What Might The Future Climate Look Like?” ThinkProgress http://thinkprogress.org/climate/2012/09/01/784931/realistically-what-might-the-future-climate-look-like/)

This is Why Reducing Emissions is Critical

We’re not yet committed to surpassing 2°C global warming, but as Watson noted, **we are quickly running out of time** to realistically give ourselves a chance to stay below that ‘danger limit’. However, 2°C is not a do-or-die threshold. **Every bit of CO2 emissions we can reduce means that much avoided future warming**, which means that much avoided climate change impacts. As Lonnie Thompson noted, the more global warming we manage to mitigate, the less adaption and suffering we will be forced to cope with in the future.

Realistically, based on the current political climate (which we will explore in another post next week), limiting global warming to 2°C is probably the best we can do. However, there is a big difference between 2°C and 3°C, between 3°C and 4°C, and **anything greater than 4°C can probably accurately be described as catastrophic**, since various tipping points are expected to be triggered at this level. Right now, **we are on track for the catastrophic consequences** (widespread coral mortality, mass extinctions, hundreds of millions of people adversely impacted by droughts, floods, heat waves, etc.). **But we’re not stuck** on that track just yet, and we need to move ourselves **as far off** of it as possible by reducing our greenhouse gas emissions **as soon and as much as possible**.

There are of course many people who believe that the planet will not warm as much, or that the impacts of the associated climate change will be as bad as the body of scientific evidence suggests. That is certainly a possiblity, and we very much hope that their optimistic view is correct. However, what we have presented here is the best summary of scientific evidence available, and it paints a very bleak picture if we fail to rapidly reduce our greenhouse gas emissions.

If we continue forward on our current path, catastrophe is not just a possible outcome, it is the most probable outcome. And an intelligent risk management approach would involve taking steps to prevent a catastrophic scenario if it were a mere possibility, let alone the most probable outcome. This is especially true since the most important component of the solution – carbon pricing – **can be implemented at a relatively low cost**, and a far lower cost than trying to adapt to the climate change consequences we have discussed here (Figure 4).

**Not inevitable – cuts now have an IMMEDIATE effect**

**Desjardins 13** (Cléa, member of Concordia university Media Relations Department, academic writer, citing Damon Matthews; associate professor of the Department of Geography, Planning and Environment at Concordia University, PhD, Member of the Global Environmental and Climate Change Center, “Global Warming: Irreversible but Not Inevitable,” http://www.concordia.ca/now/what-we-do/research/20130402/global-warming-irreversible-but-not-inevitable.php)

Carbon dioxide emission cuts will **immediately affect** the rate of future global warming Concordia and MIT researchers show Montreal, April 2, 2013 – There is a persistent misconception among both scientists and the public that there is a delay between emissions of carbon dioxide (CO2) and the climate’s response to those emissions. This misconception has led policy makers to argue that CO2 emission cuts implemented now will not affect the climate system for many decades. This **erroneous line of argument** makes the climate problem **seem more intractable** than it actually is, say Concordia University’s Damon Matthews and MIT’s Susan Solomon in a recent Science article. The researchers show that **immediate decreases** in CO2 emissions would in fact result in an **immediate decrease** in the rate of climate warming. Explains Matthews, professor in the Department of Geography, Planning and Environment, “If we can successfully decrease CO2 emissions in the near future, this change will be felt by the climate system when the emissions reductions are implemented **– not in several decades**." “The potential for a **quick climate response** to prompt cuts in CO2 emissions opens up the possibility that the climate benefits of emissions reductions would occur on the same timescale as the political decisions themselves.” In their paper, Matthews and Solomon, Ellen Swallow Richards professor of Atmospheric Chemistry and Climate Science, show that the onus for slowing the rate of global warming falls squarely on current efforts at reducing CO2 emissions, and the resulting future emissions that we produce. This means that there are critical implications for the equity of carbon emission choices currently being discussed internationally. Total emissions from developing countries may soon exceed those from developed nations. But developed countries are expected to maintain a far higher per-capita contribution to present and possible future warming. “This disparity clarifies the urgency for low-carbon technology investment and diffusion to enable developing countries to continue to develop,” says Matthews. “Emission **cuts made now** will have an **immediate effect** on the rate of global warming,” he asserts. “I see more hope for averting difficult-to-avoid negative impacts by accelerating advances in technology development and diffusion, than for averting climate system changes that are already inevitable. Given the enormous scope and complexity of the climate mitigation challenge, clarifying these points of hope is critical to motivate change.”

