## 1AC---Whole Res

#### **This is the whole res util aff I read the whole Jan-Feb topic. I frequently switched out internal links and stuff I didn’t break is labeled as such. I’m omitting the framework/underview/method stuff.**

### 1AC---Plan

#### Resolved: States ought to eliminate their nuclear arsenals.

I’ll spec or define anything in cross.

### 1AC---Prolif

#### This is the advantage I read the most during the topic (I switched out internal links).

#### Nuclear escalation will happen---5 warrants

#### 1---Cyberattacks cause false flags that are met with intentional launch---old principles of deterrence can’t explain cyber warfare.

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What, then, might this cyber-enabled conflict, or warfare involving cyber operations, look like? And how might these pressures involve thinking about nuclear weapons? The first thing to note is that even if nuclear systems are not targeted directly or are successfully **guarded against malicious hackers**, it seems very likely that the use—or even the threat of use—of cyber capabilities against an opponent during a crisis will raise tensions, concerns, and perceived vulnerabilities, and that this will make nuclear crisis resolution more complicated and perhaps more dangerous." The second thing to note is that the use of cyber capabilities is likely to obfuscate and complicate the escalation ladder, and possibly lead to an inadvertent **deepening** of a **crisis**, perhaps even up to the nuclear level. It is likely to do this in different ways from those theorized in the past, and probably at a much greater speed. It could also, for example, include attacks in both civilian and military domains. Taken together, new cyber dynamics—both operations and context might even necessitate a rethinking of these established nuclear concepts altogether. Perhaps the most important thing to note about cyber operations in future crises and warfare is that they are likely to be **offense-dominant**. That is, in cyberspace the advantage will be held by the attackers rather than the defenders. Although this forecast is challenged by some, and is contingent on several variables—particularly the target and intention of the attack—it does have rather significant implications for the broader security dilemma, and especially for strategic stability.51 Along with creating pressures for arms racing, this also makes cyber capabilities more likely to be employed **early** in a crisis, particularly given the policy of active defense mentioned above.52 The result could potentially be greater insecurity for all, and possibly unintended, and in the worst-case scenario perhaps even **unmanageable escalation**. By way of an example, an Israeli war game conducted in 2013 demonstrated how the use and threat of cyberattacks might very quickly escalate a crisis, in this case bringing the United States and Russia to the brink of conflict in a possible Middle East war.53 Such conflicts might begin and play out in a number of different ways, but all will likely create new pressures for crisis management. First, during a crisis hackers could potentially disrupt or **destroy** communications channels, making it difficult to manage forces, including nuclear forces, and reducing commanders' confidence in their weapons systems and the ability of officials to communicate. Even a relatively small-scale attack could create considerable doubt about the security and reliability of communications, and particularly about the veracity of the information flowing from their computers.54 Moreover, despite often-held beliefs to the contrary, many military communications systems—including even some used for nuclear **command and control**—utilize commercial infrastructure or are based on networks that could be **vulnerable to an attack** or disruption.55 It must therefore be assumed that the linkages required for nuclear second-strike capabilities could also **be unreliable**, and possibly vulnerable to an opponents cyber operations.56 Aggressors might also employ distributed denial-of-service attacks to prevent communication, of-service attacks to prevent communication, hamper battle management systems, magnify confusion, and make it more difficult to identify what is happening and perhaps to conduct a coordinated response. Such attacks might be **particularly acute** for nuclear dyads that are in close **geographical proximity**—and therefore face limited decision-making time—such as India and Pakistan." Second, the use of cyberattack capabilities might inadvertently escalate a crisis—very much building on the model of "inadvertent nuclear escalation" developed by Barry Posen back in the early 1990s.58 This might be due either to deliberate interference from a third-party actor—such as a terrorist group—or from an **unauthorized insider**, or by another state seeking to deepen the crisis through false flag operations (that is, operations conducted to look like they were carried out by someone else). Alternatively, it might involve accidentally targeting the wrong systems. This risk is amplified considerably in the cyber context because it is increasingly **difficult to know** which computer systems support which weapons and operations. For example, as Lawrence Cavaiola and his colleagues explain, "an attack [by the United States] on a Chinese system that is used to increase the readiness of tactical forces might also inadvertently degrade the readiness of Chinese strategic nuclear forces, with grave risks of misinterpretation and escalation, up to and including launch on warning."59 Thus, a cyberattack on computer systems thought to control conventional weapons might be mistaken (and interpreted) as a direct attack on an adversary's ability to use its nuclear forces. Moreover, even if enemy cyberattacks are detected and mitigated, this could still lead to a "spiral of mistrust" and worst-case scenario thinking.' Third, cyberattacks might reduce the ability to signal, causing flawed images of **intentions** and **capabilities**, or be used to "spoof early warning systems"—again, a particular concern given the possibility of false flag cyber interference by third parties. It is perfectly possible that the ability to clearly signal intentions could be one of the biggest challenges created by cyber operations for nuclear crisis management. The concern here is twofold. First, the cyber context will make communicating with an adversary (and your own forces) much more complicated. Second, it is far from clear that cyberattacks themselves offer a very useful way of signaling, and may in fact be worse than traditional methods. As Erik Gartzke and Jon Lindsay explain, this is because cyber operations "are complex, esoteric, and hard for commanders and policymakers to understand."6' Previous methods of signaling—such as seeking to indicate intentions or red lines to an adversary through limited conventional action, already a complicated and delicate endeavor—will probably be even more difficult to implement when cyberattacks are also involved.62 Moreover, given the difficulties of attribution—particularly when time is short, decision makers are under pressure, and third-party cyber activities abound—it may not be straightforward to ascertain when a conflict has actually stopped.63 In this way, cyber operations are likely to further complicate and "muddy" signaling between adversaries during a crisis or conflict, either deliberately or inadvertently." This would also, therefore, make the functioning of leadership far more complicated in any future nuclear crisis too. Fourth, the use of cyberattacks might reduce the search for viable alternatives, thereby compressing—or at least muddying —**the escalation ladder**, particularly the steps between conventional and nuclear use. Once hostilities begin, leaders may not feel confident that the information they are receiving is genuine; the same might also be true for commanders in the field. Each decision would be underpinned by an uneasiness about the veracity of the information and data being used, possibly leading to different types of calculations and actions.65 In addition to this, leaders would fear that cyber operations would be used early in a crisis to disable or retard their most important weapons systems and to prevent them from being used against an adversary. Unfortunately, this might create a spiral effect, and more pressure to "use them or lose them," when it comes to a state's most important military capabilities.66 In a worst-case scenario, these concerns might increase perceived time pressures to act or respond, and the option to act preemptively. Stephen Cimbala has even gone as far as to warn that a nuclear-armed state bombarded with cyberattacks—particularly on its command, control, communications, and early warning networks—might feel so vulnerable that it would **opt for preemption**, in the worst case with nuclear weapons.° This exacerbates the feeling that cyber operations could undermine the ability to threaten retaliation, and therefore to strike second, because cyber capabilities appear to augment conventional first-strike possibilities against key enemy systems and forces, including their nuclear weapons.68 Taken together, these dynamics raise the likelihood of unintended and potentially **uncontrollable escalation** and make the management of such crises more complicated and dangerous.69

#### State-sponsored cyberattacks are on the rise.

Testoni '18 (Mark Testoni; Mark Testoni is the CEO and president of SAP National Security Services; 3-6-2018; "License to hack: State-sponsored hackers are upping the ante"; https://thehill.com/opinion/cybersecurity/376807-license-to-hack-state-sponsored-hackers-are-upping-the-ante, TheHill, accessed 12-1-2019; JPark)

At this year’s World Economic Forum in Davos, the threat of large-scale, **state-sponsored cyberattacks** was top of mind among the government and business leaders in attendance. Many world leaders now fear cyberattacks more than disease, terrorism or food shortages. Warren Buffett famously called cyber threats mankind’s number one problem, even over nuclear weapons. The U.S. military has already formally recognized cyberspace as a new **potential battlefield** alongside air, land, sea, and space. A quick walk through the global digital landscape confirms the magnitude of the problem. In December 2015, Ukraine suffered what may be the first known successful cyberattack against a power grid, bringing darkness to more than 230,000 residents in the region for an hour. While investigators could not confirm it was a state-sponsored attack, it exhibited all of its fingerprints: well-planned, sophisticated, with the markings of a **dry** **run** for a more prominent and **destabilizing assault** in the future. State-sponsored attacks are highly complex, often well-funded, executed through intermediaries and capable of causing widespread disruption. **China, Russia, Iran, and North Korea** are believed to be key actors in a threat that are estimated to hit $8 trillion in economic impact by 2022. The counter to these threats, referred to as the Third Offset Strategy, involves the combined power of humans and machines working together. Human intelligence assisted by artificial intelligence to outpace and out-think our enemy is fast becoming the new conventional battlefield – and it’s a physical and virtual one. We all have to be 'in it to win it' The absence of **general cyber awareness**, sometimes called cyber hygiene, is often identified as the primary source of attacks, leaks, or security incidents. Corporations and governments are starting create a battle rhythm around cyber — often driving from the board level down greater organizational awareness, to add another layer of defense. Spearfishing remains the most oft-cited entry point. Securing the rapidly expanding set of IoT entities from attack is becoming more critical. Employee behavior and vigilance is at the forefront. Reducing the cyber risk aperture is every bit as important as securing financial assets for companies and agencies. We must complement employee knowledge with automated capabilities like artificial intelligence to assist in identifying potential attacks. In tandem, the tools help employees and enterprises recognize threats on their own and lead to real behavioral changes in the workplace. Government initiatives like the Stop.Think.Connect campaign are working to educate different segments of the American public on cyber threats and the shared responsibility of protecting our critical networks. Sophisticated state-sponsored cyberattacks raise the stakes. The often interdependent relationship created by the internet requires a level collaboration on this battlefield we rarely needed in analog days. This requires strengthening public/private partnerships to ensure the protection of both the nation and its citizens from large-scale attacks. Although we’ve seen some progress with sharing information and analysis, we have to create a much more trusted relationship between players. Our biggest cyber threats, problems and concerns can only be managed by collaboration rather than working in silos. We need **national policy direction** (and debate) to improve the combined forces approach demanded by the threats.

#### 2---US doctrine promises nuclear retaliation in response to infrastructure attacks---that invites Sino-Russia retaliation.

Perkovich ’18 (George; Olivier and Nomellini chair and vice president for studies at the Carnegie Endowment for International Peace, PhD from the University of Virginia, principal adviser to the International Commission on Nuclear Nonproliferation and Disarmament; 1/18/18; “Really? We’re Gonna Nuke Russia for a Cyberattack?”; <https://www.politico.com/magazine/story/2018/01/18/donald-trump-russia-nuclear-cyberattack-216477>; POLITICO; accessed 12/6/18; TV)

The front page of Tuesday’s New York Times contained an alarming headline: “Pentagon Suggests Countering Devastating Cyberattacks With Nuclear Arms.” The article, by David Sanger and William Broad, reported on a leaked draft of the Trump administration’s Nuclear Posture Review, which determines what the role of nuclear weapons should be. This draft departs from previous posture reviews by broadening the range of attacks that could trigger a massive U.S. retaliation, including with nuclear weapons. Sanger and Broad acknowledge that the draft, which was first published by the Huffington Post, “does not explicitly say that a crippling cyberattack against the United States would be among the extreme circumstances” that would motivate the administration to initiate nuclear war. But, citing former and current officials, Sanger and Broad report that the proposed nuclear doctrine posits this contingency if, in the words of the leaked document, an adversary conducted “non-nuclear strategic attacks … on U.S., allied, or partner civilian population or infrastructure.” In plain English, the Trump team seems to be threatening to nuke anyone who conducts a massively disruptive cyberattack on the power grid or water system of the U.S. or one of its friends. For three reasons, the Trump administration would be wise to reconsider and more carefully calibrate the circumstances under which it would initiate nuclear war. The first reason has to do with the fact that nuclear war would be much more devastating to the United States than would any conceivable cyberattack. Russia and China appear to be the most likely adversaries that in the near term might be able to use cyberweapons to disable significant segments of the U.S. electricity system. Indeed, Russian attackers already did so to Ukraine, in a December 2015 operation that shut down power for approximately 230,000 Ukrainians for up to six hours. That attack, Wired magazine reported last June, may have been a dress rehearsal for a future assault on the U.S. power grid. Now imagine it was much worse, and all of Ukraine was without electricity for weeks. If Ukraine possessed nuclear weapons, would any sane person in Washington have recommended that Ukrainian leaders retaliate by nuking Russia, and thereby inviting Russian nuclear attacks on Ukraine? The cure would have been much worse than the disease. The same strategic logic applies to the United States. A cyberattack on U.S. civilian infrastructure could be enormously disruptive and costly. Depending on the scale and durability of outages of electricity, piped water, etc., the effect could be like what Puerto Rico is experiencing due to Hurricane Maria (though without the collapsed roadways and buildings). But, if a U.S. president initiated nuclear war in response to a massive cyberattack, Russia and China would be expected to retaliate with nuclear weapons. This could leave the mainland U.S. in the condition of Puerto Rico minus all the people, buildings and wildlife. Russia and China would suffer gravely in the process, but the U.S. would lose much more than it would gain by moving from cyberwar to nuclear war. Here’s the second reason it’s crazy to retaliate with nuclear weapons: The United States’ conventional and cyber capabilities combined are greater than its adversaries’. Thus, the United States for decades has wanted to keep conflicts from going nuclear, where it would be harder if not impossible to “win.” The U.S. continues to develop and deploy its own cyber capabilities to disrupt adversaries’ civilian and dual-use infrastructure—energy, water, finance, etc. This helps deter adversaries from initiating cyberwarfare on a large scale, and, if deterrence fails, to enable countervailing cyberattacks and perhaps conventional warfare. However, if the U.S. justifies the first use of nuclear weapons in response to possible cyberattacks, it will invite others to lower the threshold for using nuclear weapons. This is exactly the opposite of long-standing U.S. interests. A state with superior conventional and cyber capabilities should raise the nuclear threshold, not lower it. The third reason has to do with international law and morality. I know—such considerations may seem quaint in today’s Washington. Yet, the authors of the draft Nuclear Posture Review themselves highlight the importance of reducing the number of lives lost to war, and the advances civilization has made in doing so from 1600 to 1900, and since 1945. They attribute the post-1945 trend to the development of nuclear weapons. A parallel development has been in International Humanitarian Law, or the Law of Armed Conflict, which U.S. military officers take very seriously. These laws require that military operations be strictly necessary, that their harm be proportionate to the objective, and that they not cause unnecessary suffering. While an enemy’s massive cyberattack on U.S. civilian infrastructure would likely violate such law, it is difficult to imagine how the initiation of nuclear war in response would be necessary, proportionate, or would not cause unnecessary suffering (from radiation poisoning and subsequent birth defects, among other things). If the posture review’s authors think otherwise, the stakes are high enough that they should make this case in detail. Otherwise, they are needlessly opening the United States to yet more international condemnation that benefits only our adversaries and harms our allies and friends. The core threats of nuclear war and massive aggression that the United States has retained nuclear weapons to deter since 1945 have not gone away. Like its predecessors, the Trump administration naturally seeks to counter evolving threats, primarily from Russia, China and North Korea. But widening the role of nuclear weapons and appearing to blur the distinction between nuclear war and fundamentally less catastrophic threats is neither necessary nor helpful to making America great again.

#### 3---Hypersonic warhead discrimination is impossible – weapons move too fast and follow irregular trajectory, which means countries will think they’re being attacked and launch nukes in response.

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Hypersonic weapons are coming online just as the United States shifts its focus back to great power competition as its most pressing national security threat. To China and Russia - both of whom are rapidly modernizing their military capabilities and seeking ways to expand the role of nuclear weapons in their strategies6 - the unique characteristics of hypersonic systems (including their ability to render useless all current U.S. missile defenses) represent a perfect opportunity to take the lead in a high-stakes technological field. Russia’s “Kinzhal” aircraft-launched boost-glide vehicle is currently operational,7 and its nuclear-capable “Avangard” system will reportedly come online in 2019 (after much rhetorical fanfare from Vladimir Putin and other high-profile Kremlin officials, who have alarmingly boasted of the role such capabilities could play in a potential decapitation strike on the United States).8 China has tested multiple systems, including the “Starry Sky-2” boost-glide system and the DF-ZF unpowered glide vehicle (referred to by DoD as WU-14) that would give Beijing conventional prompt strike capability over a multi-thousand kilometer range. 9 Both countries have conducted multiple tests of these systems while continuing to funnel massive funding into hypersonics research and development (R&D)10 - two trends that, in the last year, have thrust the United States’ own hypersonic efforts into an uncomfortable spotlight. Somewhat understandably, the pace of testing and the adversarial rhetoric has contributed to perceptions and fears among American policymakers of a new arms race. However, the reality may be more tempered. James Acton, co-director of the Carnegie Endowment for International Peace, has argued that “in many ways, the United States is running a different race from Russia and China.”11 Russia and China are generally believed to take a different view of the role that hypersonic weapons can play in their strategy than the United States. Their interest appears vested in the capability of getting nuclear-armed vehicles past U.S. ballistic missile defenses. To many U.S. experts and leaders, this is not the strategic disruption it might seem. They assert that intercontinental ballistic missiles and submarine-launched ballistic missiles already give Washington, Moscow, and Beijing an unpreventable ability to launch a nuclear strike. Adding nuclear-equipped long-range hypersonic weapons that can defeat current missile defenses essentially results in the same outcome, and thus would not truly alter the strategic balance among the three powers that currently possess them.12 Rather, U.S. officials see greater potential value in the ability of conventionally-armed hypersonic weapons to disrupt the tactical dynamics of regional or theater conflicts by expanding U.S. response options without crossing the nuclear threshold.13 Certainly, hypersonic threats do not necessarily require hypersonic responses, and the logic of deterrence still matters.14 Should Beijing or Moscow field hypersonic weapons with conventional warheads, however, this would allow them “to threaten, with nonnuclear warheads, targets in Europe and eventually the continental United States that, previously, [they] could only have destroyed with nuclear weapons,”15 rendering U.S. missile defenses obsolete while holding the United States at risk and lowering the bar to full-blown military conflict.16 That said, the inadvertent escalation risk of hypersonic weapons should not be underestimated. Because of their speed and maneuverability, it would be nearly impossible to predict what facilities (or even what country) is being targeted if a country detected the launch of one of these weapons. Moreover, it would be impossible to know for certain the type of warhead it carries, meaning that a conventional strike could easily be mistaken for a preemptive nuclear attack.17

#### 4---Second-gen proliferators lack secure second strike capabilities---that subverts MAD and increases intentional use.

Kroenig ‘15 (Matthew Kroenig. Associate Professor and International Relations Field Chair in the Department of Government and School of Foreign Service at Georgetown University. 2015. "The History of Proliferation Optimism: Does It Have A Future?" Journal of Strategic Studies. Volume 38. Issue 1-2. 2015. <https://www.tandfonline.com/doi/abs/10.1080/01402390.2014.893508/>. Rct by JPark)

The spread of nuclear weapons poses at least six severe threats to international peace and security including: nuclear war, nuclear terrorism, global and regional instability, constrained US freedom of action, weakened alliances, and further nuclear proliferation. Each of these threats has received extensive treatment elsewhere and this review is not intended to replicate or even necessarily to improve upon these previous efforts. Rather the goals of this section are more modest: to usefully bring together and recap the many reasons why we should be pessimistic about the likely consequences of nuclear proliferation. Many of these threats will be illuminated with a discussion of a case of much contemporary concern: Iran’s advanced nuclear program. Nuclear War The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there will be a catastrophic nuclear war. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used nuclear weapons on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to the 65-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again simply because they have not been used for some time. After all, analysts in the 1990s argued that worldwide economic downturns like the Great Depression were a thing of the past, only to be surprised by the dot-com bubble bursting later in the decade and the Great Recession of the late 2000s.48 This author, for one, would be surprised if nuclear weapons are not used again sometime in his lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons, neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preventive nuclear strike to disarm Iran’s nuclear capabilities. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use them or lose them pressures. That is, in a crisis, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.49 If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. Fortunately, there is no historic evidence of this dynamic occurring in a nuclear context, but it is still possible. In an Israeli–Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, however, when both sides have secure, second-strike capabilities, there is still a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders who would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who hold millenarian religious worldviews and could one day ascend to power. We cannot rule out the possibility that, as nuclear weapons continue to spread, some leader somewhere will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. Leaders might, therefore, choose to launch a limited nuclear war.50 This strategy might be especially attractive to states in a position of conventional inferiority that might have an incentive to escalate a crisis quickly to the nuclear level. During the Cold War, the United States planned to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority.51 As Russia’s conventional power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear weapons in its military doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a US superpower in a possible East Asia contingency. Second, as was also discussed above, leaders can make a ‘threat that leaves something to chance’.52 They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increase the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents nearly led to war.53 When we think about future nuclear crisis dyads, such as Iran and Israel, with fewer sources of stability than existed during the Cold War, we can see that there is a real risk that a future crisis could result in a devastating nuclear exchange. Nuclear Terrorism The spread of nuclear weapons also increases the risk of nuclear terrorism.54 While September 11th was one of the greatest tragedies in American history, it would have been much worse had Osama Bin Laden possessed nuclear weapons. Bin Laden declared it a ‘religious duty’ for Al- Qa’eda to acquire nuclear weapons and radical clerics have issued fatwas declaring it permissible to use nuclear weapons in Jihad against the West.55 Unlike states, which can be more easily deterred, there is little doubt that if terrorists acquired nuclear weapons, they would use them.56 Indeed, in recent years, many US politicians and security analysts have argued that nuclear terrorism poses the greatest threat to US national security.57 Analysts have pointed out the tremendous hurdles that terrorists would have to overcome in order to acquire nuclear weapons.58 Nevertheless, as nuclear weapons spread, the possibility that they will eventually fall into terrorist hands increases. States could intentionally transfer nuclear weapons, or the fissile material required to build them, to terrorist groups. There are good reasons why a state might be reluctant to transfer nuclear weapons to terrorists, but, as nuclear weapons spread, the probability that a leader might someday purposely arm a terrorist group increases. Some fear, for example, that Iran, with its close ties to Hamas and Hizballah, might be at a heightened risk of transferring nuclear weapons to terrorists. Moreover, even if no state would ever intentionally transfer nuclear capabilities to terrorists, a new nuclear state, with underdeveloped security procedures, might be vulnerable to theft, allowing terrorist groups or corrupt or ideologically-motivated insiders to transfer dangerous material to terrorists. There is evidence, for example, that representatives from Pakistan’s atomic energy establishment met with Al-Qa’eda members to discuss a possible nuclear deal.59 Finally, a nuclear-armed state could collapse, resulting in a breakdown of law and order and a loose nukes problem. US officials are currently very concerned about what would happen to Pakistan’s nuclear weapons if the government were to fall. As nuclear weapons spread, this problem is only further amplified. Iran is a country with a history of revolutions and a government with a tenuous hold on power. The regime change that Washington has long dreamed about in Tehran could actually become a nightmare if a nuclear-armed Iran suffered a breakdown in authority, forcing us to worry about the fate of Iran’s nuclear arsenal. Regional Instability The spread of nuclear weapons also emboldens nuclear powers, contributing to regional instability. States that lack nuclear weapons need to fear direct military attack from other states, but states with nuclear weapons can be confident that they can deter an intentional military attack, giving them an incentive to be more aggressive in the conduct of their foreign policy. In this way, nuclear weapons provide a shield under which states can feel free to engage in lower-level aggression. Indeed, international relations theories about the ‘stability-instability paradox’ maintain that stability at the nuclear level contributes to conventional instability.60 Historically, we have seen that the spread of nuclear weapons has emboldened their possessors and contributed to regional instability. Recent scholarly analyses have demonstrated that, after controlling for other relevant factors, nuclear-weapon states are more likely to engage in conflict than nonnuclear-weapon states and that this aggressiveness is more pronounced in new nuclear states that have less experience with nuclear diplomacy.61 Similarly, research on internal decision-making in Pakistan reveals that Pakistani foreign policymakers may have been emboldened by the acquisition of nuclear weapons, which encouraged them to initiate militarized disputes against India.62 Currently, Iran restrains its foreign policy because it fears major military retaliation from the United States or Israel, but with nuclear weapons it could feel free to push harder. A nuclear-armed Iran would likely step up support to terrorist and proxy groups and engage in more aggressive coercive diplomacy. With a nuclear-armed Iran increasingly throwing its weight around in the region, we could witness an even more crisis prone Middle East. And in a poly-nuclear Middle East with Israel, Iran, and, in the future, possibly other states, armed with nuclear weapons, any one of those crises could result in a catastrophic nuclear exchange.

#### Disarm transitions away from the old nuclear order and revitalizes taboos and flexible diplomacy which acts as a stopgap to proliferation

Egeland 16 [Kjølv Egeland is a doctoral candidate in international relations at the University of Oxford, Wadham College. He is writing his thesis on the history of the nuclear nonproliferation and disarmament regime, focusing on changes in multilateral diplomatic practices. His broader research interests include international relations theory, ethics, and the philosophy of international law. “Change the incentives: Stigmatize nuclear weapons.” March 15, 2016. <https://thebulletin.org/2016/03/change-the-incentives-stigmatize-nuclear-weapons/>. *Bulletin of the Atomic Scientists*]

A right of great powers. Much has been written about the “nuclear taboo” against using such devastating weapons, but it seems that this taboo, if it does indeed exist, does not extend to the possession of nuclear weapons. In fact, throughout the history of the NPT and its review process, most states have accepted the treaty’s distinction between “nuclear” and “non-nuclear-weapon” states. It is true that many non-nuclear-weapon states frequently—some would say “ceremonially”—express their dissatisfaction with what they see as insufficient disarmament by the nuclear-weapon states, but few states have been willing to go beyond rhetoric. As long as this remains true, nuclear weapons will continue to be seen as a natural right of great powers. The Indian case illustrates the link between great power status and nuclear weapons: Following bilateral agreements with the United States and other governments, India, which developed nuclear weapons outside the NPT, is now recognized as a nuclear-weapon state (in practice if not in theory). While some see this implicit recognition as an unfortunate suspension of the norm of nonproliferation, others take a more lenient view. According to University of Chicago political science professor John Mearsheimer, full recognition of India as a nuclear-weapon state is no more than what India “deserves” as an emerging great power. Because this view is widespread, India’s nuclear adventure has turned into a huge success. In fact, while visiting New Delhi in November 2010, US President Barack Obama expressed support for India’s bid for a permanent seat on the UN Security Council. Obama’s refusal to offer the same support for Brazil’s bid when he visited Brasilia a few months later, even though Brazil’s economy is significantly larger than India’s, led many in the Brazilian capital and elsewhere to identify Brazil’s nuclear shortcoming as the sticking point for recognition as a great power. This created an unfortunate incentive for Brazil, and other states with global ambitions, to go nuclear. As long as nuclear weapons are seen as a badge of power, nuclear-armed states are unlikely to disarm, and aspiring powers without nuclear weapons are likely to keep their options open. Repugnant weapons. To create a world free of nuclear weapons—a stated goal of the international community since 1946—the incentive structures of the nuclear order must change. As with chemical and biological weapons, nuclear weapons must be re-cast as uncivilized, repugnant weapons, rather than status symbols. The humanitarian initiative, an attempt by non-nuclear-weapon states at reframing the debate on nuclear disarmament, has been a notable expression of this idea. By describing the catastrophic humanitarian consequences of any use of nuclear weapons in simple, everyday terms, the supporters of the initiative hope, much like the child in the story of the emperor’s new clothes, to undress the woolly rhetoric of “deterrence,” “stability,” and “special responsibilities” in which nuclear weapons are wrapped. Banning the use and possession of nuclear weapons through a new legal instrument—advocated by a growing number of non-nuclear-weapon states—is arguably the most potent tool available for those who wish to change the status quo. Such an instrument, which could be negotiated and adopted without the participation of the nuclear-armed states, could blunt or even reverse the incentive to possess nuclear weapons, and would fundamentally withdraw the implicit recognition of certain states as being entitled to possess them. Such a ban would not be a substitute for arms reduction treaties. But by reducing the incentive to possess nuclear weapons, it could facilitate and expedite the laborious process of negotiating the number of nuclear weapons in the world, making the nuclear-armed states more willing to reduce and eventually eliminate their stockpiles. The idea of a ban is, not surprisingly, vehemently opposed by the nuclear-armed states, and has, to some extent, polarized the international community. This proves that the strategy is working precisely as intended. Redefining the sources of status in international society cannot be done without causing some kerfuffle. A somewhat unfortunate implication of the ban strategy is that it might work better at inducing nonproliferation and disarmament in democratic states than in authoritarian ones. Democratic, liberal states are logically more susceptible to moral pressure than non-democratic, illiberal states. It is no accident that, with the exception of Israel, the only states that have not acceded to the conventions on chemical and biological weapons are authoritarian. Accordingly, in a worst-case scenario, one could end up with a world where nuclear weapons are held not by the entitled but by the wicked. This would be an unfortunate chain of events indeed, yet its prospect is not a very good argument against a principled ban. It would imply that moral principles should only be allowed to enter into play when it has been decided in advance that doing so would not conflict with other interests, whether of status or security. This, it seems to me, negates the notion of having principles in the first place. If the international community deems a nuclear world order managed by a select group of global custodians as better than a non-nuclear one, fair enough. But if the nations of the world are serious about creating the conditions for a world without nuclear weapons, they must change the nuclear incentives. If they do not, they will be locked in a never-ending fight against their own desires.

#### 5---Nuclear competition is inevitable and causes miscalculation and war – nine warrants that prove deterrence is fake.