**Adaptation fails**

**JRC 16 (**Joint Research Centre is the European Commission's science and knowledge service which employs scientists to carry out research in order to provide independent scientific advice and support to EU policy. August 11, 2016 https://www.sciencedaily.com/releases/2016/08/160811101332.htm)

Global change will strike the oldest and most complex ecosystems of the world hardest, regardless of their past stability. This alarming finding is reported in a JRC-led article published in *Nature Communications*. The authors hypothesized that invasive species, the warming climate and environmental degradation have altered natural habitats **so deeply** that species adaptation to historical conditions may not be helpful under these new circumstances. Interestingly, the authors found independent support for this hypothesis from both **computer simulations** and **real-world data**. Starting from a single ancestor digital organism, the authors let artificial life communities evolve for hundreds of thousands of generations under different, stable environmental settings. These simulated communities included both free-living and 'parasite' digital organisms that helped researchers investigate how biodiversity and ecological networks develop over time, under different environmental conditions. Over several generations, both hosts and parasites diversified, and their interactions became more complex. The authors then investigated how these communities would respond to different scenarios of biodiversity loss. They found that when species become extinct in a sequence consistent with their degree of adaptation to the 'natural' environmental conditions within which they had evolved, their extinction has only a limited effect on the overall diversity of the community. Any deviation from this pattern however, may trigger **extinction cascades**, eventually leading to the **collapse** of **the entire network**. The tendency of consuming species to rely and specialise (develop in a way most suited to the environment) on dependable resources has enabled the evolution of complex systems. This basic mechanism may have doomed many species to extinction -- the authors demonstrate it by comparing the results of their artificial life simulations with several empirical host-parasite networks of different animal groups. Resources that had been largely available in the past are now becoming increasingly scarce, putting at risk the species that rely on them.

## Other Solvency Mechanisms

### Establish an International Framework for use

#### NATO regulations key to global regulation of LAWS – lack of regulation causes misuse

Brian Michelson (Center for European Policy Analysis) “Why NATO Needs Lethal Autonomous Weapon Standards” February 23, 2021 https://cepa.org/why-nato-needs-lethal-autonomous-weapon-standards/