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International relations scholars and nuclear deterrence theorists have identified several possible processes by which nuclear war could occur. The most prominent of these scenarios are reviewed here, including: irrational nuclear use, accidental nuclear use, inadvertent nuclear use, catalytic nuclear war, nuclear use against non-nuclear opponents, splendid first strike, use ‘em or lose ‘em, brinkmanship, and limited nuclear use. Irrational Nuclear Use. The first potential cause of nuclear use is irrationality. In practice, irrational nuclear use means a leader is using nuclear weapons in pursuit of goals that are so vastly different from our own as to be utterly unrecognizable. Political scientists tend to assume that states are unified rational actors that value their continued existence above all else, but this is a simplifying assumption, not a description of the world in which we actually live.6 Historically, there have been rare leaders who have been willing to destroy their own states in the pursuit of broader ideological goals, including Adolf Hitler in World War II.7 One could similarly imagine a leader of a nuclear-armed state on the losing end of a major war deciding that he has nothing left to lose and voluntarily choosing to unleash the destructive force of nuclear weapons. For example, if the North Korean regime were to collapse, might North Korean Supreme Leader Kim Jong-un decide to use nuclear weapons, figuring that if he is going down he might as well take everyone else with him? Alternatively, it is at least conceivable that somewhere, someday, a leader could ascend to power with religious, nationalist, racist, or some other extremist worldview that causes him to value nuclear destruction over self-preservation. Iran’s clerical establishment, for example, contains a minority of individuals who genuinely appear to hold millenarian religious beliefs.8 If Iran acquires nuclear weapons and one of these leaders comes to have his finger on the nuclear trigger, it is at least imaginable that he might try to launch an unprovoked nuclear attack in an attempt to bring about an apocalypse. Granted, this type of nuclear use may be the most far-fetched of those discussed in this chapter, but many international events, including the terrorist attacks of 9/11 and the recent global financial crisis, were virtually unimaginable until they happened. Accidental Nuclear Use. A second type of potential nuclear use can be characterized as accidental or unintentional. In 1982, the Department of Defense catalogued all previously known nuclear accidents from the 1950s to the 1980s.9 The list included the 1982 Titan II crisis in which a dropped wrench socket in a nuclear missile silo nearly caused a nuclear explosion, and a number of cases in which aircraft carrying nuclear weapons crashed or dropped nuclear weapons into the ocean but that fortunately failed to detonate.10 Scott Sagan, in his book The Limits of Safety, catalogs a number of near nuclear accidents during the Cold War period, including a 1966 midair collision between a B-52 bomber and a KC-135 tanker that led to the release of four hydrogen bombs near Palomares, Spain.11 In 1968, a B-52 bomber on airborne alert caught fire over Greenland near a U.S. early warning site, causing four one-megaton thermonuclear bombs to hurtle toward the ground.12 The current era is not immune from nuclear accidents either, as evident from the 2007 incident in which nuclear weapons were accidentally and unknowingly transported from Minot Air Force Base in North Dakota to Barksdale Air Force Base in Louisiana.13 Other nuclear weapons states have also had their share of incidents,14 and newer nuclear weapons states may be even more prone to accidents, especially as they strive to develop stable command and control structures.15 In none of these cases did the nuclear warhead detonate; however, we might not be so lucky next time. Inadvertent Nuclear Use. An inadvertent nuclear use would occur if a nuclear-capable state decided to launch a nuclear war under the incorrect belief that it is already under nuclear attack.16 Thomas Schelling provides perhaps the most sophisticated theoretical discussion of inadvertent nuclear war in his discussion of “reciprocal fear of surprise attack.”17 Schelling argues that when two nuclear adversaries face each other in crisis, each side may rightly worry that the other side is considering nuclear attack. If there is an advantage to striking first, then, in these difficult circumstances under intense time pressures, a cycle of fear could lead to nuclear war. As Schelling writes, “Fear that the other may be about to strike in the mistaken belief that we are about to strike gives us a motive for striking, and so justifies the other’s motive.”18 In the Limits of Safety, Sagan provides several examples of near-inadvertent nuclear war during the Cuban Missile Crisis. In one episode, an intruder— later identified as a bear—led to the sounding of a “sabotage alarm,” which set off similar alarms at all the bases in the area. At one base, an incorrectly wired alarm sent pilots of nuclear-armed fighter aircraft to prepare for takeoff before a car raced down the runway to stop them.19 Also during the crisis, Vandenberg Air Force Base conducted a regularly scheduled ballistic missile test that the Soviet Union might have reasonably misread as a nuclear missile launch.20 Finally, at the end of the crisis, Moorestown, New Jersey radar operators alerted North American Aerospace Defense Command (NORAD) that an incoming missile attack was underway when a training tape simulating an attack was mistakenly run in their system.21 Inadvertent nuclear war nearly occurred again in the 1983 Able Archer incident, in which a very realistic North Atlantic Treaty Organization (NATO) military exercise during a period of tension led the Soviets to worry that the training operation was a cover for war preparations. The Soviets put their own nuclear forces on alert in response.22 A similar scare occurred in the post-Cold War era in January 1995 when a U.S.-Norwegian weather balloon was launched from Norway to study the Aurora Borealis. A Russian early warning radar detected this object, leading former Russian President Boris Yeltsin to activate his “nuclear keys” for the first time. Eventually radars detected that the balloon was going out to sea and Russian forces stood down.23 Given the frequency with which countries have feared themselves to be under nuclear attack in the past, it will likely continue to happen in the future, and it is always possible that at least one of them could lead to a nuclear response. Catalytic Nuclear War. During the early Cold War era, strategists theorized about the possibility of “catalytic nuclear war.” They imagined that the United States could be attacked with nuclear weapons, and that U.S. leaders would assume, quite reasonably, that the Soviet Union had been responsible for the attack and decide to strike back. Both states would have been vastly weakened after absorbing the nuclear exchange, but what if it had not been the Soviets, but the Chinese who had initially attacked the United States? In the aftermath, the Chinese could emerge as the preeminent power. One party initiates the attack, but the attack is attributed to another party and the secret attacking state comes out of the conflict more powerful than the two victimstates.24 Given today’s more advanced intelligence, surveillance, and reconnaissance (ISR) capabilities, a secret attack scenario may seem less plausible, but it is at least imaginable that a third party could begin a crisis that would bring other states to nuclear conflict. Nuclear Use Against a Non-Nuclear Opponent. In an ongoing crisis or conflict with a non-nuclear state, a nuclear-capable state may be tempted to use nuclear weapons. Nuclear use could be attractive in this situation because there would be no danger of nuclear retaliation from the targeted state, although such use could have other ill effects, including international opprobrium. The only case of nuclear use, against Japan during World War II, illustrates this type of use. Nuclear attacks against non-nuclear states have also been considered on at least a few other occasions. Reportedly, the French briefly contemplated nuclear use against the Vietnamese in the 1954 Battle of Dien Bien Phu during the First Indochina War.25 Almost 2 decades later in the same country, former U.S. President Richard Nixon mentioned the possibility of using a nuclear weapon to then U.S. National Security Advisor Henry Kissinger, saying “I’d rather use the nuclear bomb.” Kissinger responded that nuclear use would be “too much,” to which Nixon responded, “The nuclear bomb. Does that bother you?” He went on to say, “I just want you to think big.”26 Thus far, leaders from nuclear-capable states have appeared to agree with Kissinger that nuclear use against non-nuclear weapons states is “too much.” However, two points are important to note. First, the conflicts in which nuclear states have forgone nuclear use against non-nuclear states—in addition to the above conflicts, one could add China in the Korean War, the Falklands War, and the first and second Gulf Wars—were not existential threats to the nuclear states. In future conflicts with greater stakes, nuclear weapons states may be more likely to consider nuclear use. Second, there is also the possibility of nuclear use against a non-nuclear state brandishing chemical and biological weapons (CBWs). The unique physical and psychological damage caused by these unconventional weapons have caused leaders to consider nuclear weapons as a potentially appropriate response and a stronger means of deterrence than conventional threats. During the 1991 Gulf War, the administration of then U.S. President George H. W. Bush attempted to threaten nuclear use to deter Iraqi President Saddam Hussein from using chemical weapons against U.S. soldiers.27 Similarly, during the 2003 Iraq War, officials from the George W. Bush administration again made veiled threats of nuclear use by claiming no options were off the table to deter Iraqi use of CBWs.28 Bush administration officials later said they would not have used nuclear weapons, but they must have thought use was credible enough to issue the threat. Today U.S. nuclear doctrine continues to leave open the possibility of nuclear use in response to unconventional attacks. The 2010 Nuclear Posture Review states, “there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring a conventional or CBW attack against the United States or its allies and partners.”29 Similarly, the 2010 Russian nuclear doctrine reserves the option “to utilize nuclear weapons in response to the utilization of nuclear and other types of weapons of mass destruction [WMD] against it and (or) its allies.”30 Finally, there are those who argue that nuclear weapons should be considered in cases of cyberattack. In January 2013, the Department of Defense, Defense Science Board issued a report arguing that the United States should be prepared to use nuclear weapons in response to major cyberattacks, and Washington has not yet ruled out any such use in official doctrine.31 Splendid First Strike. A sixth potential use of nuclear weapons is the so-called “splendid first strike.” The purpose of this type of nuclear use is to destroy all of an adversary’s nuclear weapons in a single nuclear campaign, leaving the adversary unable to strike back with nuclear weapons. No state has ever attempted a nuclear first strike, but such strikes have been considered. Early in the Cold War, it was plausible for the United States, with its head start in the nuclear arms race, to consider a splendid first strike against the Soviet Union. In April 1950, the U.S. National Security Council rejected preventive war on the nascent Soviet arsenal “on strategic and moral grounds.”32 Although the decision document, NSC-68, did allow for a pre-emptive strike if the United States were under imminent attack from the Soviet Union.33 During the administration of former U.S. President Dwight Eisenhower, military planners explored a preventive war option, with a Joint Chiefs of Staff Advance Study Group recommending the United States consider starting a war with the Soviets before their nuclear forces became “a real menace.”34 Other military leaders disagreed, in effect calling such an attack un-American, and this option was ruled out by December 1954.35 Both the United States and the Soviets considered a nuclear first strike against China in the 1960s.36 As the Soviet Union’s nuclear arsenal developed over time, Washington began to worry that its nuclear forces might themselves be vulnerable to a splendid first strike. RAND Corporation analyst Albert Wohlstetter argued that the balance of terror might be more “delicate” than previously believed and, as a result, the U.S. military dispersed its air bases and took other measures to ensure nuclear survivability.37 Carrying out a nuclear first strike would entail great risk. If the strike failed to destroy every single nuclear weapon of the adversary, then the attacker would risk devastating nuclear retaliation in response. Even Herman Kahn, author of On Thermonuclear War, argued that “for . . . practical reasons alone, not to speak of vitally important moral and political ones, the notion of having a Splendid First Strike Capability seems fanciful.”38 This type of nuclear use would be most plausible, therefore, against a target state that possessed relatively few weapons at known locations. Though there are no historical examples of a splendid first strike using nuclear weapons, the strategic logic underpinning this type of attack, to wipe out an adversary’s nuclear capability in one strike to prevent one’s own state from being targeted in the future, has been pursued by states using conventional weapons. In destroying Iraq’s Osirak nuclear reactor in 1981, for example, Israel attempted to take out Iraq’s developing nuclear capability, striking before it had a more developed weapons program. Israel took similar action when bombing the Syrian al-Kibar reactor in September 2007. If a country were further along in a nuclear weapons program and conventional weapons were insufficient to destroy an enemy nuclear program, it is conceivable that leaders would consider nuclear weapons appropriate for the task for the same underlying reasons. Use ‘Em or Lose ‘Em. In a crisis situation involving two nuclear-armed states, each may fear their nuclear weapons will be vulnerable to attack by their adversary and thus decide to use them before they are wiped out. Pressure to “use ‘em or lose ‘em” in a crisis might be heightened if a country possesses a nuclear arsenal that is vulnerable to a splendid first strike or if the adversary’s nuclear posture favors the offense. For example, during the Cold War, each side maintained ballistic missiles with relatively accurate multiple independently targetable reentry vehicles (MIRVs). With this capability, a single missile could target and destroy a number of the adversary’s nuclear weapons. Even if not all of the targeted state’s missiles were destroyed, it would be left at great numerical disadvantage vis-à-vis the attacking state. This condition meant each side felt immense pressure to launch its missiles first in the event of conflict, leading to the development of “launch on warning” postures in which weapons already on alert could be quickly deployed if an incoming attack were detected. In this situation, it might be more reasonable for a leader to simply back down rather than initiate a nuclear war from such a disadvantaged position, but it is possible that a future leader would prefer to use them than lose them. Nuclear Brinksmanship. Many scholars and practitioners incorrectly believe that nuclear use is impossible, or at the very least irrational, once one’s adversary possesses a secure second-strike capability. If an adversary has the ability to absorb a nuclear attack and respond with a devastating counterattack, then one can no longer hope to conduct a splendid first strike and any nuclear use could result in unacceptable retaliation. Meanwhile, states would not feel the same use ‘em or lose ‘em pressures, because they would understand that they could ride out a nuclear attack and still hit back with force. Since both sides understand these facts, a situation of restraint arises due to the condition of Mutually Assured Destruction (MAD). Yet, nuclear deterrence theorists have identified several rational uses of nuclear weapons even in a condition of MAD. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.39 He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”40 They can engage in a process, a nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis, there is an increasing probability that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before backing down will win the crisis as long as it does not end in catastrophe. It is for this reason that Schelling called great power politics in the nuclear era a “competition in risk taking.”41 This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Alternatively, they can escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. On brinksmanship, former U.S. Secretary of State John Foster Dulles stated, “The ability to get to the verge without getting into the war is the necessary art . . . . If you try to run away from it, if you are scared to go to the brink, you are lost.”42 The bipolar Cold War conflict provides several examples of nuclear brinksmanship, with the Cuban Missile Crisis as the most notable. Former Soviet Premier Nikita Khrushchev initially raised the stakes by placing nuclear weapons in Cuba, gravely threatening the U.S. homeland and meddling within the U.S. sphere of influence. In response, then U.S. President John F. Kennedy escalated by placing a blockade around the island so Soviet ships could not deliver additional missiles. In the end, the Soviet Union withdrew its missiles from Cuba, but not before the risk of nuclear war was raised to, in President Kennedy’s mind, “between 1 in 3 and even.”43 Other historical examples of brinkmanship include Moscow’s threats against the British and the French during the 1956 Suez Crisis, Moscow’s threats to attack China during the Sino-Soviet border war in 1969, former President Nixon’s nuclear alerts in 1969 and 1973, and finally, Indian and Pakistani threats and nuclear weapons movements during the 1999 Kargil Crisis.44 Looking to the future, as long as rivalries continue and as long as leaders are willing to initiate and escalate high-stakes crises in search of their geopolitical goals, the risk of war through nuclear brinkmanship will remain with us. Limited Nuclear War. During the course of the Cold War, nuclear strategists considered an alternative to all-out nuclear war between the two superpowers: limited nuclear war.45 This is conflict “in which each side exercises restraint in the use of nuclear weapons, employing only a limited number of weapons on selected targets.”46 By launching a single nuclear weapon against a small city or an isolated military base, for example, a nuclear armed state could signal its willingness to escalate a crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. U.S. proponents of limited nuclear war included Henry Kissinger and Robert Osgood.47 In his 1957 book Nuclear Weapons and Foreign Policy, Kissinger argued that the United States should be prepared for alternatives to “all-out” nuclear war, especially in peripheral conflicts.48 Limited nuclear war, he argues, cannot be “improvised” during the course of conflict, but it has “its own appropriate tactics . . . with limitations as to targets, areas and the size of weapons used.”49 Most importantly, limited nuclear war requires communicating to adversaries in advance the understandings of limited war, otherwise “miscalculations and misinterpretations” of intentions “may cause the war to become all-out even if both sides intend to limit it.”50 In the current era, there are a number of conflicts in which adversaries could engage in limited nuclear war. Because arsenal sizes vary, the defining feature of this type of nuclear war is not that it seeks to avoid all-out nuclear exchange, but that nuclear weapons are employed with some level of restraint, to avoid the widespread use of nuclear weapons on both sides. History provides examples of states planning to deploy nuclear weapons in a limited way to achieve limited aims. During the early Cold War when the United States was conventionally inferior to the Soviet Union, U.S. leaders felt they had no choice but This content downloaded from 107.194.152.197 on Wed, 15 Jan 2020 06:26:46 UTC All use subject to https://about.jstor.org/terms 154 to go nuclear to stop Soviets from overrunning Europe. This is similar to France’s approach to nuclear strategy during the Cold War. Vastly overmatched by Moscow, the French plan was also to resort to launching nuclear weapons as soon as conventional fighting began.51 Similarly, at present, America’s conventionally inferior adversaries have incentives to use nuclear weapons early in a crisis in an attempt to deter further escalation and ensure their own survival.52

#### **Nuclear war causes extinction – ozone losses, firestorms, and agricultural disruption.**

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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 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 coldest 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 population**.

#### Only full elimination solves – even one state with weapons causes a power imbalance.

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Nuclear reductions and the heady dreams of abolition are driven in part by a belief that nukes are Cold War anachronisms. But it would be incorrect — dangerous, in fact — to assume that the conditions that have allowed the United States to de-emphasize its atomic arsenal will persist. Nuclear weapons are still the most potent military tools on Earth, and they will remain central to **geopolitical competition**. They have been relatively unimportant in the recent past not because humanity has somehow become more enlightened, but because we have been blessed with a temporary respite from great-power rivalry. The Soviet Union’s collapse left the United States as the world’s sole superpower, and America’s unmatched conventional military overawed other countries. Nuclear weapons have not been central to America’s national security for the past two decades because its primary foes — Serbia, Iraq, Afghanistan, and al Qaeda — did not have them. Whatever America’s problems in prosecuting its recent wars, a lack of firepower was not one of them. But times are changing. Economists predict that China could overtake the United States as the world’s largest economy in the coming years, and international relations theory tells us that transitions between reigning hegemons and rising challengers often produce conflict. Already, **China** has become more assertive in pursuing revisionist claims in East Asia, confronting America’s allies, and building military capabilities — including anti-ship ballistic missiles and submarines — tailored for a fight with the United States. In September 2012, a dispute between China and Japan over the Senkaku Islands nearly caused a war that could have easily drawn in the United States. Beijing’s contested claims to natural resources in the South China Sea and ever-present tensions with Taiwan could also lead to **Sino-U.S.** conflict. Even relations with Russia, America’s partner in arms control, are becoming more competitive: The civil war in Syria bears every hallmark of a Cold War-style proxy battle. In short, great-power political competition is heating up once again, and as it does, nuclear weapons will once again take center stage. The writing is already on the wall. Russia, China, India, Pakistan, and North Korea are modernizing or expanding their nuclear arsenals, and Iran is vigorously pursuing its own nuclear capability. As Yale University political scientist Paul Bracken notes, we are entering a “**second nuclear age**” in which “the whole complexion of global power politics is changing because of the reemergence of nuclear weapons as a vital element of statecraft and power politics.” Nostalgia for simpler times can be seductive, but the United States needs a nuclear force that can protect it from the challenges that lie ahead. MIKE FISHER/AFP/Getty Images “It Takes Only a Handful of Nukes to Deter an Enemy.” Wrong. Advocates of further cuts argue that a secure second-strike capability — the ability to absorb an attack and retain enough nuclear warheads to launch a devastating response — is sufficient for nuclear deterrence. Although “secure” and “devastating” are imprecise terms, many analysts would say that a few dozen submarine-launched ballistic missiles, each with multiple warheads, is plenty because at-sea subs are difficult to target in a first strike and the firepower provided by, say, 200 nuclear weapons is impressive. By their logic, anything more is “overkill” that can be cut with little loss to U.S. security. Although it is possible that no sane leader would intentionally start a nuclear war with a state that possesses even a small deterrent force, nuclear-armed states still have conflicting interests that can lead to crises. And it turns out that, contrary to widely held assumptions, the nuclear balance of power is critically important to how such disputes are resolved. Recently, I methodically reviewed the relationship between the size of a country’s nuclear arsenal and its security. In a statistical analysis of **all nuclear-armed countries** from 1945 to 2001, I found that the state with more warheads was only one-third as likely to be challenged militarily by other countries and more than **10 times** more likely to prevail in a crisis — that is, to achieve its basic political goals — when it was challenged. Moreover, I found that the size of this advantage increased along with the margin of superiority. States with vastly **more nukes** (95 percent of the two countries’ total warheads) were **more than 17 times** more likely to win. These findings held even after accounting for disparities in **conventional military power**, political **stakes**, geographical **proximity**, **type of political system**, **population**, territorial **size**, **history** of past disputes, and other factors that could have influenced the outcomes. When the United States operated from a position of nuclear strength during the Cold War, it stopped the Soviet Union from building a nuclear submarine base in Cuba in 1970 and deterred Moscow from increasing support to its Arab allies in the 1967 and 1973 Arab-Israeli wars. By contrast, when the nuclear balance was less favorable to Washington, it was unable to achieve clear victories in crises against the Soviet Union — for example, failing to roll back Moscow’s 1979 invasion of Afghanistan. In addition, qualitative evidence from the past 70 years shows that leaders pay close attention to the nuclear balance of power, that they believe superiority enhances their position, and that a nuclear advantage often translates into a geopolitical advantage. During the Cuban missile crisis, American nuclear superiority helped compel Moscow to withdraw its missiles from the island. As Gen. Maxwell Taylor, then chairman of the Joint Chiefs of Staff, wrote in a memo to Defense Secretary Robert McNamara, “We have the strategic advantage in our general war capabilities.… This is no time to run scared.” Similarly, Secretary of State Dean Rusk argued, “One thing Mr. Khrushchev may have in mind is that he knows that we have a substantial nuclear superiority, but he also knows that we don’t really live under fear of his nuclear weapons to the extent that he has to live under fear of ours.” We see similar patterns in South Asia. When asked years later why **Pakistan** ultimately withdrew its forces from Indian Kashmir during the 1999 Kargil crisis, former Indian Defense Minister George Fernandes **cited** his country’s **nuclear superiority**. In the event of a nuclear exchange, he said, “We may have lost a part of our population … [but] Pakistan may have been completely wiped out.” This may sound crazy. To most people, “But you should see the other guy” would be scant consolation for losing perhaps millions of one’s fellow citizens. But the truth is that nuclear war might well be more devastating for one country than for the other, even if both sides can inflict “unacceptable” damage. As Cold War nuclear strategist Herman Kahn wrote, “Few people differentiate between having 10 million dead, 50 million dead, or 100 million dead. It all seems too horrible. However, it does not take much imagination to see that there is a difference.” This is not to argue that leaders of countries with bigger arsenals believe they can fight and win nuclear wars. The logic is more subtle. Nuclear states coerce each other through brinkmanship. They heighten crises, raising the risk of nuclear war until one side backs down and the other gets its way. At each stage of the crisis, leaders make gut-wrenching calculations about whether to escalate, thereby risking a catastrophic nuclear war, or to submit, throwing an important geopolitical victory to their opponent. If the costs of nuclear war are higher for one state than another, then **giving in** will always look more **attractive** to leaders in the inferior position — whatever payoff they might get from escalating would always be offset by a higher potential cost. So, on average, we should expect that leaders with **fewer nukes** at their disposal will be more likely to **cave** during a crisis. And this is exactly what the data show.

#### The aff is a long term solution – this card also explains aff implementation.

Van Der Meer '16 (Sico Van Der Meer; research Fellow at the Clingendael Institute. His research is focussing on non-conventional weapons like Weapons of Mass Destruction and cyber weapons from a strategic policy perspective. He also has a special interest in North Korea and relations between North and South Korea. He graduated from the Radboud University Nijmegen in 1999 with a Master’s in History. Before joining the Clingendael Institute, he worked as a journalist and as a Fellow of a think tank on civil-military relations. In 2016 he was seconded to the Taskforce International Cyber Policies of the Netherlands Ministry of Foreign Affairs; 2-15-2016; "Accelerating global nuclear disarmament: a menu of 16 policy options"; https://www.clingendael.org/publication/accelerating-global-nuclear-disarmament-menu-16-policy-options, No Publication, accessed 12-2-2019; JPark)

* This card also explains the scope of durable fiat

An important consideration is that nuclear disarmament policies will not guarantee any success as long as the states possessing these weapons are not engaged. To get them on board, it may be important to recognize that nuclear weapons have both a humanitarian dimension and a security dimension. It will be a difficult balancing act to combine these two in the same policy. Nevertheless, in order to effectively achieve **the global elimination** of nuclear weapons, it is crucial that the states possessing the weapons should participate in measures to that end, otherwise these measures would be mainly symbolic. Even if one argues that such symbolic measures will increase the pressure on nuclear weapon states to disarm, one may question if such pressure is really contributing to the elimination of nuclear weapons or is only creating a fragmentation of international support for existing nuclear taboos as established in the NPT. Nevertheless, it should be noted as well that only five of the current nine nuclear weapon states are a member state of the NPT (the United States, Russia, the United Kingdom, France and China). The other four (Israel, India, Pakistan and North Korea) are not. One could argue that many of the policy steps being discussed within the Humanitarian Initiative could be applicable to all states, regardless of membership of the NPT or any other treaty. Yet, confidence in and an ongoing commitment to the current multilatera system of non-proliferation and disarmament efforts, especially but not exclusively embodied by the NPT and CD, can be reinforced by the demonstrated implementation of concrete nuclear disarmament measures by the current nuclear weapon states. Constructive diplomacy has always proven to be the **best method** to increase international security and stability. The menu of choice below consists of 16 steps. The policy options described are of course all interconnected. Moreover, the order in which they are described is **not static**; although the aim is to start with the least drastic step and to end with the most radical option, combinations of measures could certainly be thought of. It is not necessary that every step should follow the previous one; parallel and simultaneous steps are also certainly possible. 1. Relying on existing disarmament fora The simplest policy option for any state involved is, of course, doing nothing new. This means sticking to the traditional disarmament efforts within the NPT and CD, trying to solve the deadlock on disarmament currently perceived by many member states within these fora themselves. Without doubting the importance of the NPT and CD, it is debatable whether this option is in itself the most effective one. Considering the many states and NGOs asking for increased disarmament efforts, one could question whether the option to stick to traditional fora and methods is enough. The discomfort concerning the pace of nuclear disarmament must be dealt with in a positive way to channel this energy into the right direction – doing nothing new may harm the massive support for existing non-proliferation and disarmament arrangements even more than looking for extra steps towards disarmament measures. Nevertheless, the five nuclear weapon states within the NPT appear to prefer this path, convinced that the NPT and CD are the best fora to negotiate on further disarmament. These negotiations could be combined with their own self-designated ‘P5 Process’ in which the five nuclear weapon states within the NPT discuss the issue among themselves. There have also been meetings of the so-called ‘P5 Plus Group’, but even this group, with the non-NPT nuclear weapon states India and Pakistan on board, still misses the participation of Israel and North Korea, who are considered to have nuclear weapons as well. Without any hesitation, it is positive that these states discuss disarmament efforts with each other, although this does not mean that more inclusive discussions, with the non-nuclear weapon states and the nuclear weapon states which are not party to the NPT being included as well, should be sidelined as counter-productive. Nevertheless, the P5 Process, or preferably an extended P5 Plus Process, could certainly be helpful in discussing more far-reaching policy options as will discussed in the options below. 2. Increased **transparency** measures While non-nuclear weapon states are obliged under the NPT to provide full transparency on their nuclear activities (if any), the nuclear weapon states are not. Their nuclear weapons programmes are generally dealt with as **top secret**. This entails that any discussion about nuclear weapons, including the issue of nuclear disarmament, is to some extent always speculative. From this perspective, further transparency in the form of (public) reporting by the nuclear weapon states on their nuclear weapons inventories and policies, as well as their fissile material stockpiles, would be helpful in enhancing informed debate and increased confidence between states. Such transparency measures could be implemented unilaterally, bilaterally or multilaterally by (any of) the nuclear weapon states. 3. Confidence-building measures An important problem of the current discontent regarding nuclear disarmament efforts is a lack of confidence by many state and non-state actors in the sincerity of nuclear weapon states to effectively work towards a further reduction of the threat of nuclear weapons – threats of use as well as accidents. A first step to increase confidence could be measures to minimize the inadvertent use of nuclear weapons. The initiative for this kind of measure should come from the nuclear weapon states – unilaterally or in cooperation with each other. The main focus should be increasing the **predictability** of states’ behaviour regarding the use of nuclear weapons, thus preventing misperceptions leading to inadvertent nuclear escalation.2 Various examples of confidence-building measures could be thought of. Developing and the sharing of guidelines and principles, as well as verification and accountability instruments regarding decreasing the risks of accidents with and/or inadvertent use of nuclear weapons could be **effective measures** to increase confidence. The same holds true for sharing best practices and lessons learned on risk reduction regarding the inadvertent use of nuclear weapons. Information sharing on nuclear postures and procedures could also increase confidence. Guarantees or standardization regarding decision making and judgement processes on the use of nuclear weapons could add to confidence in the prevention of misuse and accidents as well; decision makers on the use of nuclear weapons must, for example, have enough time and information tools for prudent judgement so as to resolve potential misperceptions and to receive vital pieces of information. Only if nuclear weapon states are able to show other states that they are serious in this kind of risk-reducing 2 Wolfgang Ischinger, Steven Pifer and Andrei Zagorski, Confidence Building Measures Are Now Needed More Than Ever, European Leadership Network, 30 June 2014. measures could confidence be increased as a first step towards a further reduction and elimination efforts. 4. Preparing measures for disarmament verification An important step preceding actual nuclear disarmament is discussing how, at any moment, it will be accomplished. A disarmament process can only be successful if it is **irreversible**, **verifiable** and **transparent**. Currently, a coalition of both nuclear weapon and non-nuclear weapon states is discussing this issue within the International Partnership for Nuclear Disarmament Verification (IPNDV). This partnership, led by the United States, is aimed at developing (technical) solutions for monitoring and verifying potential future nuclear disarmament efforts. It would be helpful if this initiative would be able to come up with practical recommendations in the short term. Increasing the inclusiveness of the partnership would be helpful as well; in the end, verification mechanisms could be developed that will be supported by all states. From this perspective, cooperation with the International Atomic Energy Agency (IAEA) may be helpful as well. 5. Reduced role of nuclear weapons in security policies As long as nuclear weapon states retain an important role for nuclear weapons in their security policies, including doctrines and postures, they do not demonstrate much priority for the elimination of these weapons. As a first step to increase the credibility of their NPT obligations of nuclear disarmament, nuclear weapon states could reduce the role of nuclear weapons in their security doctrines. By doing so, they will demonstrate that they are sincere in both decreasing their importance as well the risks of (inadvertent) use. This policy measure could be implemented unilaterally or in coordination with other nuclear weapon states. 6. De-alerting nuclear weapons Especially the United States and Russia have nuclear warheads on ballistic missiles that are on **high alert** and ready to be launched within only a few minutes. France and the United Kingdom also keep some of their nuclear weapons on alert, although at lower readiness levels than the United States and Russia. As far as is known, the other nuclear weapon states have no nuclear weapons on alert status.3 The very little time that decision makers in these states have to judge whether or not to use the nuclear weapons significantly increases the risk of **inadvertent** **use**. In the past, several cases have become public in which such inadvertent use – because of miscommunications, misperceptions, or technical errors – brought the world close to nuclear warfare with catastrophic results.4 To reduce the risks of the inadvertent use of high alert nuclear weapons, unilateral, bilateral or multilateral measures could be taken to decrease the operational readiness of nuclear forces. Reducing the alert status of nuclear weapons could be achieved through a phased approach, and should preferably be verified (at least by other nuclear weapon states de-alerting their weapons as well). This measure would decrease the risk of inadvertent use to some extent as well as demonstrate a commitment to reduce the role of nuclear weapons in security policies. 3 Hans M. Kristensen and Matthew McKinzie, Reducing Alert Rates of Nuclear Weapons, United Nations Institute for Disarmament Research (UNIDIR), 2012. 4 For examples of cases, see: Patricia Lewis, Heather Williams, Benoît Pelopidas and Sasan Aghlani, Too Close for Comfort: Cases of Near Nuclear Use and Options for Policy, Chatham House Report, April 2014, pp. 7-23. An extra option within a process of de-alerting could be programming all nuclear missiles on alert to a default target in the middle of any ocean. This would give decision makers some more response time in (perceived) crisis situations, because the weapons should be retargeted before being used. Moreover, this would limit the risk of nuclear weapons accidently being used against real targets. According to some sources, the United States has already implemented such a default ocean targeting.5 7. Improved ‘No First Use’ guarantees and security guarantees Some nuclear weapon states have declared that they will use nuclear weapons only in response to a nuclear attack, while others do not exclude ‘first use’. Unilateral, bilateral or multilateral measures could be taken to increase the confidence that nuclear weapons will not be used by a state before it is attacked by such weapons itself. Nuclear weapon states could develop nuclear doctrines clearly stating the **No First Use principle**, and establish protocols to guarantee this principle in their command and control procedures. A No-First-Use Treaty or No-First-Use Convention is a possibility as well, but currently this does not seem to be realistic.6 Closely linked to No First Use guarantees are security assurances to non-nuclear weapon states. It would be a positive sign if such assurances would be extended by all nuclear weapon states, publicly giving an absolute guarantee that they will not use nuclear weapons to threaten or attack any nonnuclear weapon state.7 8. Banning nuclear weapons tests Already in 1996 the Comprehensive NuclearTest-Ban Treaty (CTBT) was opened for signature. Since then many states have signed and ratified the treaty. However, the Treaty has not so far entered into force, because the required signatures and/or ratifications by various states are lacking, especially (but not exclusively) the nuclear weapon states of China, India, Israel, North Korea, Pakistan and the United States.8 It would be an important positive signal if those states would sign and/or ratify the CTBT as well. Even though the entry into force of the treaty will not depend on only one or a few of these states, their membership would demonstrate to the international community that they acknowledge the need for a ban on nuclear test explosions. Supporting a ban on nuclear weapons testing to some extent shows the willingness to end the development and modernisation of nuclear weapons as well, even though digitally simulated tests are always still possible. As long as the CTBT cannot enter into force, states could unilaterally decide to stop testing and/or to declare a moratorium on nuclear test explosions; currently all nuclear weapon states have already done so, except for North Korea. 7 On the importance of clear language in this regard, see: Michael S. Gerson, ‘No First Use. The Next Step for U.S. Nuclear Policy’, International Security, Vol. 35, No. 2 (Fall 2010), pp. 7-47. 8 Situation of 23 January 2016, according to CTBTO figures. 9. Reduction or removal of forward deployed nuclear weapons As far as is known, one nuclear weapon state, the United States, has some of its tactical nuclear weapons deployed in other NATO states in Western Europe – so-called ‘forward deployment’. Although, technically speaking, this forward deployment possibly cannot be labelled as illegal under NPT obligations (the weapons are not transferred but remain in possession and under the control of the US), it certainly is against the spirit of the treaty. Moreover, the greater the number of locations where nuclear weapons are stored, the more risks there are of accidents and inadvertent use. Measures to reduce or eliminate the number of forward deployed nuclear weapons – which ideally would consist of cooperative action by the US, NATO and the actual host countries – would be a symbolically important step towards further nuclear disarmament. Considering the increasing tensions between NATO and Russia in the past few years, one could question whether NATO is currently ready for this step. However, even starting serious deliberations within NATO on such measures would already be an important signal of a serious willingness to work on further nuclear reduction and disarmament. 10. Reduction of or ending deployment in border regions Nuclear weapons deployed in border regions between (potential) adversaries may contribute to increased tensions. Especially in the case of relatively low-yield tactical nuclear weapons, one may speculate that the threshold of use could be considered somewhat lower compared to strategic nuclear weapons or tactical nuclear weapons deployed further away from borders. The risk of use, inadvertent use (for example, in case local military commanders may decide on use in crisis situations), or accidents may be higher.9 Specific border areas where (as far as is known) tactical nuclear weapons are currently deployed are at the borders between India and Pakistan and between Russian and NATO territory (including forward deployed US nuclear weapons as described in the previous step). Unilateral or bilateral steps to end the deployment of (tactical) nuclear weapons in border regions may decrease the risks of accidents or (inadvertent) use as well as demonstrate a willingness to reduce the role of nuclear weapons in security policies. 11. Banning the production of **fissile materials** Discussions on achieving a Fissile Material Cut-Off Treaty (FMCT) have stalled within the CD for many years already. Such a treaty would ban the production of fissile materials which can be used to build nuclear weapons (plutonium and highly enriched uranium). Some states even favour a Fissile Material Treaty (FMT) which would also limit existing stockpiles of fissile materials.10 As one of the steps towards nuclear disarmament it would be helpful if negotiations on such a treaty would be given new impetus in a constructive way. Although an FMCT, or even an FMT, will not directly bring about nuclear disarmament, it will at least be helpful in building confidence that states with fissile material production facilities will not further increase their nuclear weapons resources. As long as negotiations towards such a treaty will not be successful, unilateral, bilateral or multilateral initiatives could be launched to make a start in limiting and/or 9 Shashank Joshi, ‘Pakistan’s Tactical Nuclear Nightmare: De’ja’ Vu?’, The Washington Quarterly, Summer 2013, pp. 159-172. 10 A Fissile Material Cut-off Treaty. Understanding the Critical Issues, United Nations Institute for Disarmament Research (UNIDIR), 2010. halting the production of fissile materials. Facilities used for the production of fissile materials for nuclear weapons could be dismantled or converted, and existing stockpiles of fissile materials could also be converted to materials which are useful for peaceful purposes only (for example, by ‘down blending’ highly enriched uranium). Such measures, especially if transparency and verification mechanisms are included, could be an important step in building confidence that nuclear weapon states are serious about limiting their nuclear weapon programmes.11 12. Moratorium on nuclear weapons modernisation Various nuclear weapon states are currently modernizing their nuclear weapons arsenal or are suspected of doing so.12 Although one may contend that in some cases it is merely maintenance rather than modernisation, or a modernisation that is aimed at increasing the security of the weapons (which few would oppose), in various cases it seems like modernisation to make nuclear weapons more effective within the context of national security policies. It is difficult not to consider such modernisation efforts as contradictory to any disarmament pledge. To demonstrate their sincerity regarding nuclear disarmament, nuclear weapon states could – via unilateral, bilateral or multilateral measures – end or forego efforts to **modernize** their nuclear weapons (preferably including ending and foregoing the development of new missions for their nuclear weapons). This could result in a moratorium on nuclear weapons modernisation. Ideally, any kind of verification arrangements should be included in such measures to ensure confidence in such a moratorium. 13. Reduction of (deployed) nuclear weapons numbers Considering nuclear disarmament as a **phased process**, starting with a reduction and ending with the elimination of nuclear weapons, accelerating the reduction phase is an important step towards the ultimate aim of ‘**global zero’**. Unilateral, bilateral or multilateral measures in which nuclear weapon states reduce the number of their nuclear weapons are thus essential steps. Any reduction of nuclear weapons would contribute to **decreasing** the **risks** of them being used (on purpose or by accident) and would **increase** the **confidence** in commitments towards the reduction and elimination of nuclear weapons in the long term. Some nuclear weapon states may contend that the United States and Russia should make a start with their nuclear weapons stockpile reduction, since they currently possess some 93% of the global number of nuclear weapons.13 However, this does not necessarily exclude reduction measures by other states as well – states have even eliminated their nuclear weapons without taking such figures into account (in the case of South Africa). Some nuclear weapon states use the principle of ‘strict sufficiency’, meaning something like maintaining their arsenal of nuclear weapons at the lowest possible level with regard to their perceived strategic context.14 This may sound interesting in theory, but how this lowest possible level 13 According to the most accurate estimates: ‘World nuclear forces, January 2015’, Stockholm International Peace Research Institute (SIPRI). 14 Jenny Nielsen and Marianne Hanson, The European Union and the humanitarian initiative in the 2015 Non-Proliferation Treaty review cycle, NonProliferation Papers No. 41, EU Non-Proliferation Consortium, December 2014, p. 13. should be measured in practice is hard to define. Although an actual reduction through the **dismantlement** of nuclear weapons would be the most optimal decision in this context, a preliminary step of only reducing the number of deployed nuclear weapons may also be considered as a first step. Although this would not be disarmament in itself, only removing some of the nuclear weapons from deployment into storage, it reduces the risk of these weapons being used in the short term and could at least be considered as a confidence-building measure. Settings to accomplish any steps on this topic could be, for example, the P5 Process or the P5 Plus Process, as well as bilateral dialogue like past arms reduction negotiations between the United States and Russia. During the last few years, however, little to no progress has been made in such processes.

#### Deterrence is a myth – the presence of nukes heightens instability and makes war inevitable with many paths to failure without mitigation.

Barash 18 (David, Professor of Psychology at the University of Washington, author or editor of over 40 books, Nuclear deterrence is a myth. And a lethal one at that, Jun 14 2018, The Guardian)

* A2 “we haven’t gone to war” – can’t prove anything, it’s because geopolitical relations have been peaceful
* Counterexamples: Cuban/Chinese revolutions, US in Vietnam, Soviets in Afghanistan, conventional warfare during the Cold War, the Korean war failed to deter China
* Sescher and Fuhrmann: 348 disputes between 1919 and 1995: nuke contries not more successful in changing behavior
* No credibility – MAD
* Counterforce vulnerability, first strike incentives = instability
* Deterrence assumes rationality but misperception, anger, pride inform decisionmaking – esp. when pressure is high or have “nothing to lose” lethal acts appear rational
* Accidental launching/firing
* False alarms – misperceptions, ruptured gas pipeline/faulty computer codes seen as strikes

In his classic The Evolution of Nuclear Strategy (1989), Lawrence Freedman, the dean of British military historians and strategists, concluded: ‘The Emperor Deterrence may have no clothes, but he is still Emperor.’ Despite his nakedness, this emperor continues to strut about, receiving deference he doesn’t deserve, while endangering the entire world. Nuclear deterrence is an idea that became a potentially lethal ideology, one that remains influential despite having been increasingly discredited. After the United States’ nuclear bombings of Hiroshima and Nagasaki in 1945, war changed. Until then, the overriding purpose of military forces had ostensibly been to win wars. But according to the influential US strategist Bernard Brodie writing in 1978: ‘From now on its chief purpose must be to avert them. It can have almost no other useful purpose.’ Thus, nuclear deterrence was born, a seemingly rational arrangement by which peace and stability were to arise by the threat of mutually assured destruction (MAD, appropriately enough). Winston Churchill described it in 1955 with characteristic vigour: ‘Safety will be the sturdy child of terror, and survival the twin brother of annihilation.’ Importantly, deterrence became not only a purported strategy, but the very grounds on which governments justified nuclear weapons themselves. Every government that now possesses nuclear weapons claims that they deter attacks by their threat of catastrophic retaliation. Even a brief examination, however, reveals that deterrence is not remotely as compelling a principle as its reputation suggests. In his novel The Ambassadors (1903), Henry James described a certain beauty as ‘a jewel brilliant and hard’, at once twinkling and trembling, adding that ‘what seemed all surface one moment seemed all depth the next’. The public has been bamboozled by the shiny surface appearance of deterrence, with its promise of strength, security and safety. But what has been touted as profound strategic depth crumbles with surprising ease when subjected to critical scrutiny. Let’s start by considering the core of deterrence theory: that it has worked. Advocates of nuclear deterrence insist that we should thank it for the fact that a third world war has been avoided, even when tensions between the two superpowers – the US and the USSR – ran high. Some supporters even maintain that deterrence set the stage for the fall of the Soviet Union and the defeat of Communism. In this telling, the West’s nuclear deterrent prevented the USSR from invading western Europe, and delivered the world from the threat of Communist tyranny. There are, however, compelling arguments suggesting that the US and the former Soviet Union avoided world war for several possible reasons, most notably because neither side wanted to go to war. Indeed, the US and Russia never fought a war prior to the nuclear age. Singling out nuclear weapons as the reason why the Cold War never became hot is somewhat like saying that a junkyard car, without an engine or wheels, never sped off the lot only because no one turned the key. Logically speaking, there is no way to demonstrate that nuclear weapons kept the peace during the Cold War, or that they do so now. Perhaps peace prevailed between the two superpowers simply because they had no quarrel that justified fighting a terribly destructive war, even a conventional one. There is no evidence, for example, that the Soviet leadership ever contemplated trying to conquer western Europe, much less that it was restrained by the West’s nuclear arsenal. Post facto arguments – especially negative ones – might be the currency of pundits, but are impossible to prove, and offer no solid ground for evaluating a counterfactual claim, conjecturing why something has not happened. In colloquial terms, if a dog does not bark in the night, can we say with certainty that no one walked by the house? Deterrence enthusiasts are like the woman who sprayed perfume on her lawn every morning. When a perplexed neighbour asked about this strange behaviour, she replied: ‘I do it to keep the elephants away.’ The neighbour protested: ‘But there aren’t any elephants within 10,000 miles of here,’ whereupon the perfume-sprayer replied: ‘You see, it works!’ We should not congratulate our leaders, or deterrence theory, much less nuclear weapons, for keeping the peace. What we can say is that, as of this morning, those with the power to exterminate life have not done so. But this is not altogether comforting, and history is no more reassuring. The duration of ‘nuclear peace’, from the Second World War to the end of the Cold War, lasted less than five decades. More than 20 years separated the First and Second World Wars; before that, there had been more than 40 years of relative peace between the end of the Franco-Prussian War (1871) and the First World War (1914), and 55 years between the Franco-Prussian War and Napoleon’s defeat at Waterloo (1815). Even in war-prone Europe, decades of peace have not been so rare. Each time, when peace ended and the next war began, the war involved weapons available at the time – which, for the next big one, would likely include nuclear weapons. The only way to make sure that nuclear weapons are not used is to make sure that there are no such weapons. There is certainly no reason to think that the presence of nuclear weapons will prevent their use. The first step to ensuring that humans do not unleash nuclear [winter] holocaust might be to show that the Emperor Deterrence has no clothes – which would then open the possibility of replacing the illusion with something more suitable. It is possible that the post-1945 US-Soviet peace came ‘through strength’, but that need not imply nuclear deterrence. It is also undeniable that the presence of nuclear weapons on hair-trigger alert capable of reaching each other’s homeland in minutes has made both sides edgy. The Cuban Missile Crisis of 1962 – when, by all accounts, the world came closer to nuclear war than at any other time – is not testimony to the effectiveness of deterrence: the crisis occurred because of nuclear weapons. It is more likely that we have been spared nuclear war not because of deterrence but in spite of it. Even when possessed by just one side, nuclear weapons have not deterred other forms of war. The Chinese, Cuban, Iranian and Nicaraguan revolutions all took place even though a nuclear-armed US backed the overthrown governments. Similarly, the US lost the Vietnam War, just as the Soviet Union lost in Afghanistan, despite both countries not only possessing nuclear weapons, but also more and better conventional arms than their adversaries. Nor did nuclear weapons aid Russia in its unsuccessful war against Chechen rebels in 1994-96, or in 1999-2000, when Russia’s conventional weapons devastated the suffering Chechen Republic. Nuclear weapons did not help the US achieve its goals in Iraq or Afghanistan, which have become expensive catastrophic failures for the country with the world’s most advanced nuclear weapons. Moreover, despite its nuclear arsenal, the US remains fearful of domestic terrorist attacks, which are more likely to be made with nuclear weapons than be deterred by them. In short, it is not legitimate to argue that nuclear weapons have deterred any sort of war, or that they will do so in the future. During the Cold War, each side engaged in conventional warfare: the Soviets, for example, in Hungary (1956), Czechoslovakia (1968), and Afghanistan (1979-89); the Russians in Chechnya (1994-96; 1999-2009), Georgia (2008), Ukraine (2014-present), as well as Syria (2015-present); and the US in Korea (1950-53), Vietnam (1955-75), Lebanon (1982), Grenada (1983), Panama (1989-90), the Persian Gulf (1990-91), the former Yugoslavia (1991-99), Afghanistan (2001-present), and Iraq (2003-present), to mention just a few cases. Nor have their weapons deterred attacks upon nuclear armed states by non-nuclear opponents. In 1950, China stood 14 years from developing and deploying its own nuclear weapons, whereas the US had a well-developed atomic arsenal. Nonetheless, as the Korean War’s tide was shifting dramatically against the North, that US nuclear arsenal did not inhibit China from sending more than 300,000 soldiers across the Yalu River, resulting in the stalemate on the Korean peninsula that divides it to this day, and has resulted in one of the world’s most dangerous unresolved stand-offs. In 1956, the nuclear-armed United Kingdom warned non-nuclear Egypt to refrain from nationalising the Suez Canal. To no avail: the UK, France and Israel ended up invading Sinai with conventional forces. In 1982, Argentina attacked the British-held Falkland Islands, even though the UK had nuclear weapons and Argentina did not. Following the US-led invasion in 1991, conventionally armed Iraq was not deterred from lobbing Scud missiles at nuclear-armed Israel, which did not retaliate, although it could have used its nuclear weapons to vaporise Baghdad. It is hard to imagine how doing so would have benefitted anyone. Obviously, US nuclear weapons did not deter the terrorist attacks on the US of 11 September 2001, just as the nuclear arsenals of the UK and France have not prevented repeated terrorist attacks on those countries. Deterrence, in short, does not deter. The pattern is deep and geographically widespread. Nuclear-armed France couldn’t prevail over the non-nuclear Algerian National Liberation Front. The US nuclear arsenal didn’t inhibit North Korea from seizing a US intelligence-gathering vessel, the USS Pueblo, in 1968. Even today, this boat remains in North Korean hands. US nukes didn’t enable China to get Vietnam to end its invasion of Cambodia in 1979. Nor did US nuclear weapons stop Iranian Revolutionary Guards from capturing US diplomats and holding them hostage (1979-81), just as fear of US nuclear weapons didn’t empower the US and its allies to force Iraq to retreat from Kuwait without a fight in 1990. In Nuclear Weapons and Coercive Diplomacy (2017), the political scientists Todd Sechser and Matthew Fuhrmann examined 348 territorial disputes occurring between 1919 and 1995. They used statistical analysis to see whether nuclear-armed states were more successful than conventional countries in coercing their adversaries during territorial disputes. They weren’t. Not only that, but nuclear weapons didn’t embolden those who own them to escalate demands; if anything, such countries were somewhat less successful in getting their way. In some cases, the analysis is almost comical. Thus, among the very few cases in which threats from a nuclear-armed country were coded as having compelled an opponent was the US insistence, in 1961, that the Dominican Republic hold democratic elections following the assassination of the dictator Rafael Trujillo, as well as the US demand, in 1994, following a Haitian military coup, that the Haitian colonels restore Jean-Bertrand Aristide to power. In 1974-75, nuclear China forced non-nuclear Portugal to surrender its claim to Macau. These examples were included because the authors honestly sought to consider all cases in which a nuclear-armed country got its way vis-à-vis a non-nuclear one. But no serious observer would attribute the capitulation of Portugal or the Dominican Republic to the nuclear weapons of China or the US. All of this also suggests that the acquisition of nuclear weapons by Iran or North Korea is unlikely to enable these countries to coerce others, whether their ‘targets’ are armed with nuclear or conventional weapons. It is one thing to conclude that nuclear deterrence hasn’t necessarily deterred, and hasn’t provided coercive power – but its extraordinary risks are even more discrediting. First, deterrence via nuclear weapons lacks credibility. A police officer armed with a backpack nuclear weapon would be unlikely to deter a robber: ‘Stop in the name of the law, or I’ll blow us all up!’ Similarly, during the Cold War, NATO generals lamented that towns in West Germany were less than two kilotons apart – which meant that defending Europe with nuclear weapons would destroy it, and so the claim that the Red Army would be deterred by nuclear means was literally incredible. The result was the elaboration of smaller, more accurate tactical weapons that would be more usable and, thus, whose employment in a crisis would be more credible. But deployed weapons that are more usable, and thus more credible as deterrents, are more liable to be used. Second, deterrence requires that each side’s arsenal remains invulnerable to attack, or at least that such an attack would be prevented insofar as a potential victim retained a ‘second-strike’ retaliatory capability, sufficient to prevent such an attack in the first place. Over time, however, nuclear missiles have become increasingly accurate, raising concerns about the vulnerability of these weapons to a ‘counterforce’ strike. In brief, nuclear states are increasingly able to target their adversary’s nuclear weapons for destruction. In the perverse argot of deterrence theory, this is called counterforce vulnerability, with ‘vulnerability’ referring to the target’s nuclear weapons, not its population. The clearest outcome of increasingly accurate nuclear weapons and the ‘counterforce vulnerability’ component of deterrence theory is to increase the likelihood of a first strike, while also increasing the danger that a potential victim, fearing such an event, might be tempted to pre-empt with its own first strike. The resulting situation – in which each side perceives a possible advantage in striking first – is dangerously unstable. Third, deterrence theory assumes optimal rationality on the part of decision-makers. It presumes that those with their fingers on the nuclear triggers are rational actors who will also remain calm and cognitively unimpaired under extremely stressful conditions. It also presumes that leaders will always retain control over their forces and that, moreover, they will always retain control over their emotions as well, making decisions based solely on a cool calculation of strategic costs and benefits. Deterrence theory maintains, in short, that each side will scare the pants off the other with the prospect of the most hideous, unimaginable consequences, and will then conduct itself with the utmost deliberate and precise rationality. Virtually everything known about human psychology suggests that this is absurd. In Black Lamb and Grey Falcon: A Journey Through Yugoslavia (1941), Rebecca West noted that: ‘Only part of us is sane: only part of us loves pleasure and the longer day of happiness, wants to live to our 90s and die in peace …’ It requires no arcane wisdom to know that people often act out of misperceptions, anger, despair, insanity, stubbornness, revenge, pride and/or dogmatic conviction. Moreover, in certain situations – as when either side is convinced that war is inevitable, or when the pressures to avoid losing face are especially intense – an irrational act, including a lethal one, can appear appropriate, even unavoidable. When he ordered the attack on Pearl Harbor, the Japanese defence minister observed that: ‘Sometimes it is necessary to close one’s eyes and jump off the platform of the Kiyomizu Temple [a renowned suicide spot].’ During the First World War, Kaiser Wilhelm II of Germany wrote in the margin of a government document that: ‘Even if we are destroyed, England at least will lose India.’ While in his bunker, during the final days of the Second World War, Adolf Hitler ordered what he hoped would be the total destruction of Germany, because he felt that Germans had ‘failed’ him. Consider, as well, a US president who shows signs of mental illness, and whose statements and tweets are frighteningly consistent with dementia or genuine psychosis. National leaders – nuclear-armed or not – aren’t immune to mental illness. Yet, deterrence theory presumes otherwise. Finally, there is just no way for civilian or military leaders to know when their country has accumulated enough nuclear firepower to satisfy the requirement of having an ‘effective deterrent’. For example, if one side is willing to be annihilated in a counterattack, it simply cannot be deterred, no matter the threatened retaliation. Alternatively, if one side is convinced of the other’s implacable hostility, or of its presumed indifference to loss of life, no amount of weaponry can suffice. Not only that, but so long as accumulating weapons makes money for defence contractors, and so long as designing, producing and deploying new ‘generations’ of nuclear stuff advances careers, the truth about deterrence theory will remain obscured. Even the sky is not the limit; militarists want to put weapons in outer space. Insofar as nuclear weapons also serve symbolic, psychological needs, by demonstrating the technological accomplishments of a nation and thus conveying legitimacy to otherwise insecure leaders and countries, then, once again, there is no rational way to establish the minimum (or cap the maximum) size of one’s arsenal. At some point, additional detonations nonetheless come up against the law of diminishing returns, or as Winston Churchill pointed out, they simply ‘make the rubble bounce’. In addition, ethical deterrence is an oxymoron. Theologians know that a nuclear war could never meet so-called ‘just war’ criteria. In 1966, the Second Vatican Council concluded: ‘Any act of war aimed indiscriminately at the destruction of entire cities or of extensive areas along with their populations is a crime against God and man itself. It merits unequivocal and unhesitating condemnation.’ And in a pastoral letter in 1983, the US Catholic bishops added: ‘This condemnation, in our judgment, applies even to the retaliatory use of weapons striking enemy cities after our own have already been struck.’ They continued that, if something is immoral to do, then it is also immoral to threaten. In a message to the 2014 Vienna Conference on the Humanitarian Impact of Nuclear Weapons, Pope Francis declared that: ‘Nuclear deterrence and the threat of mutually assured destruction cannot be the basis of an ethics of fraternity and peaceful coexistence among peoples and states.’ The United Methodist Council of Bishops go further than their Catholic counterparts, concluding in 1986 that: ‘Deterrence must no longer receive the churches’ blessing, even as a temporary warrant for the maintenance of nuclear weapons.’ In The Just War (1968), the Protestant ethicist Paul Ramsey asked his readers to imagine that traffic accidents in a particular city had suddenly been reduced to zero, after which it was found that everyone had been required to strap a newborn infant to the bumper of every car. Perhaps the most frightening thing about nuclear deterrence is its many paths to failure. Contrary to what is widely assumed, the least likely is a ‘bolt out of the blue’ (BOOB) attack. Meanwhile, there are substantial risks associated with escalated conventional war, accidental or unauthorised use, irrational use (although it can be argued that any use of nuclear weapons would be irrational) or false alarms, which have happened with frightening regularity, and could lead to ‘retaliation’ against an attack that hadn’t happened. There have also been numerous ‘broken arrow’ accidents – accidental launching, firing, theft or loss of a nuclear weapon – as well as circumstances in which such events as a flock of geese, a ruptured gas pipeline or faulty computer codes have been interpreted as a hostile missile launch. The above describes only some of the inadequacies and outright dangers posed by deterrence, the doctrinal fulcrum that manipulates nuclear hardware, software, deployments, accumulation and escalation. Undoing the ideology – verging on theology – of deterrence won’t be easy, but neither is living under the threat of worldwide annihilation. As the poet T S Eliot once wrote, unless you are in over your head, how do you know how tall you are? And when it comes to nuclear deterrence, we’re all in over our heads.

### 1AC---Russia

#### This advantage (and Cyber) I read at just CPS.

#### Trump is cementing US-Russia tensions – conflict’s inevitable and dangerous.

Blair '18 (Bruce Blair, a nuclear security expert and a research scholar at the Program on Science and Global Security at Princeton University's Woodrow Wilson School of Public and International Affair; 1-13-2018; "Perspective"; https://www.washingtonpost.com/news/posteverything/wp/2018/01/13/the-trump-administrations-new-nuclear-plan-makes-nuclear-war-likelier/, accessed 12-4-2019; JPark)

The Trump administration’s wizards of Armageddon have locked down their vision of the nuclear future. It is, by and large, a rehash of old thinking from previous administrations, but its one key departure is a doozy: It declares a **newfound readiness** to use U.S. nuclear weapons first and early in a confrontation **with Russia** and possibly others. Alarmingly, the wizards have uprooted the nuclear taboo and deluded themselves into believing that nuclear weapons are far more usable than previous presidents held. In a single ill-conceived stroke, they have expressed a readiness to go nuclear first in a conflict with Russia or others that had not yet crossed the nuclear Rubicon. This is **needless** because the United States possesses **ample conventional strength** to repulse Russian aggression, and **reckless** because all it accomplishes is increasing the risk of blundering into a nuclear war. The new Nuclear Posture Review mostly reiterates previous commitments. It defends spending $1.25 trillion to replace aging nuclear forces with new ones, including building new missiles for emplacement in **vulnerable silos**, and “protecting” them by preparing to launch them on **early warning** before incoming warheads destroy them. The wizards thus perpetuate the drill that compels presidents to render a launch decision in **six minutes or less**. Presidents have too much power over U.S. nukes. Especially this one. Where the review goes ballistic is its assignment of U.S. nuclear weapons to deter — and if deterrence fails, to **attack Russia** if Russian President Vladimir Putin orders a non-nuclear strategic attack against the United States and its NATO allies. This mission is alleged to justify acquiring additional weapons with low-yield explosive power (in addition to the 1,000 already operational or held in reserve) to buttress the credibility of this first-use threat. What is the feared scenario of Russia aggression that would warrant such escalation? The document points to what it calls non-nuclear strategic attacks against civilian populations and infrastructure: “The United States would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States, its allies, and partners. Extreme circumstances could include significant **non-nuclear strategic attacks**. Significant non-nuclear strategic attacks include, but are not limited to, attacks on the U.S., allied, or partner **civilian** population or **infrastructure**.” **No one** can stop President Trump from using nuclear weapons. That’s by design. Is this scenario realistic? Possibly. There is strong reason to believe that in wartime the Russians have the **capability** and the **intention** to attack U.S. and Western European civilian infrastructure (financial, energy, transportation and communications) with cyber and conventional forces (very possibly including ground-launched cruise missiles with non-nuclear warheads). Russia’s plan envisions surgical strikes against infrastructure during a conventional conflict it is losing in a bid to **reverse the fortunes** of war. How? Bizarre as it may seem, the Russians appear to believe that paralyzing or even just severely disrupting “normal life” in the West would so inconvenience the populaces that they would demand their governments end the conflict. Depriving civilians of their iPhones and other amenities is viewed as key to coercing the West to stand down. Of course, some of this disruption — say, electrical blackouts — would cause more than inconvenience; it could mean life or death for thousands. Russia developed this doctrine over the past **five years** partially to exploit growing infrastructure vulnerabilities stemming from growing Western dependencies on these networks, and partially to reduce Russia’s own strategic reliance on **first use** of nuclear arms. By focusing on cyberwar and conventional forces, Russia seeks to depend less on its 20-year-old doctrine of “escalate to de-escalate,” which calls for the early first use of small-yield Russian tactical nuclear weapons to counter Western conventional supremacy. (This Russian option is also cited by the Trump review as a reason for acquiring and using countervailing low-yield U.S. nuclear weapons.) The West’s Achilles’ heel of infrastructure vulnerability may tempt other adversaries besides Russia to take aim at this weakness in wartime. Indeed, the Trump administration’s document leaves the door ajar for possible U.S. nuclear first strikes against **non-nuclear countries** if they wreck our critical civilian infrastructure. AD But for the U.S. to react to growing threats to civilian networks by proposing to use new low-yield U.S. nuclear weapons is particularly ill-conceived. The administration’s new doctrine reverses roles and puts the onus on the United States to be the first to initiate the use of nuclear weapons. Russia has managed to turn the tables on us, increasing U.S. reliance on early first use. The Pentagon has fallen into a trap by boxing itself in this way and almost casually lets Russia **off the hook**. The burden of nuclear first use should remain on Russia and not be allowed to shift onto NATO. No American president wants to feel pressure to authorize the early first use of nuclear weapons. The correct approach is for the West to exploit its own cyber and conventional prowess to counter Russia on its own terms, exploiting Western superiority in these areas and leaving the burden of nuclear first use on Russia’s shoulders. We need **tighter**, not **looser** rules for using nukes first in a confrontation with Russia. President Trump should expunge this major new creative, but misguided, part of his nuclear review — and fire its authors.

#### Relations are a ticking time bomb – both leaders are unpredictable and risk affectionate with no checks.

Wood '17 (David Wood; David is the senior military correspondent for The Huffington Post. His second book, What Have We Done: the Moral Injury of Our Longest Wars, based on his Pulitzer Prize-winning reporting on veterans of Iraq and Afghanistan, was published by Little, Brown in November 2016., ; 4-4-2017; "This Is How The Next World War Starts"; https://highline.huffingtonpost.com/articles/en/trump-russia-putin-military-crisis/, Huffington Post, accessed 12-1-2019; JPark)

In December 2015, a Turkish F-16 jet shot down a Russian SU-24 fighter on the Turkish-Syrian border. The Russian fighter plummeted in flames and its co-pilot was killed by ground fire. The surviving pilot, Captain Konstantin Murakhtin, said he’d been attacked without warning; Turkey insisted that the Russian plane had violated its airspace. Within days Putin had deftly turned the incident to his advantage. Instead of seeking to punish Turkey, he accused the U.S. of having a hand in the incident, without any evidence. Then he coaxed Turkey, a NATO member, into participating in joint combat operations over Syria. He also engineered Syrian peace talks in which the United States was pointedly not invited to participate. It was a bravura performance. Russia, says Breedlove, the retired NATO commander, “is playing three-dimensional chess while we are playing checkers.” Putin’s favored tactic, intelligence officials say, is known as “**escalation dominance**.” The idea is to **push the other side until you win**, a senior officer based in Europe explained—to “escalate to the point where the adversary stops, won’t go farther. It’s a very destabilizing strategy.” Stavridis cast it in the terms of an old Russian proverb: “Probe with a bayonet; when you hit steel withdraw, when you hit mush, proceed.” Right now, he added, “the Russians keep pushing out and hitting mush.” This mindset is basically **the opposite of** how both American and Soviet leaders approached each other during the **Cold War**, even during periods of exceptional stress such as the 1962 Cuban missile crisis. Having endured the devastation of World War II, they understood the horror that lurked on the far side of a crisis. “When things started to get too close, they would back off,” said Miller, the retired Pentagon official. The term of art for this constant recalibration of risk is “crisis management”—the “most demanding form of diplomacy,” writes Sir Lawrence Freedman, an emeritus professor of war studies at King’s College London. Leaders had to make delicate judgments about when to push their opponent and when to create face-saving off-ramps. Perhaps most critically, they had to possess the confidence to de-escalate when necessary. Skilled crisis management, Freedman writes, requires “an ability to match deeds with words, to convey threats without appearing reckless, and to offer concessions without appearing soft, often while under intense media scrutiny and facing severe time pressures.” A recent textbook example came in January 2016, when Iran seized those 10 U.S. Navy sailors, claiming that they had been spying in Iranian waters in the eastern Persian Gulf. President Barack Obama’s secretary of state, John Kerry, immediately opened communications with his counterpart in Tehran, using channels established for negotiating the nuclear deal with Iran. By the next morning, the sailors had been released. The U.S. acknowledged the sailors had strayed into Iranian waters but did not apologize, asserting that the transgression had been an innocent error. Iran, meanwhile, acknowledged that the sailors had not been spying. (The peaceful resolution was not applauded by Breitbart News, headed at the time by Stephen Bannon, who is now Trump’s chief White House strategist. Obama, a Breitbart writer sneered, has been “castrated on the world stage by Iran.”) TODAY, THANKS TO REAL-TIME VIDEO, THE MEN IN THE KREMLIN AND WHITE HOUSE CAN KNOW—OR THINK THEY KNOW—AS MUCH AS THE GUY IN THE COCKPIT OF A PLANE OR ON THE BRIDGE OF A WARSHIP. **Neither** Putin nor Trump, it’s safe to say, are **crisis managers** by nature. Both are notoriously **thin-skinned**, operate on **instinct**, and have a tendency to **shun expert advice**. (These days, Putin is said to surround himself not with seasoned diplomats but cronies from his old spy days.) Both are unafraid of **brazenly lying**, fueling an atmosphere of extreme distrust on both sides. Stavridis, who has studied both Putin and Trump and who met with Trump in December, concluded that the two leaders “are not risk-averse. They are risk-affectionate.” Aron, the Russia expert, said, “I think there is a much more cavalier attitude by Putin toward war in general and the threat of nuclear weapons. He continued, “He is not a madman, but he is much more inclined to use the threat of nuclear weapons in conventional [military] and political confrontation with the West.” Perhaps the most significant difference between the two is that Putin is far more calculating than Trump. In direct negotiations, he is said to rely on videotaped analysis of the facial expressions of foreign leaders that signal when the person is bluffing, confused or lying. At times, Trump has been surprisingly **quick to lash out** at a perceived slight from Putin, although these moments have been overshadowed by his effusive praise for the Russian leader. On December 22, Putin promised to strengthen Russia’s strategic nuclear forces in his traditional year-end speech to his officer corps. Hours later, Trump vowed, via Twitter, to “greatly strengthen and expand” the U.S. nuclear weapons arsenal. On Morning Joe the following day, host Mika Brzezinski said that Trump had told her on a phone call, “Let it be an arms race. We will outmatch them at every pass and outlast them all.” And in late March, the Wall Street Journal reported that Trump was becoming increasingly frustrated with Russia, throwing up his hands in exasperation when informed that Russia may have violated an arms treaty. Some in national security circles see Trump’s impulsiveness as a cause for concern but not for panic. “He can always overreact,” said Anthony Cordesman, senior strategic analyst at the Center for Strategic and International Studies and a veteran of many national security posts throughout the U.S. government. “[But] there are a lot of people [around the president] to prevent an overreaction with serious consequences.” Let’s say that Trump acted upon his impulse to tell a fighter pilot to shoot a jet that barrel-rolled an American plane. Such a response would still have to be carried out by the Pentagon, Cordesman said—a process with lots of room for senior officers to say, “Look, boss, this is a great idea but can we talk about the repercussions?” While Cold War presidents used the "red phone" (which was actually not a phone, but a special Telex terminal) to deter war with the Russians, the current president has an itchy Twitter finger. EMORY KRISTOF/NATIONAL GEOGRAPHIC/GETTY IMAGES And yet that **process is no longer as robust** as it once was. Many senior policymaking positions at the Pentagon and State Department remain **unfilled**. A small cabal in the White House, including Bannon, Jared Kushner and a few others, has asserted a role in foreign policy decisions outside the normal NSC process. It’s not yet clear how much influence is wielded by Trump’s widely respected national security adviser, Lieutenant General H.R. McMaster. When lines of authority and influence are so murky, it increases the risk that a minor incident could boil up into an unintended clash, said retired Marine Corps General John Allen, who has served in senior military and diplomatic posts. To complicate matters further, the relentless pace of information in the social media age has destroyed the one precious factor that helped former leaders safely navigate perilous situations: **time**. It’s hard to believe now, but during the 1962 Cuban missile crisis, for instance, President Kennedy and his advisers deliberated for a full 10 weeks before announcing a naval quarantine of the island. In 1969, a U.S. spy plane was shot down by North Korean jets over the Sea of Japan, killing all 31 Americans on board. It took 26 hours for the Pentagon and State Department to recommend courses of action to President Richard Nixon, according to a declassified secret assessment. (Nixon eventually decided not to respond.) Today, thanks to real-time video and data streaming, the men in the Kremlin and White House can know—or think they know—as much as the guy in the cockpit of a plane or on the bridge of a warship. The president no longer needs to rely on reports from military leaders that have been filtered through their expertise and deeper knowledge of the situation on the ground. Instead, he can **watch** a crisis unfold on a screen and **react** in **real time**. Once news of an incident hits the internet, the pressure to respond becomes even harder to withstand. “The ability to recover from early missteps is greatly reduced,” Marine Corps General Joseph Dunford, the chairman of the Joint Chiefs of Staff, has written. “The **speed of war has changed**, and the nature of these changes makes the global security environment even more unpredictable, dangerous, and unforgiving.” And so in the end, no matter how cool and unflappable the instincts of military men and women like Kevin Webster, what will smother the inevitable spark is steady, thoughtful leadership from within the White House and the Kremlin. A recognition that first reports may be wrong; a willingness to absorb new and perhaps unwelcome information; a thick skin to ward off insults and accusations; an acknowledgment of the limited value of threats and bluffs; and a willingness to recognize the core interests of the other side and a willingness to accept a face-saving solution. These qualities are not notably on display in either capital.

#### Any and all negotiations will fail – underestimation, aggression, and structural factors.

Beebe '19 (George Beebe; George Beebe is vice president and director of studies at the Center for the National Interest, a nonpartisan think tank in Washington. He is also the former head of Russia analysis at the CIA, and the author of The Russia Trap: How Our Shadow War with Russia Could Spiral into Nuclear Catastrophe; 10-7-2019; "We’re More at Risk of Nuclear War With Russia Than We Think"; https://www.politico.com/magazine/story/2019/10/07/were-more-at-risk-of-nuclear-war-with-russia-than-we-think-229436, POLITICO Magazine, accessed 12-1-2019; JPark)

Today, that old dread of disaster has all but disappeared, as have the systems that helped preclude it. But the actual threat of **nuclear catastrophe is much greater than we realize**. Diplomacy and a desire for global peace have given way to **complacency** and a **false sense of security** that nuclear escalation is outside the realm of possibility. That **leaves us** unprepared for—and highly **vulnerable** to—a nuclear attack from Russia. The most recent sign of American complacency was the death, a few weeks ago, of the Intermediate-Range Nuclear Forces Treaty—a pivotal 1987 agreement that introduced intrusive on-site inspection provisions, destroyed an entire class of dangerous weaponry, and convinced both Washington and Moscow that the other wanted strategic stability more than strategic advantage. The New START treaty, put in place during the Obama administration, appears headed for a similar fate in 2021. In fact, nearly **all** the key U.S.-Russian arms control and confidence-building provisions of the Cold War era are **dead** or on life support, with little effort underway to update or replace them. Meanwhile, U.S. officials from both parties are focused not on how we might avoid nuclear catastrophe but on showing how **tough** they can look against a **revanchist Russia** and its leader, Vladimir Putin. Summit meetings between White House and Kremlin leaders, once viewed as opportunities for peace, are now seen as dangerous temptations to indulge in Munich-style appeasement, the cardinal sin of statecraft. American policymakers worry more about “going wobbly,” as Margaret Thatcher once put it, than about a march of folly into inadvertent war. President Donald Trump’s suggestion that the United States and Russia might explore ways to manage their differences diplomatically has produced mostly head-scratching and condemnation. In my more than 25 years of government experience working on Russia matters, I’ve seen that three **misguided assumptions** underlie how the United States got to this point. The first is that American policymakers think that because neither side wants nuclear war, then such a war is very unlikely to occur. Russia would be foolish, we reason, to cross swords with the powerful U.S. military and risk its own self-destruction, and many Americans find it hard to imagine that modern cyber duels, proxy battles, information operations and economic warfare might somehow erupt into direct nuclear attacks. If the Cold War ended peacefully, the thinking goes, why should America worry that a new shadow war with a much less formidable Russia will end any differently? But wars do not always begin by design. Just as they did in 1914, a vicious circle of clashing geopolitical ambitions, distorted perceptions of each other’s intent, new and poorly understood technologies, and disappearing rules of the game could combine to produce a disaster that neither side wants nor expects. In fact, cyber technologies, artificial intelligence, advanced hypersonic weapons delivery systems and antisatellite weaponry are making the U.S.-Russian shadow war much more complex and dangerous than the old Cold War competition. They are blurring traditional lines between **espionage** and **warfare**, entangling nuclear and conventional weaponry, and erasing old distinctions between offensive and defensive operations. Whereas the development of nuclear weaponry in the Cold War produced the concept of **mutually assured destruction** and had a restraining effect, in the cyber arena, **playing offense is** increasingly seen as **the best defense**. And in a highly connected world in which financial networks, commercial operations, media platforms, and nuclear command and control systems are all linked in some way, escalation from the cyber world into the physical domain is a serious danger. Cyber technology is also magnifying fears of our adversaries’ strategic intentions while prompting questions about whether warning systems can detect incoming attacks and whether weapons will fire when buttons are pushed. This makes containing a crisis that might arise between U.S. and Russian forces over Ukraine, Iran or anything else much more difficult. It is not hard to imagine a crisis scenario in which Russia cyber operators gain access to a satellite system that controls both U.S. conventional and nuclear weapons systems, leaving the American side uncertain about whether the intrusion is meant to gather information about U.S. war preparations or to disable our ability to conduct nuclear strikes. This could cause the U.S. president to wonder whether he faces an urgent “**use it or lose it**” nuclear launch decision. It doesn’t help that the lines of communication between the United States and Russia necessary for managing such situations are all but severed. A related, second assumption American policymakers make is seeing the Russian threat as primarily a **deterrence** problem. The logic goes something like this: Wars often happen because the states that start them believe they can win, but the United States can disabuse a would-be aggressor of this belief through a show of force, thus deterring conflict. Indeed, Washington seems convinced that showing the Kremlin it will punish Russian transgressions—through toughened economic sanctions, an enhanced military posture in Europe and more aggressive cyber operations—is the best path to preserving peace. But, when dealing with states that believe they are under some form of assault, focusing on **deterrence** can be **counterproductive**. Rather than averting aggression by demonstrating the will to fight back, America might be unintentionally **increasing the odds of a war**. To a great degree, this is the situation the United States already faces. Years of enlargement of NATO and perceived U.S. involvement in Russia’s internal affairs have convinced the Kremlin that America poses an **existential threat**. In turn, Russia’s meddling in the 2016 U.S. presidential election, coupled with a string of aggressions against its neighbors, have convinced Washington that Moscow is going for the West’s jugular. The United States experienced this spiral phenomenon with Georgia in 2008. Convinced that Russia harbored aggressive designs on its southern neighbor, Washington policymakers accelerated U.S. military training in Georgia, openly advocated bringing Tbilisi into the NATO alliance and issued multiple warnings to Moscow against military action, believing this firm resolve would deter Russian aggression. In fact, it had the opposite effect. Russia grew increasingly alarmed by the prospect of Georgian membership in NATO, while Tbilisi felt emboldened to launch a military operation in the breakaway Georgian region of South Ossetia, which yielded an **immediate** and **massive** Russian **military response**. Lastly, the United States assumes that Russia’s anti-American hostility flows from the internal nature of its regime, and therefore is likely to diminish when a more enlightened leader with more liberal approaches **succeeds Putin**. Sooner or later, the unsatisfied longing for freedom will produce new leadership in Russia that will advance liberal reforms and seek cordial relations with Washington, just as Mikhail Gorbachev and Boris Yeltsin once did. Compromising with the Putin regime, American policymakers believe, is not only immoral, but also unnecessary and counterproductive. But the notion that Moscow hates us for what we are—a democracy—rather than the ways we influence important Russian interests is inconsistent with Russia’s business-like, if not **cordial**, **relations** with democracies that it does not see as threatening, including Israel, India and Japan. Moreover, Putin’s domestic critics include not only the country’s narrow slice of liberal reformers but also its wider expanse of hard-liners on the left and right who think he has been too soft on Washington. The reality is that Russia’s differences with Washington flow from a deep mix of **geopolitical, perceptual, historical and systemic factors** that will not go away once Putin eventually does. Managing and containing the combustive mixture of volatile factors in the U.S.-Russian relationship is a daunting, but far from impossible, challenge. Washington’s approach must dispassionately balance firmness with accommodation, military readiness with diplomatic outreach—all without skewing too far toward either concession or confrontation. It’s a difficult balance, but the United States is not even attempting it at the moment. It will require more robust U.S.-Russian communication, as well as new rules of the game to deal with new weapons systems, game-changing cyber technologies and the shifting geopolitical order. None of this will be possible, however, absent a recognition that real danger is looming—not a modern variation of World War II-style planned aggression, but a nascent **World War I-type escalatory spiral** that few recognize is developing. That danger could end catastrophically if nothing changes.