Lethal autonomous weapon systems will come to dominate warfare in the coming years. NATO needs to harmonize its approach to their development and use, or risk being left behind. The rapid weaponization of artificial intelligence, “big data,” social media, robotics, and a host of other technologies presents a clear competitive challenge to NATO, an alliance with members that exist on a wide spectrum of military-technological capabilities. The future effectiveness of NATO will be driven in large part by how it handles these challenges from hobbling its ability both to act in unison and to prevail in a contest of wills. While there are numerous potential technology gaps, one that will likely only increase is partner nations’ ability and willingness to employ lethal autonomous weapon systems. These systems will inevitably grow more capable, and more necessary, in the coming decade. Technological gaps are inevitable considering the disparities in GDP and military budgets. The United States accounts for over 70 percent of NATO’s overall military spending, while the next three largest contributors (the United Kingdom, France, and Germany) provide approximately half of the remaining 30 percent. And with most NATO nations continuing to fund their militaries at under the 2 percent GDP goal, technological gaps will continue to grow. For perspective, the 2021 United States Department of Defense research and development budget is approximately equal to the entire defense outlay of France and Germany combined. With such a large differential, what can be done to help enable effective investments in autonomous weapons by smaller nations? Even more specifically, how can smaller nations provide capabilities that can integrate into, and contribute to the alliance? To better invest limited funds, now is the time to look at a NATO standard for lethal autonomous weapons and their ethical use. While there is no agreed-upon international definition of lethal autonomous weapons systems, the U.S. Department of Defense defines them as “weapon system[s] that, once activated, can select and engage targets without further intervention by a human operator.“ While these are not Schwarzenegger-style Terminators and still have a degree of human control over them, the technology enabling these systems is maturing rapidly, and military necessity will increasingly demand that these systems gain broader parameters of autonomous action. Yet despite the complexity of these systems and the inevitability of their proliferation, NATO does not currently have a common standard for their use or development. In fact, some NATO countries even have opposing views of how to handle them. NATO standards are designed to ensure compatibility among weapon systems, communication architecture, and a host of other warfighting systems. The 7.62mm small arms round is a good example of this. But what is the 7.62mm equivalent standard for the development and employment of autonomous weapon systems? This opens a host of related questions regarding the employment of these systems: What Identification – Friend – Foe (IFF) capability should ground and air units require to prevent fratricide? What degree of certainty does a lethal autonomous weapon system require before final engagement? What level of collateral damage is acceptable? What degree of compatibility between systems is required? Should all these parameters (and others) be adjustable, and if so, at what command level? The attendant ethics also need to be addressed. NATO’s experience in Afghanistan was a case study in the challenges of coalition warfare. Differing risk tolerances, legal requirements, ethical views, domestic political concerns, and at times simply combat capability, all combined into to complex policy cocktail that impeded the effectiveness of combat operations. While modern militaries have accountability, legal, and ethical systems incorporated into their command structures, they are not uniform and leaders in differing militaries have varying degrees of authority. The key questions hinge on two issues: Who gets to decide to employ an autonomous weapon, and who is responsible should things go wrong? The Kunduz hospital strike in October of 2015 was driven primarily by human error. Responsibility was fixed on the chain of command and 16 leaders were disciplined. Who will be responsible if a member nation conducts a NATO-authorized strike and it goes terribly wrong? If this framework is not thoroughly established ahead of time, not only is it likely that commanders may hesitate to use this capability, the risk-aversion inherent in bureaucracies may limit the development of autonomous weapons that will be needed in future conflicts. In the emerging field of lethal autonomous weapons, establishing a common NATO standard for the development and use of autonomous weapons will help address the gap in capabilities among NATO member nations. By establishing these standards, nations can ensure that their defense expenditures on autonomous weapons will create systems that are interoperable, able to contribute to NATO’s capability, and can be employed within defensible ethical guidelines.

### Regulation

#### Regulation Mech

Frank Sauer (Senior Research Fellow, Bundeswehr University Munich) “Autonomy in weapons systems: playing catch up with technology” September 29, 2021 https://blogs.icrc.org/law-and-policy/2021/09/29/autonomous-weapons-systems-technology/

Hence the challenge of regulation is not met by trying to categorically separate ‘LAWS’ from ‘non-LAWS’. Instead, the challenge is met by developing a new norm in order to adjust human-machine-interaction on the battlefield: Who or what – human or machine – is supposed to perform which function on the targeting cycle where and when? Finding context-dependent and differentiated answers to this question will yield the desired regulation on how autonomous weapons technologies are applied in a manner that is ethically acceptable, compliant with IHL and prudent in terms of the preservation of international security and stability. Luckily, considerable headway has been made this year, also due to the recent papers circulated by the Belgian chair of the GGE, which underlined that the issue under discussion is best characterized by asking what the circumstances of autonomous target selection and engagement are within a framework of human command and control. Convergence is slowly but surely not only taking place in terms of conceptualization, resulting in much less ‘talking past each other’ at the CCW. It is also observable regarding the structure of a possible regulation which, potentially, could take shape in the fully fleshed-out ‘normative and operational framework’. A two-pronged approach combining prohibitions and regulations is taking shape: First, there are specific applications of autonomy in the critical functions of weapons systems that are not acceptable to many members of the international community and should thus be prohibited. Here, the ICRC as well as the Campaign to Stop Killer Robots and a recently formed group of ten States at the CCW especially highlight the targeting of human beings. In addition, the ICRC as well as many States Parties suggest that uncontrollable autonomous weapon systems should be ruled out as well due to their potentially unforeseeable or indiscriminate effects on the battlefield. Second, when applying force against target profiles other than those intended to represent humans, such as various military objects, autonomy in the critical functions is acceptable, but it requires certain limits and constraints, that is, positive obligations to curb ethical risks, safeguard IHL compliance and address security and safety concerns. Those limits and constraints can be temporal, spatial and, generally speaking, be subsumed under the notion that human control – no matter if eventually characterized as ‘meaningful’, ‘substantial’ or ‘effective’ – must be preserved by design and in use of a weapons system, even and especially when it, at times, performs its critical functions autonomously. The 2021 CCW RevCon and beyond Arguably, a soft ‘proto norm’ on weapon autonomy has emerged and socially taken hold already. After all, in 2021, virtually no one is able to contemplate and discuss autonomy in a weapon’s critical functions without being pointed to the serious concerns involved, the open letters published by the scientific community, the ongoing UN debates, emerging domestic legislations, large bodies of scholarly works in moral philosophy, international law, political science, and so on and so forth. In other words, the debate overall, including the UN deliberations on weapon autonomy in Geneva, has come a long way. The conversation at the CCW in particular has gotten more productive and constructive recently, with convergence increasing. That said, especially the regulatory structure sketched above is far from being universally accepted; nor is the notion that the next step should be codifying it as a legally binding instrument. The most recent GGE meeting in August demonstrated that at least a handful of States Parties are clearly having none of it, this way signaling their intent to prevent the consensus body from making headway. At the same time, pressure on the CCW keeps increasing. In light of the upcoming RevCon, States Parties need to produce tangible results. If they fail to do so, the volume of calls for moving the process into another forum will most certainly increase. Then, the CCW would – once again – have served as only an incubator. New, binding international law is needed. While weapon autonomy presents welcome opportunities in the optimization of defenses against munitions – protecting soldiers’ lives – leaving it unchecked and unregulated will make the world a more unsafe, uncertain, unstable, and inhumane place. Technology will not wait. It is time for UN diplomacy to catch up.

### Code of Conduct

#### Solvency mech

Kyle **Hiebert** (researcher and analyst formerly based in Cape Town and Johannesburg, South Africa, as deputy editor of the Africa Conflict Monitor) “Are Lethal Autonomous Weapons Inevitable? It Appears So” January 27, **2022** https://www.cigionline.org/articles/are-lethal-autonomous-weapons-inevitable-it-appears-so/

Finding the Middle Ground: Responsible Use. Even in the event that a ban on killer robots could be reached and somehow enforced, the algorithms used by autonomous weapons systems to identify, select and surveil targets are already streamlining and enhancing the use of lethal force by human actors. Banning hardware without including the underlying software would arguably be a half measure at best. But governments are badly struggling with how to regulate AI — and expanding the scope of the proposed ban would add enormous complexity to an already stalled process. Instead, establishing acceptable norms around their use — what one US official has called a non-binding code of conduct — in advance of broad adoption may represent an alternative means to harness the potential positives of LAWS while avoiding the most-feared outcomes. These norms could be based primarily on a shared commitment to avoid so-called unintended consequences. According to Robert Work, the former US defence official, LAWS should be totally excluded from systems that can independently launch pre-emptive or retaliatory attacks, especially those involving nuclear weapons. A code of conduct could include an expectation as well to keep autonomous weapons technology out of the hands of non-state actors. Numerous countries party to the CCW also believe that there are grounds to extend established international human rights law, such as the Geneva Convention, to cover autonomous weapons systems, by applying the law to the human authority that ordered their use. Some proponents of LAWS agree. These are imperfect solutions — but they may prevent dystopian sci-fi fantasies from becoming reality. One way or another, killer robots are coming.

### CCW ban

#### Solvency mech

Michael T. Klare (professor emeritus of peace and world security studies at Hampshire College and senior visiting fellow at the Arms Control Association) “Autonomous Weapons Systems and the Laws of War” March 2019 https://www.armscontrol.org/act/2019-03/features/autonomous-weapons-systems-laws-war