#### **Russia’s offensive realist – heightens tensions**

Gurganus ‘19 Julia - nonresident scholar with the Russia and Eurasia Program at the Carnegie Endowment for International Peace & Eugene Rumer - senior fellow and the director of Carnegie’s Russia and Eurasia Program, “Russia’s Global Ambitions in Perspective,” 2/20/19, https://carnegieendowment.org/2019/02/20/russia-s-global-ambitions-in-perspective-pub-78067

While usually associated with Putin, Russia’s contemporary activist foreign policy was, in fact, launched before he even became president. It was first launched by Yevgeny Primakov, who was appointed Russian foreign minister in 1996. He formulated what became known as the Primakov Doctrine. According to Primakov, Russia would no longer follow the lead of Western powers, especially the United States, but would instead position itself as an independent center of power on the world stage, contributing to the development of a multipolar world as an alternative to the U.S.-led unipolar order. Primakov’s successor as foreign minister, Sergey Lavrov, summed up his predecessor’s influence in October 2014, saying: The moment he took over the Russian Foreign Ministry heralded a dramatic turn of Russia’s foreign policy. Russia left the path our Western partners had tried to make it follow after the breakup of the Soviet Union and embarked on a track of its own.1 This vision has guided Russian foreign policy ever since. Many Western policymakers and observers were slow to take Primakov’s vision at face value, convinced that Russia was too weak to go it alone, let alone develop an alternative to the post-1989, U.S.-led international order. As the Russian economy improved and the Kremlin acquired **more resources** to implement the doctrine, its policy evolved from a relatively passive refusal to accept Western initiatives to a more active form of resistance; eventually it **morphed into an activist foreign policy with an ambitious geographic scope.** In addition to leveraging the significantly greater resources at its disposal, Russian foreign policy has reflected the Kremlin’s willingness to take advantage of a propitious external environment and chip away at the U.S.-led international order. **Success begets more success**, and since Putin’s return to the presidency in 2012, his record has been enhanced by what Russian officialdom sees as several important wins. The annexation of Crimea, the war in eastern Ukraine, the military deployment in Syria, the tense military standoff with the West in the Baltic and Black Seas, and the interference in U.S. and European domestic politics have all enhanced Russia’s image as a major power with significant power projection capabilities, as well as Putin’s reputation as a bold and skilled leader. **These victories have also demonstrated to the world Russia’s propensity for risk-taking and punching above its weight**, along with its improved capabilities for warfare and operations short of war in multiple domains—land, air, space, sea, cyber, and information operations. Moreover, the Kremlin’s record since 2012 suggests that it will not be deterred or constrained by economic difficulties. The Russian economy has performed poorly since then, with growth hampered by a failure to institute long-overdue structural reforms and excessive dependence on exporting hydrocarbons and other raw materials. But economic difficulties have not put a brake on Russian activism abroad. To the contrary, the Kremlin’s ability to withstand both domestic economic difficulties and Western sanctions without changing course is a sign of Moscow’s commitment to an activist foreign policy as a long-term choice of the country’s leadership. In addition to its determination and the considerable resources at its disposal, the Kremlin’s foreign policy record has benefited from opportunities presented by the West’s actions or inaction. For example, the annexation of Crimea and the war in eastern Ukraine took place against the backdrop of the North Atlantic Treaty Organization (NATO) making clear that it would not intervene and risk a war with Russia over Ukraine. Similarly, Russia’s military deployment to Syria took place after the United States and its allies had demonstrated that they had little appetite for intervening there. Elsewhere, long-term conflicts, such as those in Afghanistan, Iraq, and Libya, or the unfinished business of post-conflict reconstruction, such as in the Balkans, have presented Russia with opportunities to insert itself and create new facts on the ground. In the United States and Europe, growing political divisions, the proliferation of information providers, and popular frustration with governing elites in the wake of the 2008 global financial crisis have exposed targets for Russian interference. Russian agents did not cause these long-term conflicts or cleavages inside Western societies, but they have used them to advance their goals, which vary depending on the circumstances. In many instances, the Kremlin has relied on a diverse toolkit that creates the appearance of operating one step removed from the Russian government (through a range of actors including state-owned corporations such as Rosatom and Rosneft, private security companies such as the Wagner Group, organized crime syndicates, hackers, and information operation organizations such as the Internet Research Agency). Western perceptions of post-Soviet Russia have been heavily affected by the country’s economic and political implosion and foreign policy retreat during the 1990s. Against that backdrop, the ambition and dynamism of Russian foreign policy since Putin’s 2012 return to the presidency appears to be a relatively new phenomenon. It isn’t. Moscow’s post-2012 foreign policy fits comfortably in the long-standing historical and intellectual tradition of Soviet and even pre-Soviet Russian foreign policy. THE TROIKA OF RUSSIAN FOREIGN POLICY Contemporary Russian foreign policy displays the unmistakable presence of three centuries-old drivers of Moscow’s posture on the world stage. Chief among these drivers is Russia’s quest for strategic depth and secure buffers against external threats, which, considering the country’s geography and absence of natural protective barriers between it and neighboring powers, has guided its geographic expansion. Along with physical insecurity and expansion, the second key driver of Russian foreign policy has been its **ambition for recognition as a great power, which the Kremlin has long seen as necessary for legitimizing its geographic conquests and geopolitical ambitions.** The third driver, related to the first two, is Russia’s complicated relationship with the West, which combines rivalry with the need for cooperation. These recurrent themes are important. They highlight the degree to which Russian foreign policy in the Putin era is a continuation of many pursuits that are, by turns, decades- and centuries-old and were embraced by previous Russian governments regardless of their political persuasion. The historical record also performs an important legitimizing function for the citizens of the Russian state, which is less than three decades old, cementing the state’s claim to be the heir to a long, illustrious tradition dating back centuries. References to this tradition thus legitimize the Putin government’s ambitious overseas pursuits and present them as a matter of historical continuity and as an integral part of what Russia is. GEOGRAPHY AND STRATEGIC DEPTH It is hard to overestimate the role of geography as a driver behind Russia’s foreign policy. The Russian state and its security policy have been shaped by the absence of natural geographic barriers—oceans, rivers, or mountains.2 Geography has shaped Russian identity and its rulers’ understanding of security throughout the entire existence of the Russian state. Throughout the centuries, contemporary Russia, the Soviet Union, imperial Russia, and the principality of Muscovy have all faced the challenge of securing a vast stretch of territory from neighbors perceived to be hostile to the west, south, and east. To secure its territory, the Russian state acquired more territory, which, in turn, had to be secured from ever-present external threats of one kind or another. In the words of historian Stephen Kotkin, “Whatever the original causes behind early Russian expansionism—much of which was unplanned—many in the country’s political class came to believe over time that only further expansion could secure the earlier acquisitions. Russian security has thus traditionally been partly predicated on moving outward, in the name of preempting external attack.”3 The loss of territory, as was the case after the two great dislocations Russia experienced in the twentieth century—first after the 1917 revolution and the 1918 Brest-Litovsk Treaty, and later after the 1991 breakup of the Soviet Union—resulted in a profound sense of Russian insecurity and a renewed quest to regain strategic depth. Regaining that depth was the key task of the Soviet government as soon as the country began to recover from the trauma of the revolution and the civil war, and again after Moscow regained a measure of strength after the collapse of the 1990s. GREAT POWER AMBITIONS The quest for recognition as a great power has been both the result of Russia’s geographic expansion and its driver. Geographic expanse was and is, in the eyes of Russian leaders, central to their claim to recognition as a great power. Such **recognition**, in turn, **has been needed to lend a veneer of legitimacy to territorial conquests.** Perhaps precisely because they have had to struggle repeatedly for such recognition, Russia’s rulers have been particularly sensitive to any suggestion that Russia does not belong in the ranks of major powers. In the mid-nineteenth century, Russian historian and writer Nikolay Danilevsky complained about Russia’s unfair treatment by Europe, which had turned a blind eye to Prussian and Austrian aggression against Denmark following the annexation of two Danish provinces yet criticized Russia’s efforts to protect the rights of its coreligionists in “barbaric” Turkey.4 Danilevsky’s complaint was, in effect, a precursor of Putin’s lament about the West’s double standards in dealing with Russia’s annexation of Crimea and the severing of Kosovo from Serbia.5 For the leaders of the independent Russia that emerged from the Soviet collapse, the Soviet and Russian imperial legacy appeared to serve as both an inspiration and a justification for their claim to great power status. They found ample philosophical rationales for their claim. In the words of noted Russian political philosopher Nikolai Berdyaev, empire and great power status constitute the essence of Russian identity even when the country is experiencing challenges and setbacks, in large part because of its spiritual and material wealth.6 As early as 1993, the official Foreign Policy Concept of the Russian Federation included, among other foreign policy priorities, the objectives of “furthering integration of the Commonwealth of Independent States” and ensuring Russia’s active role on the world stage as a “great power.”7 With Primakov’s rise to the helm of the Russian foreign policy establishment in 1996, great power ambitions again became the Kremlin’s driving force. In his first news conference as foreign minister, Primakov said, “Despite the present difficulties, Russia was and is a great power and its foreign policy should correspond with that.”8 Putin embraced this vision when he became president in 2000, and it has served as a cornerstone of his leadership ever since. Of particular importance to the Putin government has been the military record of the Russian state and its numerous conquests. Putin issued a presidential order in 2012 reconstituting the Russian Military-Historical Society.9 Long-serving Russian Culture Minister Vladimir Medinsky has been an active patron of the society as well. The expansion of the Russian state by force of arms—including numerous victories over Poland, Sweden, the Ottoman Empire, and Central Asia—make up an integral part of the foundational narrative of the contemporary Russian state. This narrative is reinforced by a sprawling state propaganda apparatus, official government activities, and educational curricula. Several historical events are featured prominently in this narrative. Russia’s defeat of Napoleon has been treated as a uniquely important event because of its significance to the European order in the nineteenth century, as well as for being an accomplishment that cemented Russia’s status as a great power. The victory over Nazi Germany in World War II is treated as the crowning achievement of the Soviet state, which saved not just the Soviet Union and Europe but the whole world from fascism. This triumph presently makes up the most important part of Russia’s national narrative. As a whole, this legacy provides both the justification and the motivation for Russia to pursue its ambitions not just around its vast periphery but well beyond its shores. UNEASY RELATIONS WITH THE WEST Moscow’s uneasy relationship with the West for centuries has been one of the most prominent features of its foreign policy. On the one hand—from Peter the Great’s founding of the new Russian capital on the Baltic shores to Catherine the Great’s engagement with leading European Enlightenment thinkers of the day, Czar Alexander I’s securing Russia’s place in the circle of major European powers to Joseph Stalin’s consolidation of the Soviet Union’s hold on Eastern Europe—Russia long has been an integral part of Europe and its political and security fabric. On the other hand, throughout Russian history since the time of Peter the Great, Russian elites, political thinkers, and cultural figures have questioned Russia’s European choice and relationship with Europe. In a more recent and very telling sign of that ambivalence, Foreign Minister Lavrov wrote in 2016 that, over the centuries, Russia has seen itself as part of Europe and the West, as better than the West, as different and unique from the West, and as representing a crucial link between the East and the West.10 The biggest obstacle that has kept Russia from having a closer and more stable relationship with Europe, according to Lavrov, has been Europe’s inability or unwillingness to simply let Russia be Russia, and its insistence on having Moscow conform to European norms—something that no Russian leader or the people of Russia would ever accept. Moscow’s claim to great power status has derived from its victories in the West, against Napoleon and Hitler. But Russia’s biggest setbacks too have been delivered by the West—in the Crimean War and in the Cold War—and these setbacks remain the biggest drivers of Moscow’s security and defense policy.11 As was the case during the Cold War, Russian policy toward the West has long had an important ideological dimension. During the Soviet era, the ideological competition was between Soviet communism and democratic capitalism. After a relatively brief period when Russia attempted to join the West, Moscow has embraced an overtly anti-Western ideology. Communism has been replaced by a mix of nationalist, authoritarian, and state-capitalist ideas as an alternative to the West’s notion of liberal democratic capitalism. The concept of Russia as a besieged fortress facing hostile Western designs and influences is a key tool the regime uses to mobilize the political support of Russian elites and ordinary citizens alike. OLD HABITS DON’T DIE In addition to a legacy of complicated geopolitics, great power ambitions, and a difficult relationship with the West, the new Russian state has inherited from its Soviet predecessor a time-tested foreign policy toolkit. While some elements of this toolkit fell into disuse early in the post-Soviet period when Russia was struggling with a series of domestic crises, these tools have been taken up again by the country’s foreign policy and national security establishment as Moscow has returned to the world stage as an increasingly assertive actor. George Kennan wrote in “The Sources of Soviet Conduct”: . . . the Kremlin is under no ideological compulsion to accomplish its purposes in a hurry . . . and it can afford to be patient. These precepts are fortified by the lessons of Russian history: of centuries of obscure battles between nomadic forces over the stretches of a vast unfortified plain. Here caution, circumspection, flexibility and deception are the valuable qualities . . . Its [the Soviet Union’s] political action is a fluid stream which moves constantly, wherever it is permitted to move, toward a given goal. . . . The main thing is that there should always be pressure, unceasing constant pressure, toward the desired goal. There is no trace of any feeling in Soviet psychology that that goal must be reached at any given time.12 Russian foreign policy in the Putin era fits Kennan’s description from more than half a century ago. The Kremlin’s approach has involved the relatively low-cost, limited use of military force in combination with other nonmilitary instruments of national power. **Information operations, propaganda and disinformation, cyber operations, trade embargoes, and a vast array of other tools have been integrated into what has become commonly known as hybrid warfare.** The current policy discussions in Western capitals often create the impression that Moscow has come up with a fundamentally new toolkit. In reality, an extensive reliance on such tools has long been a feature of Russian domestic politics and foreign policy.

#### **Russian expansionism causes nuclear war.**

O’Hanlon ‘19 (Michael – PhD from Princeton in Public and International Affairs and currently a senior fellow at the Brookings Institute, “The Senkaku Paradox: Risking Great Power War Over Small Stakes,” p. 34-37, 4/30/19, Dartmouth Libraries)

As such, the United States and NATO partners would undoubtedly feel **intense pressure**, at the first sign of visible preparations for attack by Russia, to disable Russia’s surveillance and command and control capabilities and to preempt any missiles or aircraft or submarines before they could get within range of the target. That could, of course, entail direct attacks against airfields, ports, and other facilities on Russian soil, **not just those that happened to be directly involved in the Baltic state occupation.** In other words, **NATO might strike first**, rather than leave itself vulnerable to ambush. In light of the alliance’s consensus decision-making procedures, that possibility seems unlikely—but it must also be remembered that this scenario is premised on a situation in which Russian forces occupy at least a small swath of NATO territory, so certain thresholds would already have been crossed by enemy action. Regardless, the stage would be set for an **extremely dangerous dynamic.** If any initial conventional engagements went against its interests, Russia might also consider limited **nuclear employment options.** Indeed, some of its strategists currently entertain an “escalate to de-escalate” concept that would attempt to intimidate NATO allies into reversing their plans. Russia might detonate a nuclear weapon high in the atmosphere to create a powerful nuclear-induced electromagnetic pulse (EMP) that could prove lethal to air defense radars, military communications systems, and much civilian infrastructure over a region many hundreds of kilometers in radius. A Russian EMP burst using a high-altitude nuclear weapon would be an extremely provocative and risky move, to be sure.57 But some Russian leaders could argue that it was not strictly speaking a nuclear attack, since no humans would be killed by the direct explosive effects of such a weapon—and thus might delude themselves into thinking it was a relatively low-risk option. In fact, the risks could be very high. Some types of EMP attacks (or even cyberattacks) by Russia could disable large chunks of the U.S. or European electricity grids for many months.58 A severe attack of this type might even lead to a **U.S. nuclear response**, in light of the new nuclear doctrine of the Trump administration.59 Beyond the EMP option, **Russia could use nuclear weapons** directly against ships that carried military equipment, missile defense radars, or other capabilities. Indeed, it threatened to target nuclear missiles at any Danish ships joining the U.S.-led missile defense effort in 2015. Again, the provocation would be enormous—but the direct human stakes might be fairly limited, since only dozens of sailors, or at most a couple hundred, might be on a given naval vessel.60 Moscow might, perhaps delusionally, think the risks were acceptable. Of course, there would be enormous significance and risk to crossing the nuclear threshold in any way. But if weapons were used against isolated military targets (as both sides contemplated in various ways during the Cold War), Moscow again might convince itself, rightly or wrongly, that escalation risks could be tolerated and managed. That might be particularly true for attacks limited to the kinds of target sets that posed disproportionate vulnerability and dependence for NATO. These could include cargo ships at sea, rail marshaling yards where train tracks change gauge (necessitating unloading and reloading) at the Poland-Lithuania border, or particularly weak bridges without nearby alternative routes.61 If Russia could limit NATO fatalities to hundreds of sailors and not itself present any target sets that were characterized by a similar combination of relatively high military importance and relatively great separation from vulnerable civilian populations, NATO might not have a good recourse. Moscow might hope as much, at least—and so elect to roll the dice. Such a decision would be reckless and foolish, but perhaps not beyond the pale of how human beings have behaved historically in wars they felt they were otherwise likely to lose. The Outcome of the Scenario: Toward a Net Assessment With all these factors in motion, how would this kind of conflict likely play out? A NATO military response to the postulated Russian aggression seems very likely. Perhaps evidence of its preparations to move forces into position to defend its ally and liberate its territory from Russian occupation would be enough to catalyze a diplomatic resolution of the crisis. If not, however, **the stage would be set for the possible eruption of World War III.** Russia might try to impede a deployment through cyber-, space, and other such attacks, which would likely only slow the deployment, not stop it. Thus escalation could easily result.62 Once shots were fired, NATO would be unlikely to back down. Not every nation would necessarily send significant military forces, to be sure, but some key countries would probably remain resolute. Much more likely than acceptance of defeat would be a redoubled commitment to complete the mission—and, if Russian nuclear weapons had been used by that point, even in a limited attack, to respond in kind. Put differently, if Russia did choose to try to physically prevent the deployment of large forces into eastern NATO territory in likely preparation for a counterattack, there would be two possibilities. If that attempt failed, a showdown in the east on land would still loom. If it succeeded, NATO would then face a momentous decision: accept defeat, or reinforce dramatically with conventional forces (perhaps after a period of repairing damage and building more equipment and weaponry, depending on how many losses it had already suffered), or escalate to the nuclear level. In situations of this sort, the parties to the conflict might find themselves living scenarios like those that nuclear theorists pondered throughout the Cold War. They could be engaged in behavior that Thomas Schelling might have described as “the threat that leaves something to chance” or that Herman Kahn might have placed on the lower rungs of a nuclear escalation ladder that reached potentially to all-out war.63 American planners saw these kinds of escalatory ladders and options as ideas that might serve U.S. interests; thus it would not be too surprising to see Russian planners invoke them now.64 And whatever the dangers during the deployment phase, they would snowball during any actual maneuver warfare in eastern Europe. For example, it is entirely imaginable that an operation designed to liberate a Baltic state from a Russian occupation would trespass onto Russian territory to cut off supply lines and possible reinforcements.65 Moscow may or may not simply take NATO’s word that it has no designs on the country’s government. In other words, it might even fear that NATO’s counteroffensive could aspire to regime change in Russia. It may or may not have a clear picture of the kind of attack it is experiencing, as command and control systems would be compromised in the course of conventional battle, quite possibly including those systems commonly used for nuclear weapons.66 I conclude that, for a hypothetical conflict occurring sometime in the near future, enough uncertainties exist to make the outcome of the war somewhat unpredictable. One cannot simply assert that NATO’s numerous advantages guarantee a victory. The Baltics’ exposed geographic location, NATO’s limited means of deploying reinforcements to the region reliably, Russia’s options in domains ranging from cyberspace to outer space, and the possible **use of nuclear weapons** even in just a limited, tactical role make it uncertain that NATO could confidently expect victory despite collectively outspending Russia by more than ten to one in the military arena. For example, it is not clear that the United States could safely send most of its major ocean transport vessels to ports of debarkation and unload supplies there in the face of a conventional military threat. And if it lost a substantial fraction of its top-line supplies and ships to Russian attacks in its first attempt, the United States might need time to prepare for a second effort, which might then have to begin further west in Europe where disembarking and marshaling of forces could be carried out more safely, before those forces gradually made their way eastward. NATO would probably win such a conventional war, but it could take many months or even years. And even then, the deep uncertainties associated with possible nuclear escalation make it unclear whether victory could even be meaningful. Few would say that a few thousand square kilometers of Baltic territory logically warrant nuclear risks. But human beings are not always logical. **Nuclear brinkmanship over a limited-war scenario in eastern Europe would not be unthinkable**, based on what we know of history and human nature. And if nuclear weapons were ever used, even in small numbers at first, **all bets are off** as to where and how the conflict would end.

#### New simulations predict 91.5 million deaths – in three hours.

Ioanes and Mosher 1/23 (Ellen Ioanes is the Military & Defense Editorial Fellow at INSIDER. She is a graduate of Columbia Journalism School and Davidson College; ave Mosher is a journalist with more than a decade of experience reporting and writing stories about space, science, and technology. Mosher covers human and robotic space exploration (e.g. rockets, spaceships, astronauts, probes), space science (e.g. planets, moons, geology, astrophysics, astrobiology, astronautics), commercial and government spaceflight efforts (e.g. by NASA, SpaceX, Blue Origin, Virgin Galactic), and the figureheads of such activities (e.g. Elon Musk, Jeff Bezos, Richard Branson). In addition, he's versed in all things nuclear (e.g. weapons, energy, fallout, radioactivity), debunking common myths and misconceptions (e.g. physics, health, medicine), and chronicling absurdly ambitious scientific and engineering efforts (e.g. LIGO, JWST, Starshot, settling Mars). Mosher joined Business Insider in April 2015 as a deputy editor of science coverage to help the company launch Tech Insider. Prior to that, he directed Popular Science's website, was a Wired contributor, and worked for or with Scientific American, Popular Mechanics, Discover, Space.com, National Geographic News, Discovery.com, Nature, Science, and other media outlets. 1/23/20; “A terrifying new animation shows how 1 'tactical' nuclear weapon could trigger a US-Russia war that kills 34 million people in 5 hours”; <https://www.businessinsider.com/tactical-nuclear-weapons-escalation-us-russia-war-animated-strike-map-2019-9>; accessed 2/1/20) // Aalok

A new simulation called "Plan A," by researchers at Princeton's Program on Science and Global Security, shows how the use of one so-called tactical or low-yield nuclear weapon could lead to a terrifying worldwide conflict. In the roughly four-minute video, a Russian "nuclear warning shot" at a US-NATO coalition leads to a global nuclear war that leads to 91.5 million deaths and injuries. Under President Trump, the US is ramping up production of tactical nuclear weapons, ostensibly to target troops and munitions supplies. While advocates say these weapons would keep wars from escalating, the simulation finds the opposite outcome. The dissolution of the INF treaty in August raised the stakes for nuclear war, as both the US and Russia were free to develop weapons previously banned under the treaty. On Jan. 23, 2020, the Bulletin of the Atomic Scientists moved its Doomsday clock to 100 seconds to midnight, the closest it has ever been, in a dire warning about the rising dangers of a nuclear catastrophe as Cold War-era treaties end. Visit Business Insider's home page for more stories. More than 91 million people in Russia, the US, and NATO-allied countries might be killed or injured within three hours following a single "nuclear warning shot," according to a terrifying new simulation. The simulation is called "Plan A," and it's an audio-visual piece that was first posted to to YouTube on September 6. (You can watch the full video at the end of this story.) Researchers at the Science and Global Security lab at Princeton University created the animation, which shows how a battle between Russia and NATO allies that uses so-called low-yield or "tactical" nuclear weapons — which can pack a blast equivalent to those the US used to destroy Hiroshima or Nagasaki in World War II — might feasibly and quickly snowball into a global nuclear war. "This project is motivated by the need to highlight the potentially catastrophic consequences of current US and Russian nuclear war plans. The risk of nuclear war has increased dramatically in the past two years," the project states on its website. The video has an ominous, droning soundtrack and a digital map design straight out of the 1983 movie "WarGames." The Cold War-era movie, in which a young Matthew Broderick accidentally triggers a nuclear war, "was exactly the reference point," simulation designer Alex Wellerstein told Insider. But while simulations can be frightening, they can also be incredibly helpful: governments can use them to develop contingency plans to respond to nuclear disasters and attacks in the least escalatory way, and they can also help ordinary citizens learn how to survive a nuclear attack. "Plan A" comes as tensions between Russia and NATO allies ratchet up. Both Russia and the US are testing weapons previously banned under the Intermediate-range Nuclear Forces treaty, often called INF. Russian bombers have also cruised into US airspace repeatedly, and the US recently sent its B-2 Spirit stealth bomber on a mission in the Arctic — right in Russia's backyard. This is how a NATO-Russian confrontation could quickly escalate into nuclear war. The simulation starts with a conventional war between NATO and Russian troops. Tactical nuclear weapons Russia At this point in the simulation, Russia fires a nuclear "warning shot," prompting a tactical US response. Science and Global Security, Princeton University's Woodrow Wilson School of Public and International Policy Conventional warfare — namely all conflict short of nuclear, chemical or biological weapons — escalates into nuclear warfare when Russia launches a nuclear "warning shot" from a base near Kaliningrad to stop NATO advancement. Russia doesn't have a "no first use" policy — it dropped it in 1993. NATO forces respond by launching a tactical nuclear strike. The US already has tactical nuclear weapons, such as B61-12 gravity bombs, and more planned under US President Donald Trump's 2018 Nuclear Posture Review. Included in the plan is a low-yield warhead intended for use in a submarine-launched ballistic missile, as well as a sea-launched cruise missile. These kinds of weapons are designed for targets on the battlefield, like troops or munitions supplies, as opposed to long- or intermediate-range nuclear missiles that are fired from one country to another, for example, targeting an enemy's bombers and ICBM silos — or even cities. Tactical nuclear strikes up the ante. Tactical Strike In the simulation, both Russia and NATO up the ante with tactical strikes. Princeton Science and Global Security, Woodrow Wilson School of Public and International Affairs If the nuclear threshold is crossed, the simulation finds, then both the US and Russia would respond with tactical nuclear weapons. Russia would send 300 warheads to NATO targets, including advancing troops, in both aircraft and short-range missiles — overwhelming force that would obliterate tanks, fortified positions and soldiers unlike anything ever seen in battle before. Supporting forces and civilians not immediately killed would be susceptible to painful and even fatal radiation exposure. NATO would respond by sending about 180 tactical nuclear weapons to Russia via aircraft in equally devastating retaliation. The simulation was constructed using independent analysis of nuclear force postures in NATO countries and Russia, including the availability of nuclear weapons, their yields, and possible targets, according to the Science and Global Security lab. The tactical phase of the simulation shows about 2.6 million casualties over three hours. Instead of the tactical weapons de-escalating the conflict, as proponents claim they would, the simulation shows conflict spiraling out of control after the use of tactical weapons. Nuclear counterstrike The simulation shows that Russia and NATO allies would deploy nuclear weapons against each others' 30 most populous cities, killing 3.4 million over the span of 45 minutes. Princeton Science and Global Security, Woodrow Wilson School of International Affairs Russia's tactical weapons would destroy much of Europe, the simulation posits. In response, NATO would launch submarine- and US-based strategic nuclear weapons toward Russia's nuclear arsenals — 600 warheads in total. Strategic nuclear weapons have a longer range, so Russia, knowing that NATO nukes are headed for its weapons cache, would throw all its weight behind missiles launched from silos, mobile launchers, and submarines. The casualties during this phase would be 3.4 million in 45 minutes. This leads to 85.3 million additional casualties in the final phase of the nuclear war simulation. 91 million dead By the final stage of the simulation, there are 91.5 million casualties — all in the span of three hours. Princeton University Science and Global Security, Woodrow Wilson School of Public and International Affairs In the wake of previous attacks, both Russia and NATO would launch warheads toward each other's 30 most populous cities in the final stage of of the scenario, using five to 10 warheads for each city depending on its size. This phase would cause 85.3 million casualties — both deaths and injuries. But the total casualty count from the entire battle (of less than 5 hours) would be 34.1 million deaths and 57.4 million injuries, or a combined 91.3 million casualties overall. But that's just the immediate conflict: The entire world would be affected by nuclear disaster in the months, years, and decades to come. The radioactive fallout from the nuclear disaster would cause additional deaths and injuries. Studies also suggest that, even with a limited nuclear engagement, Earth's atmosphere would cool dramatically, driving famine, refugee crises, additional conflicts, and more deaths.

#### Aff outweighs – US-Russia nuclear war is the most probable extinction scenario.

Cotton-Barratt '17 (Owen Cotton-Barratt, PhD in Pure Mathematics, Oxford, Lecturer in Mathematics at Oxford, Research Associate at the Future of Humanity Institute, Sebastian Farquhar, DPhil student in Computer Science at the University of Oxford supervised by Yarin Gal as part of the CDT for Cyber Security, John Halstead, a policy and charity researcher with expertise across a broad range of fields including climate change, geoengineering, global catastrophic risk, road safety, and immigration, part of the research team at Founders Pledge, an NGO providing philanthropic advice to founders of tech companies, Stefan Schubert, Ph.D. in philosophy from Lund Uniersity, researcher at the the Social Behaviour and Ethics Lab, University of Oxford, working in the intersection of moral psychology and philosophy, Haydn Belfield, Associate Fellow at the Leverhulme Centre for the Future of Intelligence, has a background in policy and politics, including as a Senior Parliamentary Researcher to a British Shadow Cabinet Minister, as a Policy Associate to the University of Oxford’s Global Priorities Project, and a degree in Philosophy, Politics and Economics from Oriel College, University of Oxford. Andrew Snyder-Beattie, Director of Research at the Future of Humanity Institute, University of Oxford, where he manages a number of research, outreach, and fundraising activities, fellow in the Emerging Leaders in Biosecurity Initiative from the Johns Hopkins Center for Health Security; 2-21-2017; "Existential Risk"; https://www.fhi.ox.ac.uk/xrisk-diplomacy/, Future of Humanity Institute, accessed 12-1-2019; JPark)

The bombings of Hiroshima and Nagasaki demonstrated the unprecedented destructive power of nuclear weapons. However, even in an all-out **nuclear war** between the United States and Russia, despite horrific casualties, neither country’s population is likely to be completely destroyed by the direct effects of the blast, fire, and radiation.8 **The aftermath** could be much worse: the burning of flammable materials **could send massive amounts of smoke** into the atmosphere, which would **absorb sunlight** and cause sustained global cooling, severe ozone loss, and agricultural disruption – a nuclear winter. According to one model 9 , an **all-out exchange** of 4,000 weapons10 could lead to a drop in global temperatures of around 8°C, making it impossible to grow food for 4 to 5 years. This could leave some survivors in parts of Australia and New Zealand, but they would be in a very precarious situation and the threat of **extinction** from other sources **would be great**. An exchange on this scale is **only possible between** the **US and Russia** who have more than **90%** of the world’s nuclear weapons, with stockpiles of around 4,500 warheads each, although many are not operationally deployed.11 Some models suggest that even a **small regional nuclear** **war** involving 100 nuclear weapons would produce a nuclear winter serious enough to put two billion people at risk of starvation,12 though this estimate might be pessimistic.13 Wars on this scale are unlikely to lead to outright human extinction, but this does suggest that conflicts which are around an order of magnitude larger may be likely to **threaten civilisation**. It should be emphasised that there is very large uncertainty about the effects of a large nuclear war on global climate. This remains an area where increased academic research work, including more detailed climate modelling and a better understanding of how survivors might be able to cope and adapt, would have high returns. It is very difficult to precisely estimate the probability of existential risk from nuclear war over the next century, and existing attempts leave very large confidence intervals. According to many experts, the most likely nuclear war at present is between India and Pakistan.14 However, given the relatively modest size of their arsenals, the risk of human extinction is plausibly greater from a conflict between the United States and Russia. **Tensions** between these countries **have increased** in recent years and it seems unreasonable to rule out the possibility of them rising further in the future.

### 1AC---Cyberattacks

#### State-sponsored cyberattacks are on the rise.

Testoni '18 (Mark Testoni; Mark Testoni is the CEO and president of SAP National Security Services; 3-6-2018; "License to hack: State-sponsored hackers are upping the ante"; https://thehill.com/opinion/cybersecurity/376807-license-to-hack-state-sponsored-hackers-are-upping-the-ante, TheHill, accessed 12-1-2019; JPark)

At this year’s World Economic Forum in Davos, the threat of large-scale, **state-sponsored cyberattacks** was top of mind among the government and business leaders in attendance. Many world leaders now fear cyberattacks more than disease, terrorism or food shortages. Warren Buffett famously called cyber threats mankind’s number one problem, even over nuclear weapons. The U.S. military has already formally recognized cyberspace as a new **potential battlefield** alongside air, land, sea, and space. A quick walk through the global digital landscape confirms the magnitude of the problem. In December 2015, Ukraine suffered what may be the first known successful cyberattack against a power grid, bringing darkness to more than 230,000 residents in the region for an hour. While investigators could not confirm it was a state-sponsored attack, it exhibited all of its fingerprints: well-planned, sophisticated, with the markings of a **dry** **run** for a more prominent and **destabilizing assault** in the future. State-sponsored attacks are highly complex, often well-funded, executed through intermediaries and capable of causing widespread disruption. **China, Russia, Iran, and North Korea** are believed to be key actors in a threat that are estimated to hit $8 trillion in economic impact by 2022. The counter to these threats, referred to as the Third Offset Strategy, involves the combined power of humans and machines working together. Human intelligence assisted by artificial intelligence to outpace and out-think our enemy is fast becoming the new conventional battlefield – and it’s a physical and virtual one. We all have to be 'in it to win it' The absence of **general cyber awareness**, sometimes called cyber hygiene, is often identified as the primary source of attacks, leaks, or security incidents. Corporations and governments are starting create a battle rhythm around cyber — often driving from the board level down greater organizational awareness, to add another layer of defense. Spearfishing remains the most oft-cited entry point. Securing the rapidly expanding set of IoT entities from attack is becoming more critical. Employee behavior and vigilance is at the forefront. Reducing the cyber risk aperture is every bit as important as securing financial assets for companies and agencies. We must complement employee knowledge with automated capabilities like artificial intelligence to assist in identifying potential attacks. In tandem, the tools help employees and enterprises recognize threats on their own and lead to real behavioral changes in the workplace. Government initiatives like the Stop.Think.Connect campaign are working to educate different segments of the American public on cyber threats and the shared responsibility of protecting our critical networks. Sophisticated state-sponsored cyberattacks raise the stakes. The often interdependent relationship created by the internet requires a level collaboration on this battlefield we rarely needed in analog days. This requires strengthening public/private partnerships to ensure the protection of both the nation and its citizens from large-scale attacks. Although we’ve seen some progress with sharing information and analysis, we have to create a much more trusted relationship between players. Our biggest cyber threats, problems and concerns can only be managed by collaboration rather than working in silos. We need **national policy direction** (and debate) to improve the combined forces approach demanded by the threats.