Out of this process, some clear strategies for limiting these systems have emerged. The first and most unequivocal would be the adoption under the CCW of a legally binding international ban on the development, deployment, or use of fully autonomous weapons systems. Such a ban could come in the form a new CCW protocol, a tool used to address weapon types not envisioned in the original treaty, as has happened with a 1995 ban on blinding laser weapons and a 1996 measure restricting the use of mines, booby traps, and other such devices.13 Two dozen states, backed by civil society groups such as the Campaign to Stop Killer Robots, have called for negotiating an additional CCW protocol banning fully autonomous weapons systems altogether. Proponents of such a measure say it is the only way to avoid inevitable violations of international humanitarian law and that a total ban would help prevent the unintended escalation of conflict. Opponents argue that autonomous weapons systems can be made intelligent enough to overcome concerns regarding international humanitarian law, so no barriers should be placed on their continued development. As deliberations by CCW member states are governed by consensus, a few states with advanced robotic projects, notably Russia, the United Kingdom, and the United States, have so far blocked consideration of such a protocol. Another proposal, advanced by representatives of France and Germany at the experts’ meetings, is the adoption of a political declaration affirming the principle of human control over weapons of war accompanied by a nonbinding code of conduct. Such a measure, possibly in the form of a UN General Assembly resolution, would require human responsibility over fully autonomous weapons systems at all times to ensure compliance with the laws of war and international humanitarian law and would entail certain assurances to this end. The code could establish accountability for states committing any misdeeds with fully autonomous weapons systems in battle and require that these weapons retain human oversight to disable the device if it malfunctions. States could be required to subject proposed robotic systems to predeployment testing, in a thoroughly transparent fashion, to ensure they were compliant with these constraints.14 Those who favor a legally binding ban under the CCW claim this alternative would fail to halt the arms race in fully autonomous weapons systems and would allow some states to field weapons with dangerous and unpredictable capabilities. Others say a total ban may not be achievable and argue that a nonbinding measure of this sort is the best option available.

## Off- Case Position Answers

### Politics

#### Plan is bipartisan

Kyle **Hiebert** (researcher and analyst formerly based in Cape Town and Johannesburg, South Africa, as deputy editor of the Africa Conflict Monitor) “Are Lethal Autonomous Weapons Inevitable? It Appears So” January 27, **2022** https://www.cigionline.org/articles/are-lethal-autonomous-weapons-inevitable-it-appears-so/

National Interests Undermine Collective Action While Turkey may have been the first to allegedly deploy live killer robots, their wide-ranging use is likely to be driven by Beijing, Moscow and Washington. Chinese President Xi Jinping and Russian President Vladimir Putin both openly loathe the Western-oriented human rights doctrines that underpin calls to ban killer robots. And despite America’s domestic division and dysfunction, its political class still has a bipartisan desire for the United States to remain the world’s global military hegemon. With a GDP just slightly larger than that of the state of Florida, Russia’s inability to compete in a great power competition economically renders it reliant on exploiting asymmetric power imbalances wherever possible, including through furthering its AI capability for military and espionage purposes. Autonomous weapons could be well-suited to secure the resource-rich but inhospitable terrain of the Arctic, a region where the Kremlin is actively trying to assert Russia’s primacy. The country is also the world’s second-largest arms exporter behind the United States, accounting for one-fifth of global arms sales since 2016 — a key source of government revenue and foreign influence. Its recent anti-satellite weapons test underscores the Kremlin’s willingness to explore controversial weapons technologies too, even in the face of international condemnation.

### A2 Business Confidence/Economy Disadvantage

#### No link and turn – AI developments like the plan don’t pay off. The plan actually saves money and helps the economy by ending development before the industry crashes

John Horgan (Center for Science Writings at the Stevens Institute of Technology) Will Artificial Intelligence Ever Live Up to Its Hype? December 04, 2020 https://www.scientificamerican.com/article/will-artificial-intelligence-ever-live-up-to-its-hype/