#### Nuclear weapons are sitting ducks in cyberattacks – causes unmanageable escalation.

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What, then, might this cyber-enabled conflict, or warfare involving cyber operations, look like? And how might these pressures involve thinking about nuclear weapons? The first thing to note is that even if nuclear systems are not targeted directly or are successfully **guarded against malicious hackers**, it seems very likely that the use—or even the threat of use—of cyber capabilities against an opponent during a crisis will raise tensions, concerns, and perceived vulnerabilities, and that this will make nuclear crisis resolution more complicated and perhaps more dangerous." The second thing to note is that the use of cyber capabilities is likely to obfuscate and complicate the escalation ladder, and possibly lead to an inadvertent **deepening** of a **crisis**, perhaps even up to the nuclear level. It is likely to do this in different ways from those theorized in the past, and probably at a much greater speed. It could also, for example, include attacks in both civilian and military domains. Taken together, new cyber dynamics—both operations and context might even necessitate a rethinking of these established nuclear concepts altogether. Perhaps the most important thing to note about cyber operations in future crises and warfare is that they are likely to be **offense-dominant**. That is, in cyberspace the advantage will be held by the attackers rather than the defenders. Although this forecast is challenged by some, and is contingent on several variables—particularly the target and intention of the attack—it does have rather significant implications for the broader security dilemma, and especially for strategic stability.51 Along with creating pressures for arms racing, this also makes cyber capabilities more likely to be employed **early** in a crisis, particularly given the policy of active defense mentioned above.52 The result could potentially be greater insecurity for all, and possibly unintended, and in the worst-case scenario perhaps even **unmanageable escalation**. By way of an example, an Israeli war game conducted in 2013 demonstrated how the use and threat of cyberattacks might very quickly escalate a crisis, in this case bringing the United States and Russia to the brink of conflict in a possible Middle East war.53 Such conflicts might begin and play out in a number of different ways, but all will likely create new pressures for crisis management. First, during a crisis hackers could potentially disrupt or **destroy** communications channels, making it difficult to manage forces, including nuclear forces, and reducing commanders' confidence in their weapons systems and the ability of officials to communicate. Even a relatively small-scale attack could create considerable doubt about the security and reliability of communications, and particularly about the veracity of the information flowing from their computers.54 Moreover, despite often-held beliefs to the contrary, many military communications systems—including even some used for nuclear **command and control**—utilize commercial infrastructure or are based on networks that could be **vulnerable to an attack** or disruption.55 It must therefore be assumed that the linkages required for nuclear second-strike capabilities could also **be unreliable**, and possibly vulnerable to an opponents cyber operations.56 Aggressors might also employ distributed denial-of-service attacks to prevent communication, of-service attacks to prevent communication, hamper battle management systems, magnify confusion, and make it more difficult to identify what is happening and perhaps to conduct a coordinated response. Such attacks might be **particularly acute** for nuclear dyads that are in close **geographical proximity**—and therefore face limited decision-making time—such as India and Pakistan." Second, the use of cyberattack capabilities might inadvertently escalate a crisis—very much building on the model of "inadvertent nuclear escalation" developed by Barry Posen back in the early 1990s.58 This might be due either to deliberate interference from a third-party actor—such as a terrorist group—or from an **unauthorized insider**, or by another state seeking to deepen the crisis through false flag operations (that is, operations conducted to look like they were carried out by someone else). Alternatively, it might involve accidentally targeting the wrong systems. This risk is amplified considerably in the cyber context because it is increasingly **difficult to know** which computer systems support which weapons and operations. For example, as Lawrence Cavaiola and his colleagues explain, "an attack [by the United States] on a Chinese system that is used to increase the readiness of tactical forces might also inadvertently degrade the readiness of Chinese strategic nuclear forces, with grave risks of misinterpretation and escalation, up to and including launch on warning."59 Thus, a cyberattack on computer systems thought to control conventional weapons might be mistaken (and interpreted) as a direct attack on an adversary's ability to use its nuclear forces. Moreover, even if enemy cyberattacks are detected and mitigated, this could still lead to a "spiral of mistrust" and worst-case scenario thinking.' Third, cyberattacks might reduce the ability to signal, causing flawed images of **intentions** and **capabilities**, or be used to "spoof early warning systems"—again, a particular concern given the possibility of false flag cyber interference by third parties. It is perfectly possible that the ability to clearly signal intentions could be one of the biggest challenges created by cyber operations for nuclear crisis management. The concern here is twofold. First, the cyber context will make communicating with an adversary (and your own forces) much more complicated. Second, it is far from clear that cyberattacks themselves offer a very useful way of signaling, and may in fact be worse than traditional methods. As Erik Gartzke and Jon Lindsay explain, this is because cyber operations "are complex, esoteric, and hard for commanders and policymakers to understand."6' Previous methods of signaling—such as seeking to indicate intentions or red lines to an adversary through limited conventional action, already a complicated and delicate endeavor—will probably be even more difficult to implement when cyberattacks are also involved.62 Moreover, given the difficulties of attribution—particularly when time is short, decision makers are under pressure, and third-party cyber activities abound—it may not be straightforward to ascertain when a conflict has actually stopped.63 In this way, cyber operations are likely to further complicate and "muddy" signaling between adversaries during a crisis or conflict, either deliberately or inadvertently." This would also, therefore, make the functioning of leadership far more complicated in any future nuclear crisis too. Fourth, the use of cyberattacks might reduce the search for viable alternatives, thereby compressing—or at least muddying —**the escalation ladder**, particularly the steps between conventional and nuclear use. Once hostilities begin, leaders may not feel confident that the information they are receiving is genuine; the same might also be true for commanders in the field. Each decision would be underpinned by an uneasiness about the veracity of the information and data being used, possibly leading to different types of calculations and actions.65 In addition to this, leaders would fear that cyber operations would be used early in a crisis to disable or retard their most important weapons systems and to prevent them from being used against an adversary. Unfortunately, this might create a spiral effect, and more pressure to "use them or lose them," when it comes to a state's most important military capabilities.66 In a worst-case scenario, these concerns might increase perceived time pressures to act or respond, and the option to act preemptively. Stephen Cimbala has even gone as far as to warn that a nuclear-armed state bombarded with cyberattacks—particularly on its command, control, communications, and early warning networks—might feel so vulnerable that it would **opt for preemption**, in the worst case with nuclear weapons.° This exacerbates the feeling that cyber operations could undermine the ability to threaten retaliation, and therefore to strike second, because cyber capabilities appear to augment conventional first-strike possibilities against key enemy systems and forces, including their nuclear weapons.68 Taken together, these dynamics raise the likelihood of unintended and potentially **uncontrollable escalation** and make the management of such crises more complicated and dangerous.69

#### Russia’s a unique catalyst for cyberattack escalation.

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In July 2018, the Kremlin released the official transcript of a meeting between President Vladimir Putin and the nation’s special-services employees, when he thanked them for ensuring security during the 2018 World Cup in Russia. Putin revealed in his speech that during the preceding weeks, as millions of people watched the world’s best players kick a soccer ball, “almost **25 million** cyberattacks and other **criminal attempts** on Russia’s information **infrastructure** … were neutralized” (Cerulus 2018). Millions of cyberattacks over a couple of weeks is a frightening revelation, but the attacks are of particular concern because Russia has the world’s **largest** deployed arsenal of **nuclear weapons**. The Federation of American Scientists estimates that as of early 2018, Russia’s nuclear arsenal has **4,350 warheads**, of which about **800** are deployed on intercontinental ballistic missiles (ICBMs) (Kristensen and Norris 2018). Russian officials have stated that these missiles are ready to be launched within “several dozen **seconds**” or “a few tens of seconds” (Kristensen and McKinzie 2012, 4–5). The United States also has **hundreds of nuclear weapons** in a similar posture. Long-time nuclear policy analysts Bruce Blair, Hal Feiveson and Frank von Hippel worry about the possibility that “one day someone will mistakenly launch nucleartipped missiles, either because of a **technical failure or a human error** – a mistake made, perhaps, in the rush to respond to **false indications** of an (enemy) attack ” (Blair, Feiveson, and Hippel 1997, 76). The possibility of a hacker infiltrating computers controlling nuclear missiles adds to this concern. As the Global Zero Commission on Nuclear Risk Reduction highlighted, “A new worry about nuclear command and control and missiles on high-alert status is that they may be **exploitable** by cyber infiltrators.” Might overreaction be sparked by hackers spoofing early-warning systems into reporting that an attack was underway? The commission asked, “Could such hackers breach the firewalls, the air gaps, and transmit orders to launch crews or even to the weapons themselves? What if an insider colluded with them to provide access and passwords to the launch circuitry?” (Global Zero Commission on Nuclear Risk Reduction 2015, 29–30). Not that Russian decision-makers sound alarmed. Just as Putin talked about the 25 million cyberattacks being “neutralized”, Russian officials and the country’s media typically exude confidence and control when it comes to the nation’s nuclear arsenal. For example, based on a 2009 interview with Lieutenant-Colonel Oleg Zverkov, senior assistant to the operational duty officer of Russia’s Strategic Missile Forces (SMF) central command, a journalist said the SMF has “one of the most advanced combat management systems in the Russian Armed Forces. The penetration of computer viruses into it is completely excluded” (Andreev 2009). If this claim is true, why did an official from the press service and information department of the Russian Defense Ministry announce the creation of units for detection and prevention of computer attacks in the Strategic Rocket Forces, the most important component of Russia’s nuclear arsenal (Nikolaev 2014)? That President Putin decided to release the official report on the alarming number of cyberattacks surrounding the World Cup suggests that Russia does take the problem seriously. The Kremlin released his remarks on July 16, the same day as the Helsinki Summit between him and President Donald Trump. Following the Summit, the press was largely focused on whether Trump would confront Putin about evidence that Russian hackers influenced the 2016 US election. Perhaps the more important question was whether the world should be worried that some **government operative** or **terrorist** might hack into the computers that control the **largest deployed nuclear** **arsenal** on Earth – much of it primed for rapid response – and trigger an act of mass destruction? The Russian nuclear command and control system The Armed Forces of the Russian Federation has three services – Land Forces, Aerospace Forces and Navy – and two branches – Strategic Missile Forces (SMF; also referred to as Strategic Rocket Forces or RVSN) and Airborne Forces (Linguistic Centre of the Russian Federation Defence Ministry 2018). The SMF operates the country’s intercontinental ballistic missiles that can be launched quickly. The SMF’s main command center is close to a town called Vlasikha near Moscow and has been operational since the 1960s (Zaloga 2014). The command center has a “battle management system” that is “designed for the continuous monitoring of the state of the missile systems on combat duty and the **reliable transmission of launch orders**,” according to the late Maxim Tarasenko, an expert on the Soviet civilian and military space program.” (Podvig 2001, 175–176). Publicly available descriptions of the facility are rare, but the few that exist stress that its operations rely heavily on information technology and networking. In 2017, a visiting journalist, whose description was backed up by other sources, was given access to the center and reported that its main hall has “screens of monitors” along one wall and “workplaces of officers with telephones and computers” on another (Bozhieva 2017). The journalist went on to offer an example of the kind of information relayed by these systems: “On one of the monitors the lowering of the intercontinental ballistic missile Yars [RS-24 Yars (SS-29 or SS-27 Mod 2)] into the shaft was broadcast. On a separate monitor, the meteorological forecast was constantly updated, and the other two were showing information on mobile and stationary groups of the SMF. A few more were communicating (with) the officers of the Central Command post and officers on (troop) duty shifts” (Bozhieva 2017, Osipov 2017). The importance of **constant communication** among the SMF’S divisions was emphasized in 2009 by a senior military officer at the command center: For high-tech SMF troops, “real-time data transmission is as important as the range and accuracy of the missile or the power of its warhead… Controlling this colossal power is possible only by having constant feedback with each launcher. Since Soviet times, our Central Command post has had the most sophisticated information system in the country” (Andreev 2009). The Vlasikha command center is by no means the only location that is so dependent on vast communication networks. Russia has an extensive system to provide early warning of incoming ballistic missiles. Maintaining “the ballistic missile early-warning system, the satellite control network, and the space object surveillance and identification network system” is part of the mission of the Aerospace Forces, the US Defense Intelligence Agency says (DIA 2017, 37). The branch’s early-warning satellites transmit information to two command centers at Serpukhov-15 and Komsomolskon-Amur, which then process it and transmit the results to the command center in Solnechnogorsk (Podvig 2017b). The few publicly available descriptions of these facilities, again, suggest **extensive reliance on computer** systems (Podvig 2012b; Fedorov 2012). It is safe to surmise that cyber infiltration of these facilities would increase the risk of accidental nuclear war.

#### Trump’s military doctrine guarantees nuclear retaliation.

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The front page of Tuesday’s New York Times contained an alarming headline: “Pentagon Suggests Countering Devastating Cyberattacks With Nuclear Arms.” The article, by David Sanger and William Broad, reported on a leaked draft of the Trump administration’s Nuclear Posture Review, which determines what the role of nuclear weapons should be. This draft departs from previous posture reviews by broadening the range of attacks that could trigger a massive U.S. retaliation, including with nuclear weapons. Sanger and Broad acknowledge that the draft, which was first published by the Huffington Post, “does not explicitly say that a crippling cyberattack against the United States would be among the extreme circumstances” that would motivate the administration to initiate nuclear war. But, citing former and current officials, Sanger and Broad report that the proposed nuclear doctrine posits this contingency if, in the words of the leaked document, an adversary conducted “non-nuclear strategic attacks … on U.S., allied, or partner civilian population or infrastructure.” In plain English, the Trump team seems to be threatening to nuke anyone who conducts a massively disruptive cyberattack on the power grid or water system of the U.S. or one of its friends. For three reasons, the Trump administration would be wise to reconsider and more carefully calibrate the circumstances under which it would initiate nuclear war. The first reason has to do with the fact that nuclear war would be much more devastating to the United States than would any conceivable cyberattack. Russia and China appear to be the most likely adversaries that in the near term might be able to use cyberweapons to disable significant segments of the U.S. electricity system. Indeed, Russian attackers already did so to Ukraine, in a December 2015 operation that shut down power for approximately 230,000 Ukrainians for up to six hours. That attack, Wired magazine reported last June, may have been a dress rehearsal for a future assault on the U.S. power grid. Now imagine it was much worse, and all of Ukraine was without electricity for weeks. If Ukraine possessed nuclear weapons, would any sane person in Washington have recommended that Ukrainian leaders retaliate by nuking Russia, and thereby inviting Russian nuclear attacks on Ukraine? The cure would have been much worse than the disease. The same strategic logic applies to the United States. A cyberattack on U.S. civilian infrastructure could be enormously disruptive and costly. Depending on the scale and durability of outages of electricity, piped water, etc., the effect could be like what Puerto Rico is experiencing due to Hurricane Maria (though without the collapsed roadways and buildings). But, if a U.S. president initiated nuclear war in response to a massive cyberattack, Russia and China would be expected to retaliate with nuclear weapons. This could leave the mainland U.S. in the condition of Puerto Rico minus all the people, buildings and wildlife. Russia and China would suffer gravely in the process, but the U.S. would lose much more than it would gain by moving from cyberwar to nuclear war. Here’s the second reason it’s crazy to retaliate with nuclear weapons: The United States’ conventional and cyber capabilities combined are greater than its adversaries’. Thus, the United States for decades has wanted to keep conflicts from going nuclear, where it would be harder if not impossible to “win.” The U.S. continues to develop and deploy its own cyber capabilities to disrupt adversaries’ civilian and dual-use infrastructure—energy, water, finance, etc. This helps deter adversaries from initiating cyberwarfare on a large scale, and, if deterrence fails, to enable countervailing cyberattacks and perhaps conventional warfare. However, if the U.S. justifies the first use of nuclear weapons in response to possible cyberattacks, it will invite others to lower the threshold for using nuclear weapons. This is exactly the opposite of long-standing U.S. interests. A state with superior conventional and cyber capabilities should raise the nuclear threshold, not lower it. The third reason has to do with international law and morality. I know—such considerations may seem quaint in today’s Washington. Yet, the authors of the draft Nuclear Posture Review themselves highlight the importance of reducing the number of lives lost to war, and the advances civilization has made in doing so from 1600 to 1900, and since 1945. They attribute the post-1945 trend to the development of nuclear weapons. A parallel development has been in International Humanitarian Law, or the Law of Armed Conflict, which U.S. military officers take very seriously. These laws require that military operations be strictly necessary, that their harm be proportionate to the objective, and that they not cause unnecessary suffering. While an enemy’s massive cyberattack on U.S. civilian infrastructure would likely violate such law, it is difficult to imagine how the initiation of nuclear war in response would be necessary, proportionate, or would not cause unnecessary suffering (from radiation poisoning and subsequent birth defects, among other things). If the posture review’s authors think otherwise, the stakes are high enough that they should make this case in detail. Otherwise, they are needlessly opening the United States to yet more international condemnation that benefits only our adversaries and harms our allies and friends. The core threats of nuclear war and massive aggression that the United States has retained nuclear weapons to deter since 1945 have not gone away. Like its predecessors, the Trump administration naturally seeks to counter evolving threats, primarily from Russia, China and North Korea. But widening the role of nuclear weapons and appearing to blur the distinction between nuclear war and fundamentally less catastrophic threats is neither necessary nor helpful to making America great again.

#### **Nuclear war causes extinction – ozone losses, firestorms, and agricultural disruption.**

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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 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 coldest 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 population**.

### 1AC---Arms Racing [Unbroken]

#### Nuclear competition causes miscalculation and war – nine warrants

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International relations scholars and nuclear deterrence theorists have identified several possible processes by which nuclear war could occur. The most prominent of these scenarios are reviewed here, including: irrational nuclear use, accidental nuclear use, inadvertent nuclear use, catalytic nuclear war, nuclear use against non-nuclear opponents, splendid first strike, use ‘em or lose ‘em, brinkmanship, and limited nuclear use. Irrational Nuclear Use. The first potential cause of nuclear use is irrationality. In practice, irrational nuclear use means a leader is using nuclear weapons in pursuit of goals that are so vastly different from our own as to be utterly unrecognizable. Political scientists tend to assume that states are unified rational actors that value their continued existence above all else, but this is a simplifying assumption, not a description of the world in which we actually live.6 Historically, there have been rare leaders who have been willing to destroy their own states in the pursuit of broader ideological goals, including Adolf Hitler in World War II.7 One could similarly imagine a leader of a nuclear-armed state on the losing end of a major war deciding that he has nothing left to lose and voluntarily choosing to unleash the destructive force of nuclear weapons. For example, if the North Korean regime were to collapse, might North Korean Supreme Leader Kim Jong-un decide to use nuclear weapons, figuring that if he is going down he might as well take everyone else with him? Alternatively, it is at least conceivable that somewhere, someday, a leader could ascend to power with religious, nationalist, racist, or some other extremist worldview that causes him to value nuclear destruction over self-preservation. Iran’s clerical establishment, for example, contains a minority of individuals who genuinely appear to hold millenarian religious beliefs.8 If Iran acquires nuclear weapons and one of these leaders comes to have his finger on the nuclear trigger, it is at least imaginable that he might try to launch an unprovoked nuclear attack in an attempt to bring about an apocalypse. Granted, this type of nuclear use may be the most far-fetched of those discussed in this chapter, but many international events, including the terrorist attacks of 9/11 and the recent global financial crisis, were virtually unimaginable until they happened. Accidental Nuclear Use. A second type of potential nuclear use can be characterized as accidental or unintentional. In 1982, the Department of Defense catalogued all previously known nuclear accidents from the 1950s to the 1980s.9 The list included the 1982 Titan II crisis in which a dropped wrench socket in a nuclear missile silo nearly caused a nuclear explosion, and a number of cases in which aircraft carrying nuclear weapons crashed or dropped nuclear weapons into the ocean but that fortunately failed to detonate.10 Scott Sagan, in his book The Limits of Safety, catalogs a number of near nuclear accidents during the Cold War period, including a 1966 midair collision between a B-52 bomber and a KC-135 tanker that led to the release of four hydrogen bombs near Palomares, Spain.11 In 1968, a B-52 bomber on airborne alert caught fire over Greenland near a U.S. early warning site, causing four one-megaton thermonuclear bombs to hurtle toward the ground.12 The current era is not immune from nuclear accidents either, as evident from the 2007 incident in which nuclear weapons were accidentally and unknowingly transported from Minot Air Force Base in North Dakota to Barksdale Air Force Base in Louisiana.13 Other nuclear weapons states have also had their share of incidents,14 and newer nuclear weapons states may be even more prone to accidents, especially as they strive to develop stable command and control structures.15 In none of these cases did the nuclear warhead detonate; however, we might not be so lucky next time. Inadvertent Nuclear Use. An inadvertent nuclear use would occur if a nuclear-capable state decided to launch a nuclear war under the incorrect belief that it is already under nuclear attack.16 Thomas Schelling provides perhaps the most sophisticated theoretical discussion of inadvertent nuclear war in his discussion of “reciprocal fear of surprise attack.”17 Schelling argues that when two nuclear adversaries face each other in crisis, each side may rightly worry that the other side is considering nuclear attack. If there is an advantage to striking first, then, in these difficult circumstances under intense time pressures, a cycle of fear could lead to nuclear war. As Schelling writes, “Fear that the other may be about to strike in the mistaken belief that we are about to strike gives us a motive for striking, and so justifies the other’s motive.”18 In the Limits of Safety, Sagan provides several examples of near-inadvertent nuclear war during the Cuban Missile Crisis. In one episode, an intruder— later identified as a bear—led to the sounding of a “sabotage alarm,” which set off similar alarms at all the bases in the area. At one base, an incorrectly wired alarm sent pilots of nuclear-armed fighter aircraft to prepare for takeoff before a car raced down the runway to stop them.19 Also during the crisis, Vandenberg Air Force Base conducted a regularly scheduled ballistic missile test that the Soviet Union might have reasonably misread as a nuclear missile launch.20 Finally, at the end of the crisis, Moorestown, New Jersey radar operators alerted North American Aerospace Defense Command (NORAD) that an incoming missile attack was underway when a training tape simulating an attack was mistakenly run in their system.21 Inadvertent nuclear war nearly occurred again in the 1983 Able Archer incident, in which a very realistic North Atlantic Treaty Organization (NATO) military exercise during a period of tension led the Soviets to worry that the training operation was a cover for war preparations. The Soviets put their own nuclear forces on alert in response.22 A similar scare occurred in the post-Cold War era in January 1995 when a U.S.-Norwegian weather balloon was launched from Norway to study the Aurora Borealis. A Russian early warning radar detected this object, leading former Russian President Boris Yeltsin to activate his “nuclear keys” for the first time. Eventually radars detected that the balloon was going out to sea and Russian forces stood down.23 Given the frequency with which countries have feared themselves to be under nuclear attack in the past, it will likely continue to happen in the future, and it is always possible that at least one of them could lead to a nuclear response. Catalytic Nuclear War. During the early Cold War era, strategists theorized about the possibility of “catalytic nuclear war.” They imagined that the United States could be attacked with nuclear weapons, and that U.S. leaders would assume, quite reasonably, that the Soviet Union had been responsible for the attack and decide to strike back. Both states would have been vastly weakened after absorbing the nuclear exchange, but what if it had not been the Soviets, but the Chinese who had initially attacked the United States? In the aftermath, the Chinese could emerge as the preeminent power. One party initiates the attack, but the attack is attributed to another party and the secret attacking state comes out of the conflict more powerful than the two victimstates.24 Given today’s more advanced intelligence, surveillance, and reconnaissance (ISR) capabilities, a secret attack scenario may seem less plausible, but it is at least imaginable that a third party could begin a crisis that would bring other states to nuclear conflict. Nuclear Use Against a Non-Nuclear Opponent. In an ongoing crisis or conflict with a non-nuclear state, a nuclear-capable state may be tempted to use nuclear weapons. Nuclear use could be attractive in this situation because there would be no danger of nuclear retaliation from the targeted state, although such use could have other ill effects, including international opprobrium. The only case of nuclear use, against Japan during World War II, illustrates this type of use. Nuclear attacks against non-nuclear states have also been considered on at least a few other occasions. Reportedly, the French briefly contemplated nuclear use against the Vietnamese in the 1954 Battle of Dien Bien Phu during the First Indochina War.25 Almost 2 decades later in the same country, former U.S. President Richard Nixon mentioned the possibility of using a nuclear weapon to then U.S. National Security Advisor Henry Kissinger, saying “I’d rather use the nuclear bomb.” Kissinger responded that nuclear use would be “too much,” to which Nixon responded, “The nuclear bomb. Does that bother you?” He went on to say, “I just want you to think big.”26 Thus far, leaders from nuclear-capable states have appeared to agree with Kissinger that nuclear use against non-nuclear weapons states is “too much.” However, two points are important to note. First, the conflicts in which nuclear states have forgone nuclear use against non-nuclear states—in addition to the above conflicts, one could add China in the Korean War, the Falklands War, and the first and second Gulf Wars—were not existential threats to the nuclear states. In future conflicts with greater stakes, nuclear weapons states may be more likely to consider nuclear use. Second, there is also the possibility of nuclear use against a non-nuclear state brandishing chemical and biological weapons (CBWs). The unique physical and psychological damage caused by these unconventional weapons have caused leaders to consider nuclear weapons as a potentially appropriate response and a stronger means of deterrence than conventional threats. During the 1991 Gulf War, the administration of then U.S. President George H. W. Bush attempted to threaten nuclear use to deter Iraqi President Saddam Hussein from using chemical weapons against U.S. soldiers.27 Similarly, during the 2003 Iraq War, officials from the George W. Bush administration again made veiled threats of nuclear use by claiming no options were off the table to deter Iraqi use of CBWs.28 Bush administration officials later said they would not have used nuclear weapons, but they must have thought use was credible enough to issue the threat. Today U.S. nuclear doctrine continues to leave open the possibility of nuclear use in response to unconventional attacks. The 2010 Nuclear Posture Review states, “there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring a conventional or CBW attack against the United States or its allies and partners.”29 Similarly, the 2010 Russian nuclear doctrine reserves the option “to utilize nuclear weapons in response to the utilization of nuclear and other types of weapons of mass destruction [WMD] against it and (or) its allies.”30 Finally, there are those who argue that nuclear weapons should be considered in cases of cyberattack. In January 2013, the Department of Defense, Defense Science Board issued a report arguing that the United States should be prepared to use nuclear weapons in response to major cyberattacks, and Washington has not yet ruled out any such use in official doctrine.31 Splendid First Strike. A sixth potential use of nuclear weapons is the so-called “splendid first strike.” The purpose of this type of nuclear use is to destroy all of an adversary’s nuclear weapons in a single nuclear campaign, leaving the adversary unable to strike back with nuclear weapons. No state has ever attempted a nuclear first strike, but such strikes have been considered. Early in the Cold War, it was plausible for the United States, with its head start in the nuclear arms race, to consider a splendid first strike against the Soviet Union. In April 1950, the U.S. National Security Council rejected preventive war on the nascent Soviet arsenal “on strategic and moral grounds.”32 Although the decision document, NSC-68, did allow for a pre-emptive strike if the United States were under imminent attack from the Soviet Union.33 During the administration of former U.S. President Dwight Eisenhower, military planners explored a preventive war option, with a Joint Chiefs of Staff Advance Study Group recommending the United States consider starting a war with the Soviets before their nuclear forces became “a real menace.”34 Other military leaders disagreed, in effect calling such an attack un-American, and this option was ruled out by December 1954.35 Both the United States and the Soviets considered a nuclear first strike against China in the 1960s.36 As the Soviet Union’s nuclear arsenal developed over time, Washington began to worry that its nuclear forces might themselves be vulnerable to a splendid first strike. RAND Corporation analyst Albert Wohlstetter argued that the balance of terror might be more “delicate” than previously believed and, as a result, the U.S. military dispersed its air bases and took other measures to ensure nuclear survivability.37 Carrying out a nuclear first strike would entail great risk. If the strike failed to destroy every single nuclear weapon of the adversary, then the attacker would risk devastating nuclear retaliation in response. Even Herman Kahn, author of On Thermonuclear War, argued that “for . . . practical reasons alone, not to speak of vitally important moral and political ones, the notion of having a Splendid First Strike Capability seems fanciful.”38 This type of nuclear use would be most plausible, therefore, against a target state that possessed relatively few weapons at known locations. Though there are no historical examples of a splendid first strike using nuclear weapons, the strategic logic underpinning this type of attack, to wipe out an adversary’s nuclear capability in one strike to prevent one’s own state from being targeted in the future, has been pursued by states using conventional weapons. In destroying Iraq’s Osirak nuclear reactor in 1981, for example, Israel attempted to take out Iraq’s developing nuclear capability, striking before it had a more developed weapons program. Israel took similar action when bombing the Syrian al-Kibar reactor in September 2007. If a country were further along in a nuclear weapons program and conventional weapons were insufficient to destroy an enemy nuclear program, it is conceivable that leaders would consider nuclear weapons appropriate for the task for the same underlying reasons. Use ‘Em or Lose ‘Em. In a crisis situation involving two nuclear-armed states, each may fear their nuclear weapons will be vulnerable to attack by their adversary and thus decide to use them before they are wiped out. Pressure to “use ‘em or lose ‘em” in a crisis might be heightened if a country possesses a nuclear arsenal that is vulnerable to a splendid first strike or if the adversary’s nuclear posture favors the offense. For example, during the Cold War, each side maintained ballistic missiles with relatively accurate multiple independently targetable reentry vehicles (MIRVs). With this capability, a single missile could target and destroy a number of the adversary’s nuclear weapons. Even if not all of the targeted state’s missiles were destroyed, it would be left at great numerical disadvantage vis-à-vis the attacking state. This condition meant each side felt immense pressure to launch its missiles first in the event of conflict, leading to the development of “launch on warning” postures in which weapons already on alert could be quickly deployed if an incoming attack were detected. In this situation, it might be more reasonable for a leader to simply back down rather than initiate a nuclear war from such a disadvantaged position, but it is possible that a future leader would prefer to use them than lose them. Nuclear Brinksmanship. Many scholars and practitioners incorrectly believe that nuclear use is impossible, or at the very least irrational, once one’s adversary possesses a secure second-strike capability. If an adversary has the ability to absorb a nuclear attack and respond with a devastating counterattack, then one can no longer hope to conduct a splendid first strike and any nuclear use could result in unacceptable retaliation. Meanwhile, states would not feel the same use ‘em or lose ‘em pressures, because they would understand that they could ride out a nuclear attack and still hit back with force. Since both sides understand these facts, a situation of restraint arises due to the condition of Mutually Assured Destruction (MAD). Yet, nuclear deterrence theorists have identified several rational uses of nuclear weapons even in a condition of MAD. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.39 He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”40 They can engage in a process, a nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis, there is an increasing probability that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before backing down will win the crisis as long as it does not end in catastrophe. It is for this reason that Schelling called great power politics in the nuclear era a “competition in risk taking.”41 This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Alternatively, they can escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. On brinksmanship, former U.S. Secretary of State John Foster Dulles stated, “The ability to get to the verge without getting into the war is the necessary art . . . . If you try to run away from it, if you are scared to go to the brink, you are lost.”42 The bipolar Cold War conflict provides several examples of nuclear brinksmanship, with the Cuban Missile Crisis as the most notable. Former Soviet Premier Nikita Khrushchev initially raised the stakes by placing nuclear weapons in Cuba, gravely threatening the U.S. homeland and meddling within the U.S. sphere of influence. In response, then U.S. President John F. Kennedy escalated by placing a blockade around the island so Soviet ships could not deliver additional missiles. In the end, the Soviet Union withdrew its missiles from Cuba, but not before the risk of nuclear war was raised to, in President Kennedy’s mind, “between 1 in 3 and even.”43 Other historical examples of brinkmanship include Moscow’s threats against the British and the French during the 1956 Suez Crisis, Moscow’s threats to attack China during the Sino-Soviet border war in 1969, former President Nixon’s nuclear alerts in 1969 and 1973, and finally, Indian and Pakistani threats and nuclear weapons movements during the 1999 Kargil Crisis.44 Looking to the future, as long as rivalries continue and as long as leaders are willing to initiate and escalate high-stakes crises in search of their geopolitical goals, the risk of war through nuclear brinkmanship will remain with us. Limited Nuclear War. During the course of the Cold War, nuclear strategists considered an alternative to all-out nuclear war between the two superpowers: limited nuclear war.45 This is conflict “in which each side exercises restraint in the use of nuclear weapons, employing only a limited number of weapons on selected targets.”46 By launching a single nuclear weapon against a small city or an isolated military base, for example, a nuclear armed state could signal its willingness to escalate a crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. U.S. proponents of limited nuclear war included Henry Kissinger and Robert Osgood.47 In his 1957 book Nuclear Weapons and Foreign Policy, Kissinger argued that the United States should be prepared for alternatives to “all-out” nuclear war, especially in peripheral conflicts.48 Limited nuclear war, he argues, cannot be “improvised” during the course of conflict, but it has “its own appropriate tactics . . . with limitations as to targets, areas and the size of weapons used.”49 Most importantly, limited nuclear war requires communicating to adversaries in advance the understandings of limited war, otherwise “miscalculations and misinterpretations” of intentions “may cause the war to become all-out even if both sides intend to limit it.”50 In the current era, there are a number of conflicts in which adversaries could engage in limited nuclear war. Because arsenal sizes vary, the defining feature of this type of nuclear war is not that it seeks to avoid all-out nuclear exchange, but that nuclear weapons are employed with some level of restraint, to avoid the widespread use of nuclear weapons on both sides. History provides examples of states planning to deploy nuclear weapons in a limited way to achieve limited aims. During the early Cold War when the United States was conventionally inferior to the Soviet Union, U.S. leaders felt they had no choice but This content downloaded from 107.194.152.197 on Wed, 15 Jan 2020 06:26:46 UTC All use subject to https://about.jstor.org/terms 154 to go nuclear to stop Soviets from overrunning Europe. This is similar to France’s approach to nuclear strategy during the Cold War. Vastly overmatched by Moscow, the French plan was also to resort to launching nuclear weapons as soon as conventional fighting began.51 Similarly, at present, America’s conventionally inferior adversaries have incentives to use nuclear weapons early in a crisis in an attempt to deter further escalation and ensure their own survival.52

#### Second-gen prolif is uniquely dangerous – accidents, risk-taking, and preemptive strikes.

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The spread of nuclear weapons poses at least six severe threats to international peace and security including: nuclear war, nuclear terrorism, global and regional instability, constrained US freedom of action, weakened alliances, and further nuclear proliferation. Each of these threats has received extensive treatment elsewhere and this review is not intended to replicate or even necessarily to improve upon these previous efforts. Rather the goals of this section are more modest: to usefully bring together and recap the many reasons why we should be pessimistic about the likely consequences of nuclear proliferation. Many of these threats will be illuminated with a discussion of a case of much contemporary concern: Iran’s advanced nuclear program. Nuclear War The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there will be a catastrophic nuclear war. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used nuclear weapons on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to the 65-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again simply because they have not been used for some time. After all, analysts in the 1990s argued that worldwide economic downturns like the Great Depression were a thing of the past, only to be surprised by the dot-com bubble bursting later in the decade and the Great Recession of the late 2000s.48 This author, for one, would be surprised if nuclear weapons are not used again sometime in his lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons, neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preventive nuclear strike to disarm Iran’s nuclear capabilities. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use them or lose them pressures. That is, in a crisis, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.49 If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. Fortunately, there is no historic evidence of this dynamic occurring in a nuclear context, but it is still possible. In an Israeli–Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, however, when both sides have secure, second-strike capabilities, there is still a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders who would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who hold millenarian religious worldviews and could one day ascend to power. We cannot rule out the possibility that, as nuclear weapons continue to spread, some leader somewhere will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. Leaders might, therefore, choose to launch a limited nuclear war.50 This strategy might be especially attractive to states in a position of conventional inferiority that might have an incentive to escalate a crisis quickly to the nuclear level. During the Cold War, the United States planned to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority.51 As Russia’s conventional power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear weapons in its military doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a US superpower in a possible East Asia contingency. Second, as was also discussed above, leaders can make a ‘threat that leaves something to chance’.52 They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increase the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents nearly led to war.53 When we think about future nuclear crisis dyads, such as Iran and Israel, with fewer sources of stability than existed during the Cold War, we can see that there is a real risk that a future crisis could result in a devastating nuclear exchange. Nuclear Terrorism The spread of nuclear weapons also increases the risk of nuclear terrorism.54 While September 11th was one of the greatest tragedies in American history, it would have been much worse had Osama Bin Laden possessed nuclear weapons. Bin Laden declared it a ‘religious duty’ for Al- Qa’eda to acquire nuclear weapons and radical clerics have issued fatwas declaring it permissible to use nuclear weapons in Jihad against the West.55 Unlike states, which can be more easily deterred, there is little doubt that if terrorists acquired nuclear weapons, they would use them.56 Indeed, in recent years, many US politicians and security analysts have argued that nuclear terrorism poses the greatest threat to US national security.57 Analysts have pointed out the tremendous hurdles that terrorists would have to overcome in order to acquire nuclear weapons.58 Nevertheless, as nuclear weapons spread, the possibility that they will eventually fall into terrorist hands increases. States could intentionally transfer nuclear weapons, or the fissile material required to build them, to terrorist groups. There are good reasons why a state might be reluctant to transfer nuclear weapons to terrorists, but, as nuclear weapons spread, the probability that a leader might someday purposely arm a terrorist group increases. Some fear, for example, that Iran, with its close ties to Hamas and Hizballah, might be at a heightened risk of transferring nuclear weapons to terrorists. Moreover, even if no state would ever intentionally transfer nuclear capabilities to terrorists, a new nuclear state, with underdeveloped security procedures, might be vulnerable to theft, allowing terrorist groups or corrupt or ideologically-motivated insiders to transfer dangerous material to terrorists. There is evidence, for example, that representatives from Pakistan’s atomic energy establishment met with Al-Qa’eda members to discuss a possible nuclear deal.59 Finally, a nuclear-armed state could collapse, resulting in a breakdown of law and order and a loose nukes problem. US officials are currently very concerned about what would happen to Pakistan’s nuclear weapons if the government were to fall. As nuclear weapons spread, this problem is only further amplified. Iran is a country with a history of revolutions and a government with a tenuous hold on power. The regime change that Washington has long dreamed about in Tehran could actually become a nightmare if a nuclear-armed Iran suffered a breakdown in authority, forcing us to worry about the fate of Iran’s nuclear arsenal. Regional Instability The spread of nuclear weapons also emboldens nuclear powers, contributing to regional instability. States that lack nuclear weapons need to fear direct military attack from other states, but states with nuclear weapons can be confident that they can deter an intentional military attack, giving them an incentive to be more aggressive in the conduct of their foreign policy. In this way, nuclear weapons provide a shield under which states can feel free to engage in lower-level aggression. Indeed, international relations theories about the ‘stability-instability paradox’ maintain that stability at the nuclear level contributes to conventional instability.60 Historically, we have seen that the spread of nuclear weapons has emboldened their possessors and contributed to regional instability. Recent scholarly analyses have demonstrated that, after controlling for other relevant factors, nuclear-weapon states are more likely to engage in conflict than nonnuclear-weapon states and that this aggressiveness is more pronounced in new nuclear states that have less experience with nuclear diplomacy.61 Similarly, research on internal decision-making in Pakistan reveals that Pakistani foreign policymakers may have been emboldened by the acquisition of nuclear weapons, which encouraged them to initiate militarized disputes against India.62 Currently, Iran restrains its foreign policy because it fears major military retaliation from the United States or Israel, but with nuclear weapons it could feel free to push harder. A nuclear-armed Iran would likely step up support to terrorist and proxy groups and engage in more aggressive coercive diplomacy. With a nuclear-armed Iran increasingly throwing its weight around in the region, we could witness an even more crisis prone Middle East. And in a poly-nuclear Middle East with Israel, Iran, and, in the future, possibly other states, armed with nuclear weapons, any one of those crises could result in a catastrophic nuclear exchange.