There are also signs that investments in AI are not paying off. Technology analyst Jeffrey Funk recently examined 40 start-up companies developing AI for health care, manufacturing, energy, finance, cybersecurity, transportation and other industries. Many of them were not “nearly as valuable to society as all the hype would suggest,” Funk reports in IEEE Spectrum. Advances in AI “are unlikely to be nearly as disruptive—for companies, for workers, or for the economy as a whole—as many observers have been arguing.” Science reports that “core progress in AI has stalled in some fields,” such as information retrieval and product recommendation. A study of algorithms used to improve the performance of neural networks found “no clear evidence of performance improvements over a 10-year period.” The longstanding goal of “general” artificial intelligence, possessing the broad knowledge and learning capacity to solve a variety of real-world problems, as humans do, remains elusive. “We have machines that learn in a very narrow way,” Yoshua Bengio, a pioneer in the AI approach called deep learning, recently complained in WIRED. “They need much more data to learn a task than human examples of intelligence, and they still make stupid mistakes.” Writing in The Gradient, an online magazine devoted to tech, AI entrepreneur and writer Gary Marcus accuses AI leaders as well as the media of exaggerating the field’s progress. AI-based autonomous cars, fake news detectors, diagnostic programs and chatbots have all been oversold, Marcus contends. He warns that “if and when the public, governments, and investment community recognize that they have been sold an unrealistic picture of AI’s strengths and weaknesses that doesn't match reality, a new AI winter may commence.”

### T - LAWS

#### Definition of LAWS/How LAWS Work

Future of Life Institute “AUTONOMOUS WEAPONS: WHAT ARE THEY, AND WHY DO THEY MATTER?” Summer 2021 https://futureoflife.org/2021/11/30/an-introduction-to-the-issue-of-lethal-autonomous-weapons/

What are lethal autonomous weapons? Slaughterbots, also called “lethal autonomous weapons systems” or “killer robots”, are weapons systems that use artificial intelligence (AI) to identify, select, and kill human targets without human intervention. Whereas in the case of unmanned military drones the decision to take life is made remotely by a human operator, in the case of lethal autonomous weapons the decision is made by algorithms alone. Slaughterbots are pre-programmed to kill a specific “target profile.” The weapon is then deployed into an environment where its AI searches for that “target profile” using sensor data, such as facial recognition. When the weapon encounters someone the algorithm perceives to match its target profile, it fires and kills.

#### The complexity of the system is irrelevant – lethal autonomous weapons systems are defined based on whether humans are in the loop in the decisions making process

Congressional Research Service “Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems” November 17, 2021 https://crsreports.congress.gov/product/pdf/IF/IF11150

U.S. Policy Definitions. There is no agreed definition of lethal autonomous weapon systems that is used in international fora. However, Department of Defense Directive (DODD) 3000.09 (the directive), which establishes U.S. policy on autonomy in weapons systems, provides definitions for different categories of autonomous weapon systems for the purposes of the U.S. military. These definitions are principally grounded in the role of the human operator with regard to target selection and engagement decisions, rather than in the technological sophistication of the weapon system. DODD 3000.09 defines LAWS as “weapon system[s] that, once activated, can select and engage targets without further intervention by a human operator.” This concept of autonomy is also known as “human out of the loop” or “full autonomy.” The directive contrasts LAWS with humansupervised, or “human on the loop,” autonomous weapon systems, in which operators have the ability to monitor and halt a weapon’s target engagement. Another category is semi-autonomous, or “human in the loop,” weapon systems that “only engage individual targets or specific target groups that have been selected by a human operator.” Semiautonomous weapons include so-called “fire and forget” weapons, such as certain types of guided missiles, that deliver effects to human-identified targets using autonomous functions.

### Military Readiness

#### The United States does not currently have LAWS in their inventory. This proves they aren’t key to U.S. military protections

Congressional Research Service “Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems” November 17, 2021 https://crsreports.congress.gov/product/pdf/IF/IF11150

Lethal autonomous weapon systems (LAWS) are a special class of weapon systems that use sensor suites and computer algorithms to independently identify a target and employ an onboard weapon system to engage and destroy the target without manual human control of the system. Although these systems are not yet in widespread development, it is believed they would enable military operations in communications-degraded or -denied environments in which traditional systems may not be able to operate. Contrary to a number of news reports, U.S. policy does not prohibit the development or employment of LAWS. Although the United States does not currently have LAWS in its inventory, some senior military and defense leaders have stated that the United States may be compelled to develop LAWS in the future if U.S. competitors choose to do so. At the same time, a growing number of states and nongovernmental organizations are appealing to the international community for regulation of or a ban on LAWS due to ethical concerns.