#### And, irrational dictators cause cascading conflicts in the event of proliferation

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There have always been good reasons to worry about nuclear weapons, but those reasons have changed over time. During the Cold War, U.S. national security experts fretted about an expensive nuclear arms race with the Soviet Union. After the 9/11 attacks, specialists and the American public alike were afraid that terrorists might get their hands on highly enriched uranium and make a primitive nuclear device. Those dangers remain. But the first concern has been mitigated to some degree by strategic arms control agreements between the United States and Russia, which are still in place (although not always adhered to). And the second concern has been ameliorated through a significant reduction in the amount of highly enriched uranium used in research reactors around the world. Today, however, there is another reason to worry about nuclear weapons: the rise of personalist dictatorships in states that possess or could acquire the bomb. These dictatorships differ from other autocratic governments because their leaders have such dominant personal power that other state institutions—such as parties, politburos, or military officers—cannot overrule the decisions made at the top. Personalist dictators can make decisions on a whim, which creates a grave challenge to the concept of nuclear stability. The world has faced this particular nuclear danger only once before: between 1949 and 1953, when Joseph Stalin enjoyed unchallenged personal dominion over a nuclear-armed Soviet Union. Of course, other threats from nuclear proliferation persist. Pakistan’s nuclear arsenal is growing, for example. But it remains in the hands of professional military officers who share at least some degree of power with a democratically elected civilian government. Iran also has latent nuclear capabilities. Yet despite the Trump administration’s unilateral withdrawal from the 2015 agreement that limited Iran’s nuclear activities and the reimposition of U.S. economic sanctions on Iran, the Islamic Republic has, at least for now, decided to keep its commitments to not enrich uranium to bomb-grade levels and to permit international inspectors to monitor any suspected nuclear facilities. To understand why a nuclear-armed personalist dictatorship poses a much graver danger than those countries, look no further than Kim Jong Un, the eccentric ruler of North Korea. In the six years since he came to power following the death of his father, Kim has solidified his control of the state apparatus and purged potential rivals, including his uncle, whom he executed in 2013, and his half brother, who was murdered in an airport in Malaysia in 2017 by assailants armed with the chemical weapon VX—almost certainly on Kim’s orders. At the same time, Kim has achieved unprecedented success in North Korea’s pursuit of nuclear weapons. After testing a thermo­nuclear device in September 2017 and an intercontinental ballistic missile in November of that year, Kim announced in his 2018 New Year’s address that North Korea had “perfected” its nuclear arsenal and that “the nuclear button is on my office desk all the time.” Kim soon entered into direct negotiations with South Korea and, separately, with the United States. Like his three immediate predecessors, U.S. President Donald Trump seeks North Korea’s “complete, verifiable, and irreversible nuclear disarmament.” After meeting with Kim in June, Trump announced that the United States would suspend what he called “tremendously expensive” and “very provocative” military exercises with South Korea and declared that “there is no longer a nuclear threat from North Korea.” In fact, Kim has shown no intention of giving up his weapons, and it is unclear how Washington can achieve its ambitious goal. This dynamic is unlikely to remain confined to North Korea. Personalist dictators elsewhere are more likely to seek nuclear weapons in the future and, if they get them, more likely than other leaders to use them. The United States therefore needs to tailor its nuclear doctrine to better deter such leaders—and, if necessary, to fight and defeat them more effectively and ethically. The problem is daunting. The good news is that Washington and its allies have successfully adapted their strategies to meet new nuclear threats in the past, and the steps they must take to do so once again are well within reach. But the bad news is that the Trump administration is not thinking creatively enough and the president is making matters worse by issuing belligerent threats and making unfounded claims of success. BOMB THROWERS After 1945, the list of nuclear states grew to include five democracies (the United States, the United Kingdom, France, Israel, and India) and five non­democratic states (the Soviet Union, China, Pakistan, North Korea, and apartheid South Africa). A number of democracies, such as Australia and Sweden, started nuclear weapons programs and then abandoned them, as have a few nondemocracies, such as Brazil and Egypt in the 1970s. Democracies and autocracies alike have joined the 1968 Nuclear Nonproliferation Treaty (NPT), pledging “not to manufacture or otherwise acquire nuclear weapons.” Yet only autocracies have started or maintained illicit nuclear weapons programs after joining the NPT. These nuclear cheaters were Iran, Iraq, Libya, North Korea, Romania, Syria, Taiwan, and, for a brief period in the 1970s, South Korea. When they began their nuclear weapons programs, all these states were led by autocrats who enjoyed nearly unchallenged authority. Such dictators find nuclear weapons particularly appealing, in part for the usual reason of warding off foreign military intervention, but also because nuclear weapons, unlike conventional ones, provide a way of countering external threats without increasing the risk of internal threats, especially that of a military coup. Such leaders are also less likely to fear the effects of international economic isolation and are not constrained by domestic rivals who might oppose spending scarce resources on a nuclear weapons program. Nor are personalist dictators constrained much by the rule of law, which emboldens them to engage in nuclear cheating, since they face little chance of being outed by internal whistleblowers and because, even if they are caught cheating by foreign powers, they will pay few domestic political costs. Yet many of the traits that make personalist dictatorships dangerous also make them incompetent. Such dictators often weaken their state institutions by prizing loyalty over professionalism in military and scientific organizations, thus impeding their nuclear ambitions. In the 1980s, Romania’s laughable nuclear program was run as a pet project by Elena Ceausescu, the wife of the strongman leader Nicolae Ceausescu, who was appointed the head of the National Council for Science and Technology despite having no serious background in scientific research. In Iraq during the late 1970s and early 1980s, the dictator Saddam Hussein executed his deputy prime minister, reportedly for opposing his defense spending plans, and sent a number of senior nuclear scientists to prison because he deemed them insufficiently loyal. During the late 1990s, the Libyan strongman Muammar al-Qaddafi put together a gang that couldn’t proliferate straight: program managers imported the wrong nuclear components because they did not consult scientists first, and no one monitored progress in the program. Indeed, when the International Atomic Energy Agency inspected Libya’s nuclear sites in 2003, they found smuggled-in centrifuges still in their packing crates. North Korea’s success therefore represents a watershed. For the first time, a poor and highly personalist dictatorship has developed large numbers of nuclear weapons and long-range missiles to deliver them. North Korea’s persistence, skillful engineering, and extensive support for its scientists helped. So, too, did the illicit assistance that the regime received from the proliferation network run by the Pakistani nuclear physicist A. Q. Khan (which provided centrifuges to enrich uranium) and from companies in Ukraine (which supplied the North Koreans with high-performance liquid-propellant rocket engines). Lastly, Washington failed to get strong global sanctions placed on North Korea until after Pyongyang had already tested its first nuclear weapon, in 2006; by then, it was too late. North Korea’s success may now serve as an inspiration. Other governments may calculate that they can copy the North Korean model, especially if Pyongyang offers to carry them across the nuclear threshold, as it has attempted to do at least once in the past. In 2007, the North Koreans were caught helping Bashar al-Assad’s regime construct a secret plutonium-producing reactor in the Syrian desert, which the Israeli Air Force promptly destroyed. THIS IS NOT A DRILL It is difficult to predict which country with a personalist regime—or with a leader who is working to establish such a regime—will be the next to pursue nuclear weapons. Egypt, Syria, and Turkey all seem like contenders. Saudi Arabia might be next in line, if Crown Prince Mohammed bin Salman continues his ruthless consolidation of power when he eventually becomes king. Armed with nuclear weapons, the personalist rulers of these countries will be difficult to deter. They likely value their own lives and those of their family members and cronies more than the lives of their countries’ citizens. They vanquish rivals in order to make their regimes coup-proof and rely on sycophants, often family members, to run their regimes, prizing personal loyalty over professional competence or expertise. A leader surrounded by yes men will have no one who can question faulty assumptions, much less challenge his decision-making authority. Recent history demonstrates how such proclivities make personalist dictators particularly likely to mis­calculate. In 1986, Libyan operatives, following Qaddafi’s orders to carry out a campaign of terrorism against Americans, planted a bomb at a nightclub in Berlin popular with U.S. service members, killing two U.S. soldiers and one foreign civilian and injuring 229 other service members and civilians. In response, the United States launched air strikes against military targets in Libya and the compound outside Tripoli where Qaddafi lived with his family. In 1980, Saddam decided to attack Iran without consulting his advisers (resulting in an eight-year-long war), and in 1990, he ordered an attack on Kuwait after consulting with only his son-in-law (leading to the humiliating Persian Gulf War). Saddam even forbade his intelligence agencies from providing reports on the United States, telling them that intelligence was his “specialty.” (He also elaborated on the sources of his unique insight: “some of it out of deduction, some of it through invention and connecting the dots, all without having hard evidence.”) Flawed decision-making of this sort also makes personalist regimes accident-prone. According to North Korean government pronouncements, Pyongyang has a preemptive military doctrine, which calls for striking first if Kim receives intelligence that a U.S. attack is deemed imminent and unavoidable. But no outsiders know the exact indicators on which Kim would base his decision. Perhaps he might react to a formal warning issued by trusted organizations within the state. But even in technologically sophisticated societies, these are imperfect. In January, for example, the Hawaii Emergency Management Agency issued a false alarm: “Ballistic missile threat inbound to Hawaii. Seek immediate shelter. This is not a drill.” Throughout the islands, citizens panicked, some running for the beaches, others (more appropriately) sheltering inside their homes. In Washington, fortunately, no one panicked: the U.S. military’s sophisticated sensors did not detect an inbound missile, highly professional military officers quickly reported up the chain of command that the Hawaiian agency had made a mistake, and no high-level official believed that Kim would launch an unprovoked nuclear attack on Hawaii.

#### **Nuclear war causes extinction – ozone losses, firestorms, and agricultural disruption.**

Starr ’17 (Steven; 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. He has been published in the Bulletin of the Atomic Scientists and the Strategic Arms Reduction (STAR) website of the Moscow Institute of Physics and Technology; Jan 09, 2017; “Turning a Blind Eye Towards Armageddon — U.S. Leaders Reject Nuclear Winter Studies”; Federation of American Scientists; https://fas.org/2017/01/turning-a-blind-eye-towards-armageddon-u-s-leaders-reject-nuclear-winter-studies/; DOA December 8, 2019; JPark)

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 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 coldest 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 population**.

### 1AC---Iran [Unbroken]

#### Iranian proliferation is likely and provocative.

Huessy and Thayer 11-24 (Peter Huessy and Bradley A. Thayer; Peter Huessy is founder and president of Geo-Strategic Analysis of Potomac, Bradley A. Thayer is professor of political science at the University of Texas, San Antonio, and co-author of “How China Sees the World: Han-Centrism and the Balance of Power in International Politics.”, ; 11-24-2019; "The consequences of Iranian proliferation are serious and real"; https://thehill.com/opinion/national-security/471385-the-consequences-of-iranian-proliferation-are-serious-and-real, TheHill, accessed 1-15-2020; JPark)

The State Department reported on Nov. 1 that **Iran** is not only the deadliest of terror-sponsoring states in the world but is expanding the **scope** and **nature** of its **deadly** attacks. Missile expert Uzi Rubin recently informed an international conference on air and missile defense in Dresden, Germany, that Iran is the most **prolific builder** of **ballistic missiles** in the Middle East. Moreover, its space launch vehicles are a precursor for the development of intercontinental-range ballistic missiles. An assumption of the nuclear deal of 2015 — the Joint Comprehensive Plan of Action (JCPOA) — was that it would forestall Iran from building a nuclear warhead to place on its missiles. Much of this important assumption rested on a U.S. intelligence assessment that Iran’s nuclear weapons work ceased in 2003. Consequently, while Iran’s missile developments were of concern, these missiles widely were seen as not threatening the U.S. mainland or most allied capitals in Europe. Whatever hope the world had that the nuclear deal would moderate Iran’s aggressive behavior evaporated when Iran embarked on an acceleration of its terrorist rampage. Tehran increased its **support** of Hezbollah, Hamas, the Houthis and Islamic jihad, including reportedly providing these groups with **thousands** of ballistic missiles and rockets. Iran’s Houthi proxy force in Yemen apparently has used those rockets to attack civilian communities and key oil depot and production facilities in Saudi Arabia. Iran increased its military presence in Lebanon and Syria, even constructing local facilities to build weapons to use in its terror campaigns. Iran went further afield, attempting assassinations in Denmark, Sweden and England. Since 1979, Iran has carried out IED attacks on U.S. soldiers in Iraq and Afghanistan, killing more than 600 American soldiers. Iran also has created smuggling crews allied with Mexican drug cartels to raise funds for the terror groups they support. Some former top U.S. government officials often have cited the lack of a Palestinian homeland as the progenitor of much of the terrorism generated in the Middle East by Iran. Accordingly, Iran’s terrorism was considered a “fact of life” with which the U.S. had to deal but not at the cost of deep-sixing the nuclear deal. But even as the JCPOA took effect, critics understood that the deal was simply what Israel described as “a glide-path to the bomb,” since all of its key guardrails against Iran’s building a nuclear device eventually would expire. Even more importantly, not only did Iran’s violent rampage increase after the deal was signed, its illegal nuclear weapons activities did not cease. Thus, the U.S. got the worst of both worlds — more Iranian terror, and Iran’s continued pursuit of the bomb. Iran sought nuclear weapons technology from Germany, an activity that has surfaced again, according to German intelligence sources. Also, in the immediate wake of the 2015 deal, the Iranian government refused to come clean with the United Nations — as required — about its previous nuclear work, especially at Iranian military sites. Even more recently, the mullahs have taken a supposed “research” facility at Fordow and started enriching uranium with advanced centrifuges, an activity that must have been planned years in advance. If Iran is trying to convince the world it has no intention to sprint to a nuclear bomb, it has a rather curious way of providing proof, as it: first, enriches uranium to a level in **violation** of the **2015 nuclear deal**; second, produces nuclear fuel in excess of prescribed limits; and third, proclaims to the International Atomic Energy Agency that Iran has no intention to reveal nuclear work at military sites, despite anything the JCPOA requires. Given Iran’s violations, its support for terrorism and its continued proliferation efforts, the U.S. government and the American people are compelled to ponder the threat to America once Iran develops nuclear weapons and the means to deliver them by intercontinental ballistic missiles. President Trump perceived this threat and so decided to withdraw from the hugely flawed JCPOA. Instead, the Trump administration put together wide-ranging economic sanctions against Iran, dubbed a “maximum pressure” campaign. The U.S. has sold missile defense systems and other military equipment to our allies in the region so they can better help to deter Iran’s aggression. Moreover, the Trump administration has increased our own defense budget significantly to restore readiness and provide modern equipment to our military. The robust U.S. sanctions have **contributed** to Iran’s **serious internal** **crisis**. Riots and demonstrations involving millions of Iranians are becoming more common and the regime appears to be losing its legitimacy. Iran has lost significant international support because of its reckless attack on the core of international commerce: Saudi Arabian oil facilities. Its human rights violations — false imprisonment, mass murder, torture — especially of women, children and LGBT people, has generated condemnation from Congress and the global community. Iran poses a **serious threat** to the U.S. because of its nuclear and ballistic missile **proliferation efforts** and its willingness to **attack U.S. allies**. Keeping maximum pressure on the Iranian regime is a justifiable consequence of its actions. To defend its interests, the U.S., with its allies, must sustain a joint military deterrent in the region and support the democratic movement among the Iranian people.

#### Iran prolif heightens Middle Eastern prolif – spillover ensures escalation

Farley 11-19 (Dr. Robert Farley; Dr. Robert Farley has taught security and diplomacy courses at the Patterson School since 2005. He received a BS from the University of Oregon in 1997, and a Ph.D. from the University of Washington in 2004. Dr. Farley is the author of Grounded: The Case for Abolishing the United States Air Force (University Press of Kentucky, 2014) and the Battleship Book (Wildside, 2016). He has contributed extensively to a number of journals and magazines, including the National Interest, the Diplomat: APAC, World Politics Review, and the American Prospect. Dr. Farley is also a founder and senior editor of Lawyers, Guns and Money; 11-16-2019; “If Israel and Iran go war would Israel launch nuclear war,” <https://nationalinterest.org/blog/buzz/if-israel-and-iran-go-war-would-israel-launch-nuclear-war-96296>, The National Interest, accessed 12-2-2019; JHsu)

1 The National Interest Submissions Subscribe Contact Advertising About Search Search Submit Magazine Blogs Military Economics Technology Regions SUBSCRIBE Share on FacebookF Share on TwitterL Share on LinkedInI Subscribe to RSSR Print November 16, 2019 Topic: Security Blog Brand: The Buzz Tags: IranMilitaryTechnologyWorldIsraelNuclear Weapons If Israel And Iran Go To War, Would Israel Launch a Nuclear War? The Middle East would never be the same. by Robert Farley Follow drfarls on TwitterL Key point: Israel has considered preemptive attacks before. SPONSORED CONTENT Recommended by Israel’s nuclear arsenal is the worst-kept secret in international relations. Since the 1970s, Israel has maintained a nuclear deterrent in order to maintain a favorable balance of power with its neighbors. Apart from some worrying moments during the Yom Kippur War, the Israeli government has never seriously considered using those weapons. The most obvious scenario for Israel to use nuclear weapons would be in response to a foreign nuclear attack. Israel’s missile defenses, air defenses, and delivery systems are far too sophisticated to imagine a scenario in which any country other than one of the major nuclear powers could manage a disarming first strike. Consequently, any attacker is certain to endure massive retaliation, in short order. Israel’s goals would be to destroy the military capacity of the enemy (let’s say Iran, for sake of discussion) and also send a message that any nuclear attack against Israel would be met with catastrophic, unimaginable retaliation. But why might Israel start a nuclear war? Nuclear Pre-emption 10 SECONDS Do You Know What Happened Today In History? If a hostile power (let’s say Iran, for sake of discussion) appeared to be on the **verge of mating nuclear devices** with the systems needed to deliver them, Israel might well consider a **preventive nuclear attack**. In the case of Iran, we can imagine scenarios in which Israeli planners would no longer deem a **conventional attack** sufficiently **lethal** to destroy or delay the Iranian program. In such a scenario, and absent direct intervention from the United States, Israel might well decide to undertake a limited nuclear attack against Iranian facilities. Given that Iran lacks significant ballistic missile defenses, Israel would most likely deliver the nuclear weapons with its Jericho III intermediate range ballistic missiles. Israel would likely limit its attacks to targets specifically linked with the Iranian nuclear program, and sufficiently away from civilian areas. Conceivably, since it would be breaking the nuclear taboo anyway, Israel might target other military facilities and bases for attack, but it is likely that the Israeli government would want to limit the precedent for using nuclear weapons as much as possible. Would it work? Nuclear weapons would deal more damage than most imaginable conventional attacks, and would also convey a level of seriousness that might take even the Iranians aback. On the other hand, the **active use** of **nuclear weapons** by Israel would probably **heighten the interest** of everyone in the region (and potentially **across the world**) to develop their own nuclear arsenals. Nuclear Transfer One of Israel’s biggest concerns is the idea that **a nuclear power** (Iran, Pakistan, or North Korea, presumably) might give or sell a nuclear weapon to a non-governmental organization (NGO). Hamas, Hezbollah, or some other terrorist group would be harder to deter than a traditional nation-state. Even if a terrorist organization **did not** immediately use the weapon against an Israeli target, it could potentially extract concessions that Israel would be unwilling to make. In such a scenario, Israel might well consider **using nuclear weapons** in order to forestall a **transfer**, or destroy **the enemy nuclear device** after delivery. This would depend on access to excellent intelligence about the transfer of the device, but it is hardly impossible that the highly professional and operationally competent Israeli intelligence services could provide such data. Why go nuclear? The biggest reason would be to ensure the success of the strike; both the device itself and the people handling the device would be important targets, and a nuclear attack would ensure their destruction more effectively than even a massive conventional strike (which might well accompany the nuclear attack). Moreover, committing to the most extreme use forms of the use of force might well deter both the NGO and the originating state (not to mention any states that facilitated transfer through their borders; hello, Syria!) from attempting another transfer. However, the active use of nuclear weapons against a non-state actor might look to the world like overkill, and could reaffirm the interest of the source of the nuclear device in causing more problems for Israel. Conventional Defeat The idea that Israel might lose a conventional war seems ridiculous now, but the **origins** of the Israeli nuclear program lay in the **fear** that the Arab states would **develop a decisive military advantage** that they could use to inflict battlefield defeats. This came close to happening during the 1973 Yom Kippur War, as the Egyptian Army seized the Suez Canal and the Syrian Arab Army advanced into the Golan Heights. Accounts on how seriously Israel debated using nukes during that war remain murky, but there is no question that Israel could consider using its most powerful weapons if the conventional balance tipped decisively out of its favor. How might that happen? We can imagine a few scenarios, most of which involve an increase in hostility between Israel and its more tolerant neighbors. Another revolution in Egypt could easily rewrite the security equation on Israel’s southern border; while the friendship of Saudi Arabia seems secure, political instability could change that; even Turkish policy might shift in a **negative direction**. Israel currently has overwhelming conventional military advantages, but these advantages depend to some extent on a favorable regional strategic environment. Political shifts could leave Israel diplomatically isolated, and vulnerable once again to conventional attack. In such a situation, nuclear weapons would remain part of the toolkit for ensuring the survival of the nation. Conclusion It is unlikely, but hardly impossible, that Israel could decide to use nuclear weapons first in a future conflict. The best way to prevent this from happening is to limit the reasons why Israel might want to use these weapons, which is to say preventing the further proliferation of nukes. If Israel ever does use nuclear weapons in anger, it will rewrite the diplomatic and security architecture of the Middle East, and also the nonproliferation architecture of the world as a whole.

#### Trump is likely to resort to a nuclear solution first – that escalates Iran beyond repair and sets a first use precedent.

Mosher 1-7 (Dave Mosher; As a senior correspondent at Business Insider, he tells those tales with a conversational approach using text, photography, data, graphics, video, and whatever else makes sense. Prior to joining Business Insider in April 2015, Mosher served as the online director of Popular Science. He’s also a former Wired contributor and has written for Scientific American, Popular Mechanics, Discover, Space.com, National Geographic News, Discovery.com, Nature, Science, Health News Review, and other outlets and projects.; 1-7-2020; "Trump's unpredictability is making nuclear-nonproliferation advocates nervous as the US takes an aggressive posture against Iran"; https://www.businessinsider.com/trump-iran-attack-tactical-nuclear-weapons-war-consequences-2020-1, Business Insider, accessed 1-15-2020; JPark)

If there's one thing that anyone can agree on about President Donald Trump, it's that he excels at doing what is not normal or expected in politics. Now, after the assassination on Thursday of Iranian Maj. Gen. Qassem Soleimani, it's clear this same penchant applies to Trump's military decision-making as well. Soleimani was no angel: He's helped organize, train, and fund anti-western militia groups, provided militants in Iraq with roadside bomb technologies that have killed hundreds of troops over the past 15 years, and carried out other paramilitary actions in an ongoing "shadow war" with the US and its allies. But Trump's escalatory decision to kill the figurehead, as well as his ongoing threats on Twitter toward Iran, concerns experts who research nuclear weapons as they relate to military strategy, law, ethics, and geopolitics. Primarily, they are concerned about the remote but real possibility that tensions could escalate to the point that Trump pulls a card that Iran can't: using a new line of **"tactical" nuclear weapons** to strike a large or subterranean target. Though there have been decades' worth of test explosions, nuclear weapons were first and last used in combat against Japan on the cities of Hiroshima and Nagasaki in 1945. "In any other circumstance, I would have argued that the norm against using nuclear weapons is so strong there's no chance that a president would use a nuclear weapon," Jeffrey Lewis, a professor at the Middlebury Institute of International Studies at Monterey who studies nuclear arms control, told Business Insider. "At the end of the day, though, it's just a norm. And this president **delights in smashing norms**." Joining Lewis is Scott Sagan, a professor of political science at Stanford University who specializes in the study of US nuclear weapons. "I think we should never engage in the use of force without thinking of the long-term consequences. Killing a senior commander of a foreign country has put us in a quasi-war with Iran," Sagan told Business Insider. "How to end escalation is a very important thing to contemplate now." Sagan added: "It's not time to lose sleep over nuclear-weapons use here, but it's not too soon to be talking about that possibility and how that works against US interests in any plausible circumstance." William J. Perry, who was President Bill Clinton's secretary of defense, is advocating for more urgency about the situation. "Anyone who ever doubted that miscommunication could escalate a situation as far as triggering an accidental nuclear war need only to look at the chaos currently on display before a war has even begun," Perry tweeted on Monday. "The digital era does not safeguard us from human error." Trump is daring Iran to escalate, and it probably will Protesters demonstrate over the U.S. airstrike in Iraq that killed Iranian Revolutionary Guard Gen. Qassem Soleimani in Tehran, Iran, Saturday Jan. 4, 2020. Iran has vowed "**harsh retaliation**" for the U.S. airstrike near Baghdad's airport that killed Tehran's top general and the architect of its interventions across the Middle East, as tensions soared in the wake of the targeted killing. (AP Photo/Ebrahim Noroozi) People protesting the US airstrike in Iraq that killed Iranian Maj. Gen. Qassem Soleimani. Associated Press After an American contractor was killed and several US service members were injured in a rocket attack on a military base in Iraq in December that was carried out by Iranian-backed militants, US military leaders met with Trump to offer choices of retaliation. According to The New York Times, US military leaders presented Soleimani's death on a "menu" of responses, though as an "extreme" choice they didn't think he'd actually pick. Trump chose to strike back at the groups responsible for the attack, killing about two dozen fighters and hitting several facilities. But after the storming of the US Embassy in Iraq by Iranian-backed protesters, Trump ordered **Soleimani's killing** without **notifying Congress** — to the shock of Pentagon leaders, prompting condemnation from the rest of the world and even the disapproval of the Fox News host Tucker Carlson. Late Thursday, a US drone strike killed Soleimani and several others in a car outside Baghdad International Airport. b61 12 nuclear gravity bomb 6 nnsa A Sandia National Laboratories mechanical engineer adjusts a microphone for an acoustic test of a B61-12 nuclear-bomb system. Sandia Labs/Randy Montoya Iranian officials have vowed to respond to the killing, possibly with a devastating cyberattack to start. But Iran's influence and physical reach stretches well outside the Middle East today, and a more overt attack against the US — Iran is skilled at truck bombings and kidnapping schemes — is within the realm of possibility. In kind, Trump has ratcheted up aggressive rhetoric on Twitter. The president said he might not only attack Iranian cultural sites in response — which could be a war crime, according to the United Nations — but retaliate "in a disproportionate manner." Trump made these comments atop years' worth of others that have alarmed those concerned with the proliferation and use of nuclear weapons. In 2016, for example, Trump asked a foreign-policy expert three times why the US couldn't use nuclear weapons in combat, according to CNBC. Shortly after his election, he also egged on a nuclear-arms race, according to MSNBC. He also threatened to "totally destroy" North Korea if the country attacked the US or its allies. These and other fresh windows into Trump's attitudes toward nukes — which follow and appear to transcend vows he made during his campaign to avoid using nuclear weapons — come as the US is in the middle of a $**1.7 trillion** program to **modernize** its nuclear arsenal. Part of that effort includes creating "**dial-a-yield**" weapons, like the now-deployed B61-12 bomb. They're so-named because they can be programmed to create "tactical" explosions about 2% as powerful as those made by US bombs dropped on Japan in World War II all the way up to "strategic" blasts about 20 times as powerful as WWII-era bombs. Lewis and Sagan both believe Trump is multiple steps removed from dropping the B61-12 or similar nukes on Iranian targets. But they do worry about Trump's track record, the evolved state of the American nuclear arsenal, and the fact that the president has the **authority** to order a US nuclear-weapons strike **at any time** — a power that, in most cases, not even the **highest** career military commanders or cabinet members could stop him from asking for and using. "I don't think it's too soon to be thinking about this as a possibility, though it is remote," Lewis said. He argues that assuming Iran wouldn't dare escalate the situation because the US is too powerful is not only dangerous, but even tinged with racism (just as with US miscalculation of Japan in World War II). "The idea that they could attack us here was a reality that Americans couldn't accept until it happened," Lewis said, adding 9/11 as another example. 'Normal people are shockingly supportive of using nuclear weapons' nuclear weapons b61 11 bunker buster b2 bomber stealth aircraft reuters RTXHYF7 A B-2 Spirit bomber dropping a B61-11 bomb casing during an exercise. Reuters/Department of Defense Another aspect that concerns experts about the possibility of a nuclear strike by Trump is how intently the president responds to his **base**, as well as what that slice of America thinks about the use of such weapons. In 2017, Sagan and others studied the American public's support for a nuclear strike versus a conventional airstrike against Iranian targets. They hypothesized that though US support for bombing Japan waned from 86% in 1945 to 46% in 2015, public sentiment would be different toward a contemporary adversary. Nagasaki nuclear weapon The devastation after an atomic bomb exploded over Nagasaki, Japan, on August 9, 1945. Associated Press So they presented hundreds of people with several scenarios, such as using a conventional or nuclear airstrike against an Iranian city that would kill 100,000 civilians in Iran but save 20,000 US troops, or a nuclear airstrike that'd kill 2 million Iranian noncombatants and save the same number of troops. They found that while about 67% of respondents preferred a conventional attack, nearly 60% of people would **approve of a nuclear strike**. More than half of the respondents didn't just approve of a nuclear strike but actually preferred it. Put another way, according to Sagan and his colleagues: "Protecting the lives of US troops was a higher priority than preventing the use of a nuclear weapon or avoiding the large-scale conventional bombing of an Iranian city." "We were shocked by that finding," Sagan said. Lewis saw the results in a particular way. "Nobody wants to bomb the Japanese anymore. If we use the Iranians, people get back to being OK with mass killings," Lewis said. "Normal people are shockingly supportive of using nuclear weapons — and for revenge. It's like the death penalty. They'd be willing to use nuclear weapons and kill large numbers of people as an act of revenge." Sagan said more recent surveys with similar questions yielded lower overall support for the use of nukes but not by much. What's more, the results suggest that decrease is tied to political preferences — and Trump's base, who he strives to please, is fl reliably hawkish. "In 2015, 50% of Democrats and 66% of Republicans said they would prefer the nuclear strike (presumably ordered by President Obama) in the baseline condition," Sagan wrote in an email. "In 2019, however, only 32% of Democrats supported the strike, while 68% of Republicans did." The possible consequences of a 'small' nuclear strike donald trump shrug Donald Trump. Win McNamee Assuming tensions between the US and Iran continue to grow, Sagan and Lewis believe US military leadership would strongly encourage restraint, even if Trump pushed for a nuclear option. "The legal ethics are that you should respond proportionately and not kill more noncombatants than is necessary — try to reduce collateral damage unless destroying the target is really, really important," Sagan said. "I think the US military is the voice of reason in this administration. And that's disturbing because in the past, they haven't been the voice of reason." Lewis agreed with that sentiment, adding that the US military also wants to avoid breaking the historic norm of nonuse of nuclear weapons. However, he said "they have left loopholes in the rules of conflict big enough to fly a B-2 bomber through." "They can do pretty much anything they want," Lewis said. "A civilian airport is a legitimate military target because it might be used for military operations." If **there were retaliations** between the US and Iran, and they continued to escalate — to the point that an attack resulted in the significant loss of American lives — tactical nuke advocates within Trump's orbit could dominate the president's ear. "Unfortunately, there are some people who argue that what you should do is escalate: to shock somebody to ending the war. I hope there's nobody in the administration who holds such beliefs. But they're not uncommon among specialists," Sagan said. "I hope the US military advisers are being very careful in the interpretation of our laws of armed conflict to ensure their actions fit within the legal framework that the US military has adopted." trump burning iran Trump has ratcheted up his rhetoric toward Iran. (Photo by Majid Saeedi/Getty Images) If Trump were to order a nuclear strike in a war, breaking a vital 75-year tradition of not using such weapons of mass destruction, the results would be deeply consequential, unpredictable, and global. The consequences would also last long after any **US-Iran war** settled down. "If you believe the nonuse of nuclear weapons is due to some ethical taboo, and that taboo is broken, it can create a revulsion: It's violated," Sagan said. In this scenario, he added, a nuclear strike might inspire a stronger push to ban their use outright. Then there is the deterrence view, which Sagan more firmly buys into based on his research: Not using nukes in combat is more about keeping intact one of society's most important traditions and not setting a dangerous precedent for the future. "If we use them, then I think that tradition is broken. It's more likely nuclear weapons will be used against the United States or its allies," Sagan said. "That's what I worry about: that other states will try to obtain nuclear weapons, and they will eventually use them, and not as precedent — because that precedent will already have been set by the US." Lewis agreed, saying "all bets are off" if the US or one of its allies performs even a limited nuclear strike against military targets. Russia, India, Pakistan, Israel, and other nuclear-armed nations may find it easier to follow suit in armed conflict, despite the potentially planet-altering consequences. "The first use is the hardest. Each subsequent use gets easier," Lewis said. "It's possible people around the world will get together to ban these things. But I think the reality is that we'd see nuclear weapons used not on a frequent basis, but on a more regular basis."

#### \*\*\*starr if not reading already\*\*\*

#### Independent of nuclear weapons, war causes extinction – WMDs ensure Bioweapon response

Stirling ‘11[Earl of Stirling, Governor & Lord Lieutenant of Canada, Lord High Admiral of Nova Scotia, & B.Sc. in Pol. Sc. & History, M.A. in European Studies, “General Middle East War Nears - Syrian events more dangerous than even nuclear nightmare in Japan,” March, 2011, http://europebusines.blogspot.com/2011/03/general-middle-east-war-nears-syrian.html]

Any Third Lebanon War/General Middle East War is apt to involve WMD on both side quickly as both sides know the stakes and that the Israelis are determined to end, once and for all, any Iranian opposition to a 'Greater Israel' domination of the entire Middle East. It will be a case of 'use your WMD or lose them' to enemy strikes. Any massive WMD usage against Israel will result in the usage of Israeli thermonuclear warheads against Arab and Persian populations centers in large parts of the Middle East, with the resulting spread of radioactive fallout over large parts of the Northern Hemisphere. However, the first use of nukes is apt to be lower yield warheads directed against Iranian underground facilities including both nuclear sites and governmental command and control and leadership bunkers, with some limited strikes also likely early-on in Syrian territory. The Iranians are well prepared to launch a global Advanced Biological Warfare terrorism based strike against not only Israel and American and allied forces in the Middle East but also against the American, Canadian, British, French, German, Italian, etc., homelands. This will utilize DNA recombination based genetically engineered 'super **killer viruses'** that are designed to spread themselves throughout the world using humans as vectors. There are very few defenses against such warfare, other than total quarantine of the population until all of the different man-made viruses (and there could be dozens or even over a hundred different viruses released at the same time) have 'burned themselves out'. This could **kill a third of the world's total population**. Such a result from an Israeli triggered war would almost certainly cause a Russian-Chinese response that would eventually finish off what is left of Israel and begin a truly global war/WWIII with multiple war theaters around the world. It is highly unlikely that a Third World War, fought with 21st Century weaponry will be anything but the Biblical Armageddon.

### 1AC---China [Unbroken]

#### China is offensive realist – clash is inevitable and war happens.

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Introduction China is still growing. So what? The answer is unclear. Many international relations scholars have debated the effect of China's growing power on international relations at least since the 1990s. 2 On one hand, offensive realists see rising China as a main cause of global instability in the 21st century. 3 Since the end of the Cold War, the United States has made efforts to consolidate its own unipolar system and has been concerned with preventing anti‐US coalition‐building by other major powers. Despite the relative lack of visible balancing behaviors against Washington, offensive realists still argue that the unipolar system will face serious challenges, or perhaps even be replaced, due to the actions of major powers such as China. 4 Looking through this lens, we can predict that the rising dragon will be a revisionist challenger and may even be willing to risk conflict with the status-quo hegemon. Because all states seek security through power maximization, China can be expected to clash with the United States over hegemony in Asia. Although Chinese officials currently say that they seek not hegemony but coexistence, offensive realists insist that this preference is not fixed but will evolve along with China's capability. However, some interpreters disagree with the realists’ gloomy vision, instead emphasizing common interests, global institutions, and domestic constraints. 5 China's rapid growth makes itself open to and dependent on the global economy. Major powers and Asian neighbors seek to exploit China's rise as an economic opportunity for production, sales, and investment. Accordingly, Beijing today has much more extensive shared interests with other major powers than did Berlin before World Wars I and II or Moscow during the Cold War. In addition, we have seen the creation of an increasing number of inter‐governmental or trans‐governmental organizations through which states monitor each other and punish rule‐breakers. The liberalist/institutionalist view leads us to expect that China's growth will deepen Asia's economic interdependence, thereby increasing international stability and regional integration. According to this perspective, we should be worrying not about China's rise but about fear of the rise. Who is right: the offensive realists or their critics? Given that China is expected to continue growing and eventually equal the United States in terms of the size of its economy, will we also see China become internationally more aggressive? The purpose of this study is to compare two views of China's growth and aggression and test them rigorously. By examining China's military aggression in the post‐Mao period, we argue that China has become more aggressive as it has gained greater economic capability. In particular, China has become more hostile to its opponents in territorial disputes. This finding provides some support for the offensive realists’ position that greater China will be more aggressive. In the rest of this paper, we first focus on four factors related to China's foreign and military policies – current power itself, power growth rate, whether other countries have alliances with the United States, and the existence of territorial disputes – and develop four hypotheses. We then conduct a logit analysis of China's military behaviors to test the hypotheses and report its results. Lastly, we summarize the findings, discuss possible objections, and suggest topics for further study. China's Rise and Asian Security Offensive Realists and Their Critics China's economic growth has attracted much attention. Is it a threat? Some scholars and pundits have argued that China's assertive foreign policies are aimed at revising the US‐led international order. In the wake of the 2008 global financial crisis, China seemed to expand its sphere of influence, risking confrontations with major and neighboring states. Beijing responded to the recent International Tribunal's judgment on the South China Sea dispute by saying that it “does not accept or recognize” the decision, which is “invalid and has no binding force.” 6 Is China prepared to risk military conflicts with Asian countries and the United States in its quest for expanded influence? To this question, offensive realists and their opponents offer two competing answers. According to offensive realists, China's increased capability has made and will make the country seek to achieve greater influence and revise the regional order. The offensive realists consider it natural and unsurprising that China has changed its foreign policy strategy from Taoguangyanghui, in which its primary goal was economic growth, to Yousuozuowei, or maximizing its own strategic and territorial interests; they further anticipate that China will not shy away from serious conflict with its neighbors and even with the United States. 7 From the perspective of offensive realism, all states are revisionists or potential revisionists because they seek regional hegemony in order to survive in an international anarchy. 8 China is not an exception to this rule but wants to do what it can, not what it must. So if China continues to grow, it will inevitably desire more power rather than restraining itself. But other experts disagree with offensive realists, arguing that China's rise does not require a new regional order. Although China now has the second largest economy, its GDP per capita is far behind that of major states, and its social ills, such as inequality and corruption, are still severe. 9 Accordingly, China is more likely to focus on its internal problems, to prefer exploiting rather than attempting to replace the current international order, and to seek cooperative rather than conflictual policies toward the United States, a global hegemon. 10 Indeed, little evidence exists for China's assertiveness. 11 Some argue that, because China's policies are simply interest‐oriented, Beijing cannot be regarded at this time as assertive or revisionist. Although Beijing sometimes cannot avoid conflict with Washington, it keeps suggesting diplomatic solutions for the conflicts that arise, rather than escalating them through military options or harsh provocations. 12 Nevertheless, China has had more troubles and crises with its neighbors and with the United States during the last decade. How can we explain this? The clashes might result from multiple factors. We aim to analyze whether China's growth or its strategic and territorial relationships have affected its behaviors. Indeed, war has been a common phenomenon in China's history. The country experienced about 3,700 internal or external wars from 1100 B.C. to 1911; the Ming dynasty waged an average of 1.12 wars per year with non‐Chinese powers; 13 and the People's Republic of China engaged in 118 military conflicts from 1949 to 1992. 14 However, it should be noted that more conflicts do not necessarily imply more aggression. China might be dragged into conflicts that were initiated by others. As a result, this study focuses on conflict initiation rather than conflict participation. In the following sections, we develop four hypotheses about China's growth and its initiation of military conflict and then conduct statistical analyses to test them. China's Growth and Military Conflict China's economic and military capabilities have grown rapidly during the last four decades. After taking off during the economic reforms of the late 1970s, its economy's real annual growth rate was around 10 percent from 1985 to 2010. Although a downturn occurred in the wake of the Tiananmen Square protest of 1989, the Chinese economy's subsequent rebound was much more significant than that of any other developing or developed state, as shown by the change in China's share of world GDP from 1.7 percent in 1992 to 14.8 percent in 2015. As a percentage of US GDP, China's GDP rose from 17.3 percent in 2005 to 60.5 percent in 2015. 15 In 2014, China's purchasing power parity–based GDP, at 18,082bn,surpassedthatoftheUnitedStates(18,082bn,surpassedthatoftheUnitedStates(17,348bn), although China remains second in nominal GDP. Moreover, China's economic sphere is expanding through the internationalization of its currency (the renminbi) and the initiation of China‐centered economic integration, such as Yidai Yiru (One Belt, One Road). China's military power is also growing with its economy. Its defense budget has increased by double‐digit rates since 1989 and is around $140bn according to the Chinese government's 2016 report. 16 However, many Western experts believe that China's real defense budget may be twice as large as the official one, which includes only expenditures for military equipment, training, and personnel expenses, but not those on research and development, high‐tech weapons, and other investments. For example, the Stockholm International Peace Research Institute estimates China's 2015 military spending at $214.79bn. 17 Indeed, China has made considerable investments in high‐tech weapons and military modernization and has achieved some progress in intercontinental ballistic missiles, nuclear submarines, aircraft carriers, and intelligence, surveillance, target acquisition, and reconnaissance (ISTAR). 18 In response, worries about China's rise have emerged among its neighbors and the United States. Especially since the 2008 global financial crisis, many pundits and scholars have described Beijing's economic and military policies as revisionist and as pursuing its own interests and preferences, even at the risk of conflict with the United States. 19 In the wake of the financial crisis, Wen Jiabao, then China's premier, criticized the US‐led financial system as an “unsustainable model of development, characterized by prolonged low savings and high consumption,” 20 and Zhou Xiaochuan, then governor of the People's Bank of China, proposed replacing the US dollar as an international reserve currency. 21 In 2010, China carried out a military exercise in response to the South Korea–US joint military drill after North Korea's sinking of the South Korean warship, Cheonan, stopped the shipment of rare earth elements and minerals to Japan during the increasing tension over the Diaoyu or Senkaku Islands, and threatened to sanction American companies responsible for producing arms that the United States was selling to Taiwan. Increasingly, observers characterize China's foreign policy behaviors as assertive in nature and consistent with its aim to reestablish Sino–US relations in accordance with China's growing power and status. 22 Actually, serious discussion among Chinese scholars regarding the need for a strong military and the inevitability of revisionist foreign policy began as China was still en route to becoming a great power. 23 The advent of Xi Jinping has exacerbated concerns about China's rise. In his acceptance speech upon becoming the Chinese communist party's general secretary, Xi stressed “the great rejuvenation of the Chinese nation,” evidencing a desire to overcome the nation's “history of humiliation” since the Opium War and to recover its prestige and glory. 24 As part of his vision of foreign relations, President Xi suggested Xinxing Daguo Guanxi (New Model of Major Power Relationships), emphasizing Sino–US cooperation and coexistence with recognition of core interests. This approach suggests an interest in reshaping, rather than simply participating in, an international order mainly led by the United States. China's emerging assertiveness was well represented in Yazhou Xin Anquanguan (New Asian Security Concept), introduced by President Xi's address at the 2014 Conference for Interaction and Confidence‐Building Measures in Asia, which asserted the need for Asian states to take responsibility for their own security. 25 New developments in China's military strategy are also notable. Recently, Beijing has strengthened its anti‐access/area denial (A2/AD) strategy in order to protect its core interests, including Taiwan, from interference by external forces, such as the United States. More specifically, the A2/AD entails changes in military plans and strategies for air, maritime, submarine, space, and cyber warfare. For example, the People's Liberation Army Air Force (PLAAF) has decided to develop long-range mission capabilities and high-tech equipment, such as anti-satellite weapons. 26 The People's Liberation Army Navy (PLAN) aims to expand its scope of influence from the first island chain, connecting Okinawa, Taiwan, and the Philippines, to the second island chain, connecting Guam and Saipan. In this regard, PLAN has declared a territorial sea baseline and air defense identification zone (ADIZ), has conducted regular patrols of the Diaoyu/Senkaku Islands, and has constructed artificial islands in the South China Sea, among other activities. Such military expansions present challenges to the US-led regional order that has existed in Asia since the end of World War II. Thus, it is worthwhile to test whether and how China's power affects its aggression. We measure China's power in terms of both its current status and its growth rate. Although many realists do not distinguish between current power and power growth in predicting China's foreign behaviors, we can pose two different hypotheses involving power and aggression, as follows: Hypothesis 1a.(H1a) (Current power): As China's power increases, the country becomes more aggressive toward others. Hypothesis 1b.(H1b) (Power growth): As China's power growth rate increases, the country becomes more aggressive toward others. China's Growth and Regional Stability Another important question concerns China's potential targets. Even if we accept the premise that a stronger China will be more aggressive, we do not expect that all states will be China's military opponents. Due to their conflictual issues with the anti‐status quo major power, some Asian states are more likely targets. Surrounded by 15 countries on a 22,000‐km land border and by six countries on an 18,000‐km maritime border, a revisionist China cannot avoid conflicts with neighbors or major powers, including the United States, Russia, Japan, and India, but can be expected to adopt differentiated policies toward these countries. Beijing will prefer to bring some states into its own orbit and to expand the China‐led order against others that are unwilling to accommodate its core interests. Which states will experience conflict with a strong China? We suggest two primary factors that will affect China's aggression: (i) alliance with the United States; and (ii) territorial disputes. First, there is little doubt that to become a regional hegemon, China must seriously weaken the US-led regional alliance network. The United States has increasingly strengthened its military and economic policy of restraining, if not containing, China, at least since the late 1990s when China began to increase its regional influence in the wake of the Asian financial crisis and stressed its interests on the issues of Taiwan and the South and East China Seas. Spurred by the perception of the “China threat,” 27 Washington has sought to consolidate and expand its hub‐and‐spoke alliance system. It has ratified the 1997 US–Japan defense guidelines and has supported Japan's efforts to become a normal military power, institutionalized trilateral relationships in the region (Korea–US–Japan and US–Japan–Australia), reestablished the US–Philippine alliance through its presence at military bases and its joint exercises in the South China Sea, and deepened strategic and military relationships with its non‐allies in Asia, such as Vietnam and Indonesia. Also, Washington aims to institutionalize its own Asia–Pacific economic order through the Trans‐Pacific Partnership and multilateral institutions, such as the East Asia Summit (EAS) and APEC. To prevent Beijing's rise as an economic hegemon, Washington is adapting its liberal economic order and making other countries “play the rules that America and our partners set, and not the other way around.” 28 Amidst the United States’ pivot toward Asia, China has also pursued expansion in the economic and military spheres, sometimes risking conflict with US allies. Most strikingly, it is playing a leading and crucial role in multilateral institutions, such as the Regional Comprehensive Economic Partnership, the Shanghai Cooperation Organization, and the Asia Infrastructure Investment Bank. Strategically, Beijing's moves are designed to assure Asian states of its willingness and capabilities as a major power and to weaken the encircling net led by the United States. Indeed, China has made efforts toward military revolution and conventional buildup, extending its operational area to the Indian and western Pacific Oceans and maintaining its military superiority against Taiwan despite the Cross‐Strait economic interdependence. However, Asian states have tended to gravitate toward the US network even though they benefit from their economic ties with China. Rather than simply bandwagoning with the new regional power, they are trying to maintain a balance between the two great powers or play along with the long‐time external balancer without harming their security and economic interests. This means that without weakening US influence in Asia, China cannot become a leading state, but only a major partner of the dominant power. This is why Beijing has begun to harshly respond to US allies – Japan, the Philippines, and South Korea – on issues of territorial sovereignty and missile defense systems, repeatedly asserting its own prerogatives. Another factor in China's military aggression is its core interests. Since the 2008 global financial crisis, China has increasingly emphasized Hexin Liyi (core interests) as represented in the increasing frequency of this term's occurrence in People's Daily, the official paper of the Chinese Communist Party, rising from three uses in 2003 to 95 in 2008 and 325 in 2010. 29 At the first US–China Strategic and Economic Dialogue (2009), Dai Bingguo, then China's State Councilor, defined the core interests as: (i) its fundamental systems and national security; (ii) sovereignty and unification; and (iii) steady and stable development of its economy and society. 30 This description indicates a remarkable extension of the term's scope from its earlier definition, which focused mainly on Taiwan and Tibet. Although the precise meaning of Beijing's core interests is still debated, many agree that Beijing is less likely to acquiesce on issues of territorial sovereignty than to confront its territorial opponents. In fact, China's stance on territorial issues has strengthened since its emphatic declaration of its core interests. The recent response by Beijing to the International Tribunal's judgment favoring the Philippines shows the rising power's stubbornness in cases of territorial disputes. 31 While Beijing occasionally had military conflicts even with major powers, such as the Soviet Union and India, during the Cold War, 32 it became more aggressive toward its neighbors on territorial issues. In the 2010 Diaoyu/Senkaku crisis with Japan, China broke the principle of joint development (Gezhi Zhengyi Gongtong Kaifa; Lay the Disputes aside and Exploit Together). It not only carried out diplomatic offensives and encouraged anti‐Japan demonstrations but also stopped exporting rare earth elements, declared the ADIZ, and held military displays, arousing fears regarding a possible clash between the historical regional rivals. In the 2012 dispute with Manila over Scarborough Shoal (Huangyandao), Beijing refrained tourists from visiting the Philippines and strengthened its quarantine of agricultural products. While affirming that it opposes “the bullying of small countries by big countries,” China also insisted that “small countries should not make unreasonable demands” 33 and has escalated its confrontations with Southeast Asian countries and the United States in the South China Sea. 34 In addition, there is a high likelihood that China will have border conflicts with India, Vietnam, and Myanmar. In some cases, China's border issues have been resolved peacefully. 35 But its current emphasis on territorial sovereignty could affect its approach to future border conflicts by making it harder for China to back down in a territorial crisis. Accordingly, it is worthwhile to examine whether China has become more aggressive toward US allies or toward its opponents in territorial disputes. We argue that Beijing has made and will make efforts to weaken the US‐centered alliance system and to protect its core interests. This argument can be tested by considering the following hypotheses: Hypothesis 2a.(H2a) (US alliance): China is more aggressive toward US allies than toward others. Hypothesis 2b.(H2b) (Territorial disputes): China is more aggressive toward its opponents in territorial disputes than toward others. Empirical Analysis Research Design How do we know whether China's growing power changes its behavior in the foreign policy realm? To test the above hypotheses, we examine China's practice of initiating militarized conflicts with Asian states and major powers after the death of Mao Zedong, when it began to reemerge. 36 Many international relations scholars have studied the initiation of military conflict to examine whether, when, and how states are aggressive, although some have observed that conflict initiation can occasionally be a response to others’ aggressive intention or a strategy chosen to prevent future aggressions. Using the Militarized Interstate Disputes dataset, which provides information on four types of military action (military threat, military display, use of force, and war), 37 we measure the dependent variable: China's first military action against a particular state in a given year (yes coded 1, otherwise 0). The dataset contains 55 initiations of militarized conflict by China against Asian and major countries: 22 from 1976 to 1989 and 33 from 1990 to 2001. The independent variables are: (i) China's general or economic power; (ii) China's growth in general or economic power; (iii) alliance with the United States; and (iv) territorial issues with China. China's general power is measured by using the six variables of the Correlates of War's (COW) National Material Capabilities dataset: military expenditures, military personnel, energy consumption, iron and steel production, total population, and urban population, whereas China's economic power is measured with the two specifically economic variables in the dataset, energy consumption and iron and steel production. China's power growth was calculated by subtracting the power score in year (t–5) from that in year (t–1) and then dividing it by the power score in year (t‐5). These variables of China's power and its growth are measured relative to all states as well as to Asian states. There is a 1‐year time lag between the power‐related variables and the dependent variable in order to reduce concerns about reverse causality. Figures 1 and 2 illustrate China's general and economic power relative to all states and to Asian states, respectively. In both comparisons, China's economic power has risen more markedly since the 1970s than its general power. Despite an increase since the late 1960s, China's general power relative to Asian neighbors did not fully regain its 1960 level until the 2000s. The second independent variable refers to whether China and its neighbor had an ongoing territorial issue in a given year. For this, we have used the Issue Correlates of War (ICOW) dataset v1.1, which provides information on territorial claims, river claims, and maritime claims between two states. 38 This variable was coded as 1 if a territorial issue existed and as 0 otherwise. The third independent variable concerns whether an Asian state was allied with the United States. Relying on the COW's Formal Alliance v4.1, 39 we code the variable as 1 if there was a defense pact and as 0 if not. Since multiple factors affect conflict initiation, four control variables are included in the model. We do not argue that China's overall power and territorial disputes and its relationship with the United States are the only factors that affect its military aggression. We have also taken into account dyad‐level factors related to military, economic, and geographic relations between China and its potential target. The first is China's power relative to its potential target. Using the COW's National Material Capability dataset, we divided China's Composite Index of National Capability (CINC) score by the sum of China's and its potential target's CINC scores in a given year. We expect that China is more likely to initiate a conflict when its relative power is greater because its expected cost and risk are lower. Next, we measure economic dependence by dividing a potential target's dependence on China by China's dependence on the potential target, using the COW's Bilateral Trade dataset v.3.0. 40 State A's dependence on state B is quantified as the bilateral trade share of state A's total trade. We can expect that when a potential target is economically more dependent on China, it is more likely to become a military target due to its greater sensitivity and vulnerability to the rising dragon. Also, we controlled for how China and its potential target shared a land or water border (coded as 1 if land border, 2 if 1–12 miles of water, 3 if 13–24 miles of water, 4 if 25–150 miles of water, 5 if 151–400 miles of water, or 6 if otherwise) and the distance in miles between Beijing and the potential target's capital. Having a common border and a shorter distance between capitals should contribute positively to conflict initiation. As Carter and Signorino suggest for statistical analyses of binary dependent variables with cross‐national time series datasets, 41 the number of non‐conflict years (Peace Years), its square, and its cube are included in the statistical model, but they are not included in Table 2 to save space. The descriptive statistics are provided in Table 1. We conduct logit analyses of China's initiation of military conflict from 1976 to 2001 (Table 2: Models 1 & 3) but also rare event logit analyses because the binary dependent variable is heavily skewed to zero (Table 2: Models 2 & 4). Generally speaking, the results of the statistical analyses provide strong support for the hypotheses about economic power itself and territorial disputes (H1a, H2b) and weak support for those regarding economic power growth and US alliance (H1b, H2a) (see Table 2). 42 As China's economic power grows, whether it is assessed relative to all states or only Asian states, its likelihood of initiating conflict increases in a statistically significant way (H1a). As offensive realists argue, China's economic power had a positive effect on its foreign aggression during the period from 1976 to 2001 (Models 1, 2, 3, 4). China's economic power growth rate also shows a positive but insignificant effect on conflict initiation when measured relative to all states (Models 1 & 2). But the effect of rapid growth on conflict initiation becomes negative, not positive, and negative in the model when China's power is measured relative to Asian states (Models 3 & 4). This means that when China was rising rapidly compared to its regional neighbors, it was less aggressive toward Asian neighbors and major powers. In support of H2b, the effect of territorial disputes on conflict initiation is positive and significant in Models 1, 2, 3, and 4. Not surprisingly, China was more prone to using military options against its opponents in territorial disputes than against other nations. Many international relations scholars argue that territory is a major reason why states fight each other, because it cannot be easily divided and often possesses symbolic and religious meanings. 48 China and its opponents are not an exception to this rule. However, in contrast to H2a, China was not more aggressive toward US allies than toward other countries. Whether its opponent had a defense pact with the United States did not affect China's decision to initiate military conflict. This implies that China did not seek a direct military confrontation with the United States during the period from 1976 to 2001. Because this finding is about China's behaviors during the second half of the 20th century, however, it does not directly contradict the offensive realists’ expectation that China will challenge the United States in the future when the two nations are equal in power, at least in East Asia. Among the four control variables, Distance has a significant effect on conflict initiation in Models 1 and 3. However, the other three variables – Relative Power, Economic Dependence, and Contiguity – do not affect China's military aggression in a statistically significant way. Next, we illustrate the prediction of China's initiation of military conflict against a non‐US ally. 49 As China's share of global economic power changes from 0.05 to 0.35, its probability of conflict initiation against a territorial dispute opponent increases from 0.01 to 0.81, and its probability of conflict initiation against a non-territorial dispute opponent increases from 0.002 to 0.45 (see Fig. 3). Although this prediction derives from China's past military behaviors, we can draw two implications: (i) China's economic power has some positive effects on its military aggression; and (ii) China's territorial dispute opponents are likely targets of the rising power. Summary and Implications Offensive realists are right: China's growth has destabilized regional stability in the post‐Mao period. Our statistical analysis of China's initiation of military conflict shows that its economic power has had significant and positive effects. In addition, China was more aggressive toward its territorial dispute opponents, although the United States’ Asian allies were no more likely to be military targets than other Asian states. In short, China's greater power made the country more assertive, rather than cooperative, toward Asian states and major powers. This leads us to expect that China will maintain its current uncompromising and firm position in the South and East China Seas if its economic rise continues. Also, China's growth will accelerate its resolute protection of core interests in strategic and economic matters. Two objections are possible to the argument presented here regarding China's growth and aggression. First, some may argue that a stronger China was dragged into more conflicts with foreign actors. China's rise to become a major power might not have changed its goals and strategies as much as it increased the emergence of conflict‐laden issues. As it is now connected more deeply and extensively with foreign actors, China will face more international issues, and some conflict will be unavoidable. However, as explained earlier, this study's dependent variable was not conflict involvement but conflict initiation. Of course, there have been some historical cases of over‐balancing, as seen in European countries before World War I. But this study shows that China has become more prone to conflict initiation as it has gained greater economic capability. Second, some may question the proposed relation between conflict initiation and regional stability. China might, for example, become more prone to low-intensity conflict but not to high-intensity conflict. According to this view, China's growth could increase some tensions but still not seriously destabilize regional stability. Whereas Germany's growth drove Europe into two world wars, China might not pursue the German route but might instead seek its own pathway to a peaceful rise. We agree that there is little probability of an all-out war between China and other major powers, but the absence of all-out war does not imply regional stability. Many international rivalries, such as those between the United States and the Soviet Union or between South and North Korea, have presented serious threats to the participants even though direct high‐intensity military conflicts have not occurred. Even low-intensity sources of conflict, such as military threat and military displays, can seriously harm regional stability, especially when they happen repeatedly.

#### Nuclear weapons are the lynchpin of Chinese hegemony – NFU is unreliable and can’t check.

Schneider '19 (Mark B. Schneider; Dr. Mark B. Schneider is a senior analyst at the National Institute for Public Policy and a former senior official in the Defense Department., ; 5-6-2019; "Nuclear Weapons In Chinese Military Strategy"; https://www.realcleardefense.com/articles/2019/05/06/nuclear\_weapons\_in\_chinese\_military\_strategy\_114393.html, National Institute For Public Policy, accessed 1-15-2020; JPark)

Nuclear Weapons and the Chinese Quest for Hegemony To establish hegemony in Asia, China is building an expanding nuclear force. China appears to see nuclear weapons as a critical tool in its quest for hegemony. The political role of China’s nuclear doctrine is to force its neighbors to acquiesce to China’s hegemony because they fear China’s military power and are uncertain about the U.S. extended nuclear deterrent. In the event of a conventional war is Asia, China expects its strategic and theater nuclear capabilities to deter a U.S. effort to defend Taiwan, Japan and its other Pacific allies from a Chinese attack. In short, China is attempting to exploit the U.S. and allied fear of nuclear war to support its goal of hegemony. China is concerned about U.S. conventional capabilities and sees Chinese nuclear weapons as a means of countering them. China would prefer to deter war with the United States or to defeat the U.S. with conventional weapons in the event of a conflict in Asia. But in the event of conflict, if China needs to employ nuclear weapons it will likely do so if the stakes are high.[i] As one Chinese general citing Mao stated, “As to whether we will use nuclear weapons first, the above principle can also be followed. If we have been repeatedly ‘attacked,’ then there should not be a limit for our counter-attack.”[ii] A number of Chinese generals have made nuclear first-use threats.[iii] The 2018 Nuclear Posture Review report pointed out, “no first use” remains Chinese declaratory policy, but “its lack of transparency regarding the scope and scale of its nuclear modernization program raises questions regarding its future intent.”[iv] The Japanese Kyodo News Agency reported that it has obtained classified Chinese documents which say that China “will adjust the nuclear threat policy if a nuclear missile-possessing country carries out a series of air strikes.”[v] China’s Maoist legacy is reflected in its 2004 military White Paper which said China will pay “any cost” to prevent the “independence” of Taiwan,[vi] implying nuclear war. Mao’s China belittled the consequences of nuclear warfare and saw nuclear war as survivable.[vii] Even after the death of Mao, Deng Xiaoping continued the Maoist line that, “It is impossible to exterminate the human race by using nuclear weapons.…More than two billion people would live on the globe just the same.”[viii] Since the 1980s, China’s nuclear doctrine has been evolving toward more emphasis on nuclear “counterforce and warfighting capabilities to deter conventional, theater, and strategic nuclear war, and to control and suppress escalation during a nuclear war.”[ix] In 1995, Professor Alastair Johnson wrote China has “a deeply rooted realpolitik world view that nuclear weapons buy soft power (international status and influence) and hard power (military operational power).”[x] Nuclear Weapons, “Active Defense” and China’s Goal of Hegemony According to China’s 2006 defense White Paper (which supposedly announced Chinese nuclear strategy[xi]), its strategy is called “active defense,” and included “nuclear counter attacks” and the “second Artillery Force [now the Strategic Missile Force]” which “aims at progressively improving its force structure of having both nuclear and conventional missiles, and raising its capabilities in strategic deterrence and conventional strike under conditions of informationization.”[xii] China appears to believe that limited nuclear strikes are an “assassin’s mace…to contain the enemy” because nuclear weapons can defeat the strongest conventional forces.[xiii] The 2019 Defense Intelligence Agency (DIA) report on “China Military Power” says China characterizes its “active defense” strategy “as strategically defensive but operationally offensive.”[xiv] Keep in mind that this is declaratory policy and China is not likely to admit that its strategy is “strategically offensive.” This report stated that “active defense” takes “advantage of longer range, precision-guided munitions (primarily ballistic and cruise missiles) to keep a potential enemy as far as possible from the economically fast-developing Chinese coastal areas by fighting a ‘noncontact,’ short, sharp conflict like the Persian Gulf War.”[i] China’s new dual capable missiles clearly have the capability to carry out these strikes if this is necessary. This could include strikes in support of offensive Chinese action. The 2019 DIA report also says that China’s depiction of its “active defense” strategy allows conduct of these strikes even if the adversary has not yet conducted offensive military operations.[ii] China’s Growing Nuclear Capability and Chinese Regional Hegemony China practices extreme secrecy with regard to its nuclear forces.[iii] In 1982, Mao’s successor, Deng Xiaoping, famously stated that China should “…hide our capabilities and bide our time.” China wants the world to believe that its nuclear strategy is defensive, that its forces are small and that they abide by a policy of no first use of nuclear weapons. Yet, according to the 2018 Nuclear Posture Review, “China, too, is modernizing and expanding its already considerable nuclear forces….China is pursuing entirely new nuclear capabilities tailored to achieve particular national security objectives while also modernizing its conventional military, challenging traditional U.S. military superiority in the Western Pacific.”[iv] Furthermore, the report says China has added “…new types of nuclear capabilities to their arsenals, increased the salience of nuclear forces in their strategies and plans, and engaged in increasingly aggressive behavior, including in outer space and cyber space.”[v]

#### Those flashpoints will go nuclear.

Talmadge ’18 (Catilin; Associate Professor of Security Studies at the Edmund A. Walsh School of Foreign Service at Georgetown University, PhD in Political Science from the Massachusetts Institute of Technology, A.B. in Government from Harvard College; Nov/Dec 2018; “Beijing’s Nuclear Option: Why a U.S.-Chinese War Could Spiral Out of Control”; <https://www.foreignaffairs.com/articles/china/2018-10-15/beijings-nuclear-option>; Foreign Affairs; accessed 11/24/18; TV)

As China’s power has grown in recent years, so, too, has the risk of war with the United States. Under President Xi Jinping, China has increased its political and economic pressure on Taiwan and built military installations on coral reefs in the South China Sea, fueling Washington’s fears that Chinese expansionism will threaten U.S. allies and influence in the region. U.S. destroyers have transited the Taiwan Strait, to loud protests from Beijing. American policymakers have wondered aloud whether they should send an aircraft carrier through the strait as well. Chinese fighter jets have intercepted U.S. aircraft in the skies above the South China Sea. Meanwhile, U.S. President Donald Trump has brought long-simmering economic disputes to a rolling boil. A war between the two countries remains unlikely, but the prospect of a military confrontation—resulting, for example, from a Chinese campaign against Taiwan—no longer seems as implausible as it once did. And the odds of such a confrontation going nuclear are higher than most policymakers and analysts think. Members of China’s strategic com­munity tend to dismiss such concerns. Likewise, U.S. studies of a potential war with China often exclude nuclear weapons from the analysis entirely, treating them as basically irrelevant to the course of a conflict. Asked about the issue in 2015, Dennis Blair, the former commander of U.S. forces in the Indo-Pacific, estimated the likelihood of a U.S.-Chinese nuclear crisis as “somewhere between nil and zero.” This assurance is misguided. If deployed against China, the Pentagon’s preferred style of conventional warfare would be a potential recipe for nuclear escalation. Since the end of the Cold War, the United States’ signature approach to war has been simple: punch deep into enemy territory in order to rapidly knock out the opponent’s key military assets at minimal cost. But the Pentagon developed this formula in wars against Afghanistan, Iraq, Libya, and Serbia, none of which was a nuclear power. China, by contrast, not only has nuclear weapons; it has also intermingled them with its conventional military forces, making it difficult to attack one without attacking the other. This means that a major U.S. military campaign targeting China’s conventional forces would likely also threaten its nuclear arsenal. Faced with such a threat, Chinese leaders could decide to use their nuclear weapons while they were still able to. As U.S. and Chinese leaders navigate a relationship fraught with mutual suspicion, they must come to grips with the fact that a conventional war could skid into a nuclear confrontation. Although this risk is not high in absolute terms, its consequences for the region and the world would be devastating. As long as the United States and China continue to pursue their current grand strategies, the risk is likely to endure. This means that leaders on both sides should dispense with the illusion that they can easily fight a limited war. They should focus instead on managing or resolving the political, economic, and military tensions that might lead to a conflict in the first place. A NEW KIND OF THREAT There are some reasons for optimism. For one, China has long stood out for its nonaggressive nuclear doctrine. After its first nuclear test, in 1964, China largely avoided the Cold War arms race, building a much smaller and simpler nuclear arsenal than its resources would have allowed. Chinese leaders have consistently characterized nuclear weapons as useful only for deterring nuclear aggression and coercion. Historically, this narrow purpose required only a handful of nuclear weapons that could ensure Chinese retaliation in the event of an attack. To this day, China maintains a “no first use” pledge, promising that it will never be the first to use nuclear weapons. The prospect of a nuclear conflict can also seem like a relic of the Cold War. Back then, the United States and its allies lived in fear of a Warsaw Pact offensive rapidly overrunning Europe. NATO stood ready to use nuclear weapons first to stalemate such an attack. Both Washington and Moscow also consistently worried that their nuclear forces could be taken out in a bolt-from-the-blue nuclear strike by the other side. This mutual fear increased the risk that one superpower might rush to launch in the erroneous belief that it was already under attack. Initially, the danger of unauthorized strikes also loomed large. In the 1950s, lax safety procedures for U.S. nuclear weapons stationed on NATO soil, as well as minimal civilian oversight of U.S. military commanders, raised a serious risk that nuclear escalation could have occurred without explicit orders from the U.S. president. The good news is that these Cold War worries have little bearing on U.S.-Chinese relations today. Neither country could rapidly overrun the other’s territory in a conventional war. Neither seems worried about a nuclear bolt from the blue. And civilian political control of nuclear weapons is relatively strong in both countries. What remains, in theory, is the comforting logic of mutual deterrence: in a war between two nuclear powers, neither side will launch a nuclear strike for fear that its enemy will respond in kind. The bad news is that one other trigger remains: a conventional war that threatens China’s nuclear arsenal. Conventional forces can threaten nuclear forces in ways that generate pressures to escalate—especially when ever more capable U.S. conventional forces face adversaries with relatively small and fragile nuclear arsenals, such as China. If U.S. operations endangered or damaged China’s nuclear forces, Chinese leaders might come to think that Washington had aims beyond winning the conventional war—that it might be seeking to disable or destroy China’s nuclear arsenal outright, perhaps as a prelude to regime change. In the fog of war, Beijing might reluctantly conclude that limited nuclear escalation—an initial strike small enough that it could avoid full-scale U.S. retaliation—was a viable option to defend itself. STRAIT SHOOTERS The most worrisome flash point for a U.S.-Chinese war is Taiwan. Beijing’s long-term objective of reunifying the island with mainland China is clearly in conflict with Washington’s longstanding desire to maintain the status quo in the strait. It is not difficult to imagine how this might lead to war. For example, China could decide that the political or military window for regaining control over the island was closing and launch an attack, using air and naval forces to blockade Taiwanese harbors or bombard the island. Although U.S. law does not require Washington to intervene in such a scenario, the Taiwan Relations Act states that the United States will “consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States.” Were Washington to intervene on Taipei’s behalf, the world’s sole superpower and its rising competitor would find themselves in the first great-power war of the twenty-first century. In the course of such a war, U.S. conventional military operations would likely threaten, disable, or outright eliminate some Chinese nuclear capabilities—whether doing so was Washington’s stated objective or not. In fact, if the United States engaged in the style of warfare it has practiced over the last 30 years, this outcome would be all but guaranteed. Consider submarine warfare. China could use its conventionally armed attack submarines to blockade Taiwanese harbors or bomb the island, or to attack U.S. and allied forces in the region. If that happened, the U.S. Navy would almost certainly undertake an antisubmarine campaign, which would likely threaten China’s “boomers,” the four nuclear-armed ballistic missile submarines that form its naval nuclear deterrent. China’s conventionally armed and nuclear-armed submarines share the same shore-based communications system; a U.S. attack on these transmitters would thus not only disrupt the activities of China’s attack submarine force but also cut off its boomers from contact with Beijing, leaving Chinese leaders unsure of the fate of their naval nuclear force. In addition, nuclear ballistic missile submarines depend on attack submarines for protection, just as lumbering bomber aircraft rely on nimble fighter jets. If the United States started sinking Chinese attack submarines, it would be sinking the very force that protects China’s ballistic missile submarines, leaving the latter dramatically more vulnerable. Even more dangerous, U.S. forces hunting Chinese attack submarines could inadvertently sink a Chinese boomer instead. After all, at least some Chinese attack submarines might be escorting ballistic missile submarines, especially in wartime, when China might flush its boomers from their ports and try to send them within range of the continental United States. Since correctly identifying targets remains one of the trickiest challenges of undersea warfare, a U.S. submarine crew might come within shooting range of a Chinese submarine without being sure of its type, especially in a crowded, noisy environment like the Taiwan Strait. Platitudes about caution are easy in peacetime. In wartime, when Chinese attack submarines might already have launched deadly strikes, the U.S. crew might decide to shoot first and ask questions later. Adding to China’s sense of vulnerability, the small size of its nuclear-armed submarine force means that just two such incidents would eliminate half of its sea-based deterrent. Meanwhile, any Chinese boomers that escaped this fate would likely be cut off from communication with onshore commanders, left without an escort force, and unable to return to destroyed ports. If that happened, China would essentially have no naval nuclear deterrent. The situation is similar onshore, where any U.S. military campaign would have to contend with China’s growing land-based conventional ballistic missile force. Much of this force is within range of Taiwan, ready to launch ballistic missiles against the island or at any allies coming to its aid. Once again, U.S. victory would hinge on the ability to degrade this conventional ballistic missile force. And once again, it would be virtually impossible to do so while leaving China’s nuclear ballistic missile force unscathed. Chinese conventional and nuclear ballistic missiles are often attached to the same base headquarters, meaning that they likely share transportation and supply networks, patrol routes, and other supporting infrastructure. It is also possible that they share some command-and-control networks, or that the United States would be unable to distinguish between the conventional and nuclear networks even if they were physically separate. To add to the challenge, some of China’s ballistic missiles can carry either a conventional or a nuclear warhead, and the two versions are virtually indistinguishable to U.S. aerial surveillance. In a war, targeting the conventional variants would likely mean destroying some nuclear ones in the process. Furthermore, sending manned aircraft to attack Chinese missile launch sites and bases would require at least partial control of the airspace over China, which in turn would require weakening Chinese air defenses. But degrading China’s coastal air defense network in order to fight a conventional war would also leave much of its nuclear force without protection. Once China was under attack, its leaders might come to fear that even intercontinental ballistic missiles located deep in the country’s interior were vulnerable. For years, observers have pointed to the U.S. military’s failed attempts to locate and destroy Iraqi Scud missiles during the 1990–91 Gulf War as evidence that mobile missiles are virtually impervious to attack. Therefore, the thinking goes, China could retain a nuclear deterrent no matter what harm U.S. forces inflicted on its coastal areas. Yet recent research suggests otherwise. Chinese intercontinental ballistic missiles are larger and less mobile than the Iraqi Scuds were, and they are harder to move without detection. The United States is also likely to have been tracking them much more closely in peacetime. As a result, China is unlikely to view a failed Scud hunt in Iraq nearly 30 years ago as reassurance that its residual nuclear force is safe today, especially during an ongoing, high-intensity conventional war. China’s vehement criticism of a U.S. regional missile defense system designed to guard against a potential North Korean attack already reflects these latent fears. Beijing’s worry is that this system could help Washington block the handful of missiles China might launch in the aftermath of a U.S. attack on its arsenal. That sort of campaign might seem much more plausible in Beijing’s eyes if a conventional war had already begun to seriously undermine other parts of China’s nuclear deterrent. It does not help that China’s real-time awareness of the state of its forces would probably be limited, since blinding the adversary is a standard part of the U.S. military playbook. Put simply, the favored U.S. strategy to ensure a conventional victory would likely endanger much of China’s nuclear arsenal in the process, at sea and on land. Whether the United States actually intended to target all of China’s nuclear weapons would be incidental. All that would matter is that Chinese leaders would consider them threatened. LESSONS FROM THE PAST At that point, the question becomes, How will China react? Will it practice restraint and uphold the “no first use” pledge once its nuclear forces appear to be under attack? Or will it use those weapons while it still can, gambling that limited escalation will either halt the U.S. campaign or intimidate Washington into backing down? Chinese writings and statements remain deliberately ambiguous on this point. It is unclear which exact set of capabilities China considers part of its core nuclear deterrent and which it considers less crucial. For example, if China already recognizes that its sea-based nuclear deterrent is relatively small and weak, then losing some of its ballistic missile submarines in a war might not prompt any radical discontinuity in its calculus.

#### Yes war – none of their impact defense assumes Chinese adventurism.

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Thus, China began its war for the South China Sea. China’s claims of South China Sea (SCS) ownership are illegal, but Beijing’s hyper-nationalistic officials increasingly encourage its forces to attack U.S. Navy ships operating lawfully there. The People’s Republic of China (PRC) appears to be calling for war—a war it may well get. But it is a war that will not stay confined to that body of water, and a war that could ultimately end with regime change in Beijing. One People’s Liberation Army (PLA) officer recently exhorted PLA Navy vessels to ram and sink U.S. Navy ships conducting freedom of navigation operations in the SCS. Another called for the sinking of two U.S. aircraft carriers and killing upward of 10,000 U.S. sailors to force the U.S. from these hotly contested waters. “If the US warships break into Chinese waters again, I suggest that two warships should be sent: one to stop it, and another one to ram it,” [said](https://www.taiwannews.com.tw/en/news/3592985) PLA Air Force Colonel Commandant Dai Xu on December 8, 2018. Dai, president of China’s Institute of Marine Safety and Cooperation, proposed these unprovoked acts of war in a highly publicized forum: at [a conference](https://www.businessinsider.com/south-china-sea-chinesenavy-ram-us-ships-2018-12.) sponsored by Beijing Global Times. A senior PLA Navy officer then called for the sinking of two U.S. Navy aircraft carriers to “frighten” the U.S. away from the SCS. In a speech on December 20, 2018, Rear Admiral Luo Yuan, the deputy head of the Chinese Academy of Military Sciences, [asserted](https://www.marinecorpstimes.com/news/your-navy/2019/01/04/well-see-how-frightened-america-is-chinese-admiral-says-sinking-us-carriers-key-to-dominating-south-china-sea/) that the key for Chinese domination of the SCS lies in using ballistic missiles to sink the two carriers, killing as many American sailors as possible. “What the United States fears the most is taking casualties,” Luo said in his call to kill upwards of 10,000 U.S. sailors. “We’ll see how frightened America is,” [he said](https://www.marinecorpstimes.com/news/your-navy/2019/01/04/well-see-how-frightened-america-is-chinese-admiral-says-sinking-us-carriers-key-to-dominating-south-china-sea/). Some might argue such belligerence from senior PLA officers does not reflect China’s official policy or is simply Information Warfare, but these defenses are disingenuous. None of the senior officers has been publicly chastised by the PRC for inciting war, and the PLAN is engaging in [increasingly-dangerous actions](https://www.gatestoneinstitute.org/13605/china-ambitions) across the SCS. On September 30, 2018 the PLAN destroyer Lanzhou drove [within forty-five yards](https://www.gatestoneinstitute.org/13605/china-ambitions) of the USS Decatur as it crossed the bow of the American warship near the SCS’ Gaven Reef. The Decatur’s commander averted collision only by deftly swerving to escape the Lanzhou’s aggressive maneuverings. The U.S. Navy diplomatically called the Lanzhou’s premeditated action “unsafe and unprofessional,” but it might more aptly be described as “attempted murder.” The PLAN, China’s military-run Coast Guard, and its maritime militias have also threatened—and sank—Vietnamese ships, and [has chased](https://globalnation.inquirer.net/173395/chinese-boats-deny-pinoys-access-to-sandbars?utm_expid=.XqNwTug2W6nwDVUSgFJXed.1) Philippine Navy and fishing fleets from Philippine waters. Taiwan plays a major role in Beijing’s SCS calculus, as well. China’s ruler Xi Jinping [has ordered](http://www.atimes.com/article/why-a-china-invasion-of-taiwan-would-fail/) the PLA to be ready to invade Taiwan by 2020. By taking exclusive control of the SCS, China has another angle of attack for its Taiwan invasion force, from the Bashi Channel. China’s claims to ownership of the SCS are bogus, of course. On July 12, 2016, the Permanent Court of Arbitration in The Hague released the Arbitral Tribunal’s determination that China’s claim to “historic” SCS rights, through its so-called “nine-dash-line,” was illegal. But in Beijing’s pursuit of Xi’s “Great Rejuvenation,” control over this resource-rich, strategically vital global commons is apparently worth a war—a world war. “Conflagration with Unimagined Consequences” The First World War offers a cautionary tale of how a seemingly minor incident can lead to global carnage, says former U.S. Lieutenant General Wallace C. Gregson. “In 1914, during an era when war was considered illogical and unlikely, an itinerant worker killed Archduke Ferdinand and his wife,” says Gregson. “This violent act sparked an unexpected war of unprecedented carnage.” More than [eight million died](https://www.britannica.com/event/World-War-I/Killed-wounded-and-missing) fighting the war, and perhaps thirteen million civilians died as a result of the conflict. Four major empires, each bearing responsibility for the conflagration, collapsed: the Russian, Austro-Hungarian, German, and Ottoman. “Today the South China Sea is the most dangerous area in the world,” observed Gregson, a seasoned U.S. Marine Corps combat veteran. “Hostile statements and aggressive actions create dry tinder, awaiting only a spark to burst into conflagration—with unimagined consequences.” How, then, might China engineer a violent confrontation in the SCS that would spark a conflagration of unimagined consequences, a new world war? Through 2019, Xi Jinping continued to [pursue his vision](http://www.chinadaily.com.cn/a/201812/18/WS5c1854a7a3107d4c3a001612.html) of the “Great Rejuvenation” to achieve “unification” of areas Beijing perceived as China’s sovereign territory. His tools included aggressive political warfare and increasingly capable, overly-confident military forces. Despite Xi’s 2014 promise to not militarize China’s artificial islands in the Spratly Islands, China built air bases and defensive fortifications there and deployed warships to new naval bases on Fiery Cross, Mischief Reef and Subi Reef. In the SCS, China’s Navy, Coast Guard, and the People’s Armed Forces Maritime Militia harassed other nations’ fishing boats and military vessels. However, nations from around the world began to slowly push back against China’s overt SCS aggression. When the British Royal Navy and U.S. Navy held joint exercises in the SCS in early 2019, Beijing was put on notice. The United Kingdom-U.S. exercise followed closely the Royal Navy’s first freedom of navigation operation the previous August, near the contested Paracel Islands. London committed Great Britain [to re-engagement](https://blogs.spectator.co.uk/2019/01/britain-is-right-to-send-its-navy-to-the-south-china-sea/?utm_source=Hoover+Daily+Report&utm_campaign=32536192a2-HDR_COPY_01&utm_medium=email&utm_term=0_21b1edff3c-32536192a2-31772937) in the region to combat China’s growing strength and militarization of the SCS. Beijing sharply criticized the UK’s actions, of course. But perhaps less well appreciated by Beijing’s rulers was the [growing concern](https://news.usni.org/2018/10/29/panel-nato-eu-need-major-changes-operations-infrastructure-deter-russian-aggression) by the European Union (EU) and the North Atlantic Treaty Organization (NATO) regarding China’s illegal assertiveness in the SCS, and its corrupt and coercive activities globally. NATO Secretary General H.E. Mr. Jens Stoltenberg [often stated](https://nato.int/cps/en/natohq/opinions_148029.htm?selectedLocale=en) NATO’s “concern about the situation in the East and South China Seas” and reaffirmed NATO’s “opposition to unilateral coercive actions that could alter the status quo and increase tensions.” This political resolve was reflected in renewed commitment of NATO to increase defense spending and modernize capabilities. As important from the SCS perspective, NATO’s commitment included the projection of “stability abroad” through rapidly deployable expeditionary forces. Nevertheless, Beijing seemed to dismiss NATO’s concerns, and the Alliance’s proven ability to conduct sustained combat operations in such distant locations as Afghanistan following the 9/11 terror attacks on the United States. Senior EU officials echoed concerns about China’s unlawful conduct in the SCS. China’s expansionism was seen as a [direct threat](https://thediplomat.com/2019/01/europe-a-new-player-in-the-indo-pacific/) to the EU, as the EU focused on enhanced security and defense integration. The EU boosted its military readiness, and integrated defense policy and capabilities with the European Defense Fund and Permanent Structured Cooperation, by bolstering rapid deployment forces, and through the creation of the French-driven European Intervention Initiative. To highlight Europe’s growing concern with China’s expansionism, in March, France sent its nuclear-powered aircraft carrier Charles de Gaulle with [a battle group](https://www3.nhk.or.jp/nhkworld/en/news/20190222_08/) of three destroyers, a submarine and a supply vessel into the region. China now faced an evolving united front of nations committed to maintaining freedom of navigation in the world’s most vital waterways. As PRC maritime aggressiveness and political warfare become more intense towards other regional claimants, Southeast Asian countries such as the Philippines and Vietnam began to ask for international help. The post-Duterte Philippines government formally requested U.S. support under the Mutual Defense Treaty (MDT). In 1994 and again in 2012, Philippine [leaders were shocked](http://www.taipeitimes.com/News/editorials/print/2018/07/10/2003696410) by the U.S. government’s failure to back it in territorial disputes with China. However, when U.S. Secretary of State Mike Pompeo [stated](https://www.state.gov/secretary/remarks/2019/03/289799.htm) on March 1, 2019, that “any armed attack on Philippine forces, aircraft, or public vessels in the South China Sea will trigger mutual defense obligations under Article 4 of our Mutual Defense Treaty,” it was clear that a new generation of American national security managers clearly learned from this past alliance mismanagement. The U.S. military rapidly increased its presence in the Philippines’ exclusive economic zone waters. In another alliance-strengthening move, the U.S. Pacific Fleet and Japan’s Maritime Self Defense Forces in the SCS expanded combined carrier flight and naval surface and submarine operations. This sent a clear signal to Beijing that the SCS remained global commons, and not China’s private lake, and that the SCS would not be a safe haven for its ballistic missile submarine force. This show of unity greatly encouraged many nations that had seen little meaningful pushback against China’s expansionist activities.

## 1AR---Case

#### These are case extensions/answers to case turns for the 1AR.

### 1AR---!

#### Nuclear war causes extinction---that’s 1AC Starr---initial blast, tons of carbon smoke, ozone losses and nuclear winter causes disease and famine.

#### Independently, 1AC Wellerstein proves a single bomb causes fusion chain reactions that light the atmosphere on fire---earth-shock and radioactivity causes extinction.

### 2AR---!

#### Nuclear war outweighs

#### First is reversibility---nuclear winter makes the earth uninhabitable and even limited war causes firestorms that decimate the ecosystem.

#### Second is scope---[DA impact] is regionally contained but nuclear winter affects Earth’s climate and kill people via famine, radiation, and the blast itself – that affects everyone

Prioritize impacts that are existential from which we cannot recover – not voting affirmative means every other impact is inevitable and future action is impossible.

### 1AR---Prolif

#### Nuclear weapons cause nuclear war---it’s try or die.

#### [x] internal links I’m going for---

#### ] Cyberattacks---hackers wreck command and control infrastructure confusing a country into accidental launch. It’s probable---Russia’s already suffered millions and a single false flag operation causes war.

#### ] Infrastructure---the US’s nuclear doctrine guarantees nuclear retaliation in the case of an attempted grid or water attack---escalates to all out war.

#### ] Hypersonic warheads---status quo conventional warheads can be mistaken for a first strike---discrimination is impossible inviting nuclear retaliation---adversarial rhetoric and poor defense systems escalate.

#### ] Second gen proliferators---new nuclear countries lack second-strike and are more aggressive---conflicts of interests and increased risk of terror results in a catastrophic nuclear exchange.

#### ] Deterrence is wrong---scenarios include irrational, accidental, and inadvertent nuclear use, catalytic nuclear war, nuclear use against non-nuclear opponents, splendid first strike, use ‘em or lose ‘em, brinkmanship, and limited nuclear use---past examples:

1982 Titan II---dropped wrench socket almost caused an explosion

Cuban Missile Crisis---bear sounded an alarm and bases got set off

US-Norwegian weather balloon was interpreted by Russia as a nuclear preempt.

1956 Suez crisis and threats in 1969 and 1973

### 1AR---Russia

#### Nuclear weapons cause Russia war---it’s try or die.

#### First is signaling---New US nuclear doctrine kills NFU while cyber, AI, hypersonic delivery and ASATs are all mistaken as weapons causing miscalc and retaliation.

#### Second is Russian revisionism---They’re offensive realist and expand into the Baltics, Crimea, Ukraine, Syria etc---increase risk taking and escalates skirmishes with NATO.

#### Both escalate---1AC Wood proves Putin and Trump are risk affectionate with minimal checks and “use or lose” pressures encourage launch which leads to nuke war.

### 1AR---Cyberattacks

#### Cyberattacks on nuclear weapons are try or die---state-sponsored and terror-based cyberattacks are on the rise.

#### First is confusion---hackers wreck command and control infrastructure confusing a country into accidental launch. It’s probable---Russia’s already suffered millions.

#### Second is retaliation---the US’s nuclear doctrine guarantees nuclear retaliation in the case of an infrastructure attack.

#### Nuclear first strike ensures retaliation which leads to nuclear war.

### 1AR---Arms Racing

#### Nuclear proliferation is try or die---

#### First is miscalculation---more weapons increase accidental launch and incentivize brinkmanship through credible first strike threats which escalates.

#### Second is second gen prolif---new nuclear states lack second strike capabilities and are incentivized to first strike---especially true of personalist dictatorships that can’t be constrained.

### 1AR---Iran

#### Iranian proliferation is try or die---

#### First is terror---recent evidence proves Iran’s motivated to build nuclear devices in lieu of international norms---they supply terrorists which increases risk of use.

#### Second is Middle Eastern prolif---even the perception of Israeli buildup increases the risk of other Arab states proliferating---increases accidental use.

#### Third is Trump---post-Soleimani US eggs on Iranian nuclear retaliation---war between the countries would go nuclear and draw in Russia, India, Pakistan, and Israel.

#### Independently, bioweapons---absent prolif Iran will launch bioweapons in the Middle East and against US allies---super killer viruses wipe out populations and cause Russian-Chinese nuclear response.

### 1AR---Barash AT Deterrence

#### Extend Barash---Deterrence is a myth:

#### First, defense: 1] it isn’t credible---mutually assured destruction ensures countries assume it probably won’t be used, and if anything as last last resort 2] misunderstands psychology---leaders act out of misperceptions, anger, national pride and won’t be attuned to risk---*especially* if they’re under pressure or losing, attacks seem appropriate even if possibly fatal

#### Second, offense: 1] presence of nukes heightens tensions because of the threat of destruction---especially true because countries err towards first strike in their decision calc to take out enemy arsenals -- causes massive instability, makes escalation likely 2] false alarms---countries perceive everything as a nuclear strike---any attack, or even a ruptured gas pipeline---and retaliate 3] accidental or unauthorized use, miscommunication within a country’s leadership chain of command, etc.

### 1AR---Circumvention

Durable fiat solves---1AC Van Der Meer details a process to increase transparency and have a phased approach to reduce operational readiness---strike their evidence on specificity---there’s no way you can vote negative presumption unless their evidence indicates these countries would circumvent under new disarmament methods

Durable fiat is best---it follows resolutional wording and is grounded in a predictable stasis point and it avoids debates over the minutae of processes, allowing detailed debates over the benefits and harms of nukes

### 1AR---Russia Try or Die

#### 1] It’s try or die---New START failed and the pressure is building.

Mohammed and Landay '19 (Arshad Mohammed, Diplomatic Correspondent and Jonathan Landay, senior national security and intelligence correspondent for McClatchy Newspapers, has written about foreign affairs for over 25 years. He was a co-recipient of the 2003 Raymond Clapper Memorial Award for disclosing the Bush administration’s use of bogus and exaggerated intelligence to justify the invasion of Iraq. In 2005, he was part of a team that won a National Headliners Award for “How the Bush Administration Went to War in Iraq.” He also won a 2005 Award of Distinction from the Medill School of Journalism, Georgetown University’s 2007 Weintal Prize for Diplomatic Reporting Special Citation and was a co-recipient of the National Press Club’s 2011 Edward M. Hood Award for Diplomatic Correspondence for an investigative series on contracting corruption in Afghanistan ; 4-1-2019; "Treaty's end would give U.S., Russia impetus to make more nukes: study"; https://www.reuters.com/article/us-usa-russia-nuclear/treatys-end-would-give-u-s-russia-impetus-to-make-more-nukes-study-idUSKCN1RD1AI, U.S., accessed 12-1-2019; JPark) Solvency Advocate

WASHINGTON (Reuters) - The **demise** of the only U.S.-Russia arms control pact limiting deployed nuclear weapons would make it harder for each to gauge the other’s intentions, giving both **incentives** to expand their arsenals, according to a study released on Monday. The expiration of the New START accord also may undermine faith in the Nuclear Non-Proliferation Treaty, which calls on nuclear states such as the United States and Russia to **work toward nuclear disarmament**, as well as influence China’s nuclear posture, historically one of restraint. The study, produced by the CNA Corp non-profit research group, is the most comprehensive public examination to date of the consequences of **New START’s demise**. It argues for extending the 2011 treaty, which expires in February 2021 but can be extended for five years if both sides agree. The Trump administration is deliberating whether to extend the pact, which President Donald Trump has reviled as a bad deal and his national security adviser, John Bolton, has long opposed. Russia has said it is prepared to extend New START but wants to discuss what it regards as U.S. violations first. The State Department did not immediately respond to a request for comment on the administration’s deliberations. Trump has said Washington **will withdraw** from another arms pact, the 1987 Intermediate-range Nuclear Forces Treaty, this summer unless Moscow ends its alleged violations, compounding **tense ties**. Russia denies violating the INF treaty. The New START treaty required the United States and Russia to cut their deployed strategic nuclear warheads to no more than 1,550, the lowest level in decades, and limit delivery systems - land- and submarine-based missiles and nuclear-capable bombers. It also includes extensive transparency measures requiring each side to allow the other to carry out 10 inspections of strategic nuclear bases each year; give 48 hours notice before new missiles covered by the treaty leave their factories; and provide notifications before ballistic missile launches. Both sides must also exchange data declaring their deployed strategic nuclear warheads, delivery vehicles and launchers, as well as breakdowns of how many of each are located at individual bases. All of that would end if the treaty expires. "Neither country would have the **same degree of confidence** in its ability to assess the other's precise warhead levels," CNA's Vince Manzo wrote in the study (bit.ly/2JUdSvW). "**Worst-case planning** is also more likely as a result. “Increased **opacity** between **U.S. and Russian strategic nuclear forces** would unfold within the broader context of growing **mistrust** and **diverging perceptions** about strategy, intentions, and perceptions,” he added. Without the data, the United States would have to reassign its overworked satellites, possibly devoting more surveillance to Russia and less to China, Iran and North Korea. Another casualty of the treaty’s expiration could be global nonproliferation, making non-nuclear states doubt the United States and Russia will keep working toward nuclear disarmament under the NPT, the study said. While it was impossible to predict how China - estimated to have about 280 nuclear warheads - would react to New START’s expiry, the study cites factors that could make Beijing expand its capability.

### 1AR---AT Russia War Good

1] Russia war is bad—it spurs a global nuclear war that ends with a nuclear winter where innocent people starve and are unable to recover, causing the sixth extinction period—they have conceded 1AC Cotton-Barratt which says this will be only scenario for extinction because of a resulting famine and nuclear winter

#### 2] Russia’s more likely to go first, precisely because they expect US strategists to think like the NEG---flips their entire argument

Arbatov, et al 17 (Dr. Alexey Arbatov, PhD, full member of the Russian Academy of Sciences, Head of the Center for International Security at the Institute of World Economy and International Relations, and scholar in residence at the Carnegie Moscow Center; Maj.Gen. Vladimir Dvorkin (retired), chief researcher at the Center for International Security at the Institute of Primakov National Research Institute of World Economy and International Relations, former director of the Russian Defense Ministry’s Fourth Central Research Institute; and Dr. Petr Topychkanov, Senior Researcher in the SIPRI Nuclear Disarmament, Arms Control and Non-proliferation Programme, former Senior Researcher at the Center for International Security at the Primakov National Research Institute of World Economy and International Relations of the Russian Academy of Sciences; “Entanglement as a New Security Threat: A Russian Perspective,” 11-8-2017, https://carnegie.ru/2017/11/08/entanglement-as-new-security-threat-russian-perspective-pub-73163)//KMM

THE EFFECTIVENESS OF NON-NUCLEAR DISARMING STRIKES This threat of a non-nuclear disarming strike is a central topic of discussion among Russian experts and government officials. The key bone of contention is whether the United States might attempt a massive conventional counterforce attack against Russia (which would inevitably be less effective than a nuclear counterforce strike), assuming that Moscow would be reluctant to respond with nuclear weapons given the certainty of follow-on nuclear retaliation by the United States. A particular issue of concern is that Russia’s emphasis on the threat of a conventional disarming strike could be perceived in the United States as evidence of Moscow’s unwillingness to use nuclear arms to counter such a strike, prompting the United States to start precisely this kind of conventional air campaign to attain escalation dominance in a local or regional conflict. In reality, however, and in contrast to such strategic calculations, Moscow might retaliate early with a limited strategic nuclear strike in the event that the United States launched a conventional counterforce operation against Russia’s nuclear forces (in accordance with Russia’s launch-under-attack doctrine). Alternatively, Moscow might even preempt the United States with selective strategic nuclear strikes to thwart U.S. naval and air forces that were engaged in a conventional conflict and perceived as conducting a conventional counterforce offensive by launching attacks against airfields, naval bases, and their C3I facilities. In the latter case, Moscow would count on the United States’ responding selectively with “tailored strategic options” even after nuclear explosions had occurred on its territory. In reality, the U.S. response might be a large-scale nuclear attack against Russia, provoking a massive nuclear exchange. In any case, the more concerned that Moscow is about the survivability of its nuclear forces, the more likely escalation becomes. Targets for a non-nuclear disarming strike might include super-hardened command centers at various echelons, ICBM silos, light shelters for land-based mobile missiles, exposed mobile ICBM launchers in the field, ballistic missile submarines at their bases, heavy bombers at main and reserve airfields, communication sites on land, early-warning radars, command centers for the missile early-warning system, and storage depots for nuclear weapons. The vulnerability of these targets depends on how well they are defended and concealed, and on the effectiveness of countermeasures against incoming weapons. Early-warning radars, light shelters for mobile ICBM launchers, missile submarines at their bases, and heavy bombers at airfields, as well as C3I centers and sites that are not deeply buried, can be incapacitated relatively easily if the attacking weapons have sufficient range and good targeting. In the event of a local or regional conventional conflict between Russia and NATO in Eastern Europe or the Arctic, airstrikes and cruise missile attacks against these sites would most likely cause rapid escalation to a nuclear war. In particular, early U.S. strikes against such targets might not be deliberate since Russian strategic submarines and bombers are kept at the same bases as general-purpose naval vessels and aircraft, and strikes designed to target the latter might inadvertently destroy the former. Unlike the logic that may be behind Chinese policies, the co-location of nuclear and general-purpose forces in the USSR and now in Russia was and is prompted by economic and administrative considerations, not by the strategic goal of trying to deter U.S. non-nuclear strikes against Russian general-purpose forces through the threat of nuclear escalation. The interception of heavy and medium dual-use bombers in flight during a conventional conflict also makes entanglement virtually inevitable. These bombers might take part in conventional missions, but might also be sent out on patrol with nuclear weapons to decrease their vulnerability in case the conflict escalates. If these aircraft were destroyed while carrying nuclear weapons, there would be a real risk of escalation. A similar risk could arise from conventional threats to Russian nuclear-armed ballistic and cruise missile submarines in the Arctic, North Atlantic, and Pacific Oceans.

#### 3] Most recent qualified studies ensure even one tactical nuke ensures a global conflagration between the US and Russia that causes nuclear extinction

Mosher and Ioanes 19 (Dave Mosher is a journalist with more than a decade of experience reporting and writing stories about space, science, and technology. Ellen Ioanes is the Military & Defense Editorial Fellow at INSIDER. “A terrifying new animation shows how 1 'tactical' nuclear weapon could trigger a US-Russia war that kills 34 million people in 5 hours.” Business Insider. Sep 14, 2019 https://www.businessinsider.com/tactical-nuclear-weapons-escalation-us-russia-war-animated-strike-map-2019-9)

A new simulation called "Plan A," by researchers at Princeton's Program on Science and Global Security, shows how the use of one so-called tactical or low-yield nuclear weapon could lead to a terrifying worldwide conflict. In the roughly four-minute video, a Russian "nuclear warning shot" at a US-NATO coalition leads to a global nuclear war that leads to 91.5 million deaths and injuries. Under President Trump, the US is ramping up production of tactical nuclear weapons, ostensibly to target troops and munitions supplies. While advocates say these weapons would keep wars from escalating, the simulation finds the opposite outcome. The dissolution of the INF treaty in August raised the stakes for nuclear war, as both the US and Russia were free to develop weapons previously banned under the treaty. "The risk of nuclear war has increased dramatically in the past two years," the project states. Nuclear strikes are an extremely remote possibility, but their chances are rising experts warn. More than 91 million people in Russia, the US, and NATO-allied countries might be killed or injured within three hours following a single "nuclear warning shot," according to a terrifying new simulation. The simulation is called "Plan A," and it's an audio-visual piece that was first posted to to YouTube on September 6. (You can watch the full video at the end of this story.) Researchers at the Science and Global Security lab at Princeton University created the animation, which shows how a battle between Russia and NATO allies that uses so-called low-yield or "tactical" nuclear weapons — which can pack a blast equivalent to those the US used to destroy Hiroshima or Nagasaki in World War II — might feasibly and quickly snowball into a global nuclear war. "This project is motivated by the need to highlight the potentially catastrophic consequences of current US and Russian nuclear war plans. The risk of nuclear war has increased dramatically in the past two years," the project states on its website. The video has an ominous, droning soundtrack and a digital map design straight out of the 1983 movie "WarGames." The Cold War-era movie, in which a young Matthew Broderick accidentally triggers a nuclear war, "was exactly the reference point," simulation designer Alex Wellerstein told Insider. But while simulations can be frightening, they can also be incredibly helpful: governments can use them to develop contingency plans to respond to nuclear disasters and attacks in the least escalatory way, and they can also help ordinary citizens learn how to survive a nuclear attack. "Plan A" comes as tensions between Russia and NATO allies ratchet up. Both Russia and the US are testing weapons previously banned under the Intermediate-range Nuclear Forces treaty, often called INF. Russian bombers have also cruised into US airspace repeatedly, and the US recently sent its B-2 Spirit stealth bomber on a mission in the Arctic — right in Russia's backyard. This is how a NATO-Russian confrontation could quickly escalate into nuclear war. Conventional warfare — namely all conflict short of nuclear, chemical or biological weapons — escalates into nuclear warfare when Russia launches a nuclear "warning shot" from a base near Kaliningrad to stop NATO advancement. Russia doesn't have a "no first use" policy — it dropped it in 1993. NATO forces respond by launching a tactical nuclear strike. The US already has tactical nuclear weapons, such as B61-12 gravity bombs, and more planned under US President Donald Trump's 2018 Nuclear Posture Review. Included in the plan is a low-yield warhead intended for use in a submarine-launched ballistic missile, as well as a sea-launched cruise missile. These kinds of weapons are designed for targets on the battlefield, like troops or munitions supplies, as opposed to long- or intermediate-range nuclear missiles that are fired from one country to another, for example, targeting an enemy's bombers and ICBM silos — or even cities. Tactical nuclear strikes up the ante. If the nuclear threshold is crossed, the simulation finds, then both the US and Russia would respond with tactical nuclear weapons. Russia would send 300 warheads to NATO targets, including advancing troops, in both aircraft and short-range missiles — overwhelming force that would obliterate tanks, fortified positions and soldiers unlike anything ever seen in battle before. Supporting forces and civilians not immediately killed would be susceptible to painful and even fatal radiation exposure. NATO would respond by sending about 180 tactical nuclear weapons to Russia via aircraft in equally devastating retaliation. The simulation was constructed using independent analysis of nuclear force postures in NATO countries and Russia, including the availability of nuclear weapons, their yields, and possible targets, according to the Science and Global Security lab. The tactical phase of the simulation shows about 2.6 million casualties over three hours. Instead of the tactical weapons de-escalating the conflict, as proponents claim they would, the simulation shows conflict spiraling out of control after the use of tactical weapons. Russia's tactical weapons would destroy much of Europe, the simulation posits. In response, NATO would launch submarine- and US-based strategic nuclear weapons toward Russia's nuclear arsenals — 600 warheads in total. Strategic nuclear weapons have a longer range, so Russia, knowing that NATO nukes are headed for its weapons cache, would throw all its weight behind missiles launched from silos, mobile launchers, and submarines. The casualties during this phase would be 3.4 million in 45 minutes. This leads to 85.3 million additional casualties in the final phase of the nuclear war simulation. In the wake of previous attacks, both Russia and NATO would launch warheads toward each other's 30 most populous cities in the final stage of of the scenario, using five to 10 warheads for each city depending on its size. This phase would cause 85.3 million casualties — both deaths and injuries. But the total casualty count from the entire battle (of less than 5 hours) would be 34.1 million deaths and 57.4 million injuries, or a combined 91.3 million casualties overall. But that's just the immediate conflict: The entire world would be affected by nuclear disaster in the months, years, and decades to come. The radioactive fallout from the nuclear disaster would cause additional deaths and injuries. Studies also suggest that, even with a limited nuclear engagement, Earth's atmosphere would cool dramatically, driving famine, refugee crises, additional conflicts, and more deaths.

#### 4] Russia would win---new military developments and declining US military superiority.

**Task And Purpose ‘19** (Task And Purpose is a new report citing Jared Keller, Jared Keller is a senior editor at [Task & Purpose](http://t.umblr.com/redirect?z=http%3A%2F%2Ftaskandpurpose.com%2F&t=NzY5NmZmNDBmZTkzMGNhMmI2ZDJiM2I1ZjQzYjU5ZTdjMTVmMjk5MyxUbU4zdWpESg%3D%3D&p=&m=0) and contributing editor at [Pacific Standard](http://t.umblr.com/redirect?z=http%3A%2F%2Fpsmag.com&t=YTg3NWNmZTY1MDkxZjI0NTU1YjA1ZmIxYTI3YjA3YTUyNTQzMzI4OSxUbU4zdWpESg%3D%3D&p=&m=0), covering news, politics, and national affairs. "Report: U.S. Military Would Suffer A 'Decisive' Defeat In A War With Russia Or China," National Interest, 5-3-2019, <https://nationalinterest.org/blog/buzz/report-us-military-would-suffer-decisive-defeat-war-russia-or-china-55602>)(Shiv)

Put **bluntly**, the U.S. military could **lose** the next state-versus-state war it fights." If the United States went to war with Russia or China tomorrow, the military would almost **certainly suffer** a " **decisive military defeat**," so far that the "**security and wellbeing**" of the U.S. "are **at greater risk** than at any time in decades," according to an alarming new [assessment](https://www.scribd.com/document/393215196/Providing-for-the-Common-Defense) of the Trump administration's 2018 National Defense Strategy. The [report](https://www.scribd.com/document/393215196/Providing-for-the-Common-Defense), composed by a bipartisan National Defense Strategy Commission selected by Congress, suggests that a likely U.S. military campaign against the Russian military in Northern Europe or with China over the island of Taiwan would yield **"enormous" losses** of both military personnel and "capital assets" (ships, aircraft, and other vehicles) for the United States. The reason is simple: While the U.S. military has "**eroded to a dangerous degree"** since the end of the Cold War, the Russian and Chinese militaries have come to rival the Pentagon in capabilities previously possessed solely by the U.S., including **precision strikes, integrated air defenses, cruise,** and **ballistic missiles**, and "**advanced cyber warfare** and **anti-satellite capabilities**." As a result, the Pentagon "would **face daunting challenges** in establishing air superiority or sea control and retaking territory lost early in a conflict," the report states. "Against an enemy equipped with advanced anti-access/area denial capabilities, attrition of U.S. capital assets—ships, planes, tanks—could be enormous." "The prolonged, deliberate buildup of **overwhelming force** in theater that has traditionally been the hallmark of American expeditionary warfare would be **vastly more difficult** and costlier, if it were possible at all," the authors add. "Put bluntly, the U.S. military could lose the next state-versus-state war it fights."

### 1AR---AT ENR

#### 1] they’d have to test – even if inspection fails we’d know and sanction them to hell – empirically proven

#### 2] no incentive – assumes massive competition which is only true in the squo

#### 3] ENR obviously hasn’t spread – this ev is from 2010 and if it had, we’d have a lot more prolif

### 1AR---AT Jensen

#### Jensen is about university students in a simulation de-escalating, not rogue actors AND assumes cyberattacks target infrastructure, not nukes – one attack is too many and adaptation is obviously too late

### 1AR---AT Air Gapping

#### Can’t solve---still vulnerable

Hutzler '15 (Derek Hutzler; Experienced Sales leader with a demonstrated history of working in the computer software industry. Skilled in Network Security, International Business, Direct Sales, Sales Management, and Channel Sales; 1-16-2015; "How to Prevent Attacks on Air Gapped Networks"; https://www.opswat.com/blog/how-prevent-attacks-air-gapped-networks, No Publication, accessed 12-18-2019; JPark)

Offline **machines are** also used by **malware** researchers, financial institutions, and government organizations. One of the flaws in offline machines is that they still need software updates. Update packages made to the machines are delivered via USB, CD, and sometimes even floppy disks. Since **attackers** cannot gain access to the air gapped networks via the internet, they must **rely on** another attack vehicle — the **update packages**. An air gapped system controlling a nuclear reactor in South Korea, was **recently** **infected**. The suspected culprit was an **unauthorized USB** that was plugged into the control system. Korea Hydro & Nuclear Power Co had an earlier outbreak of malware brought in by email, which prompted a security review. Luckily they were able to locate the malware and are now working to remove it. Trend Micro researcher Kyle Wilhoit has found over a **dozen different types** of banking malware have on ICS/SCADA systems. Wilhoit states, "It's an interesting trend -- traditional banking Trojans, not targeted attacks." The malware is making its way on to the machines by disguising itself as a software update.

### 1AR---AT Cyberattacks Grid

#### Cyberattack won’t shut down the grid---resiliency measures check

Craig ‘16 (Vicotria, analyst @ Fox Business, citing the senior manager of industrial control systems at Mandiant, “The U.S. Power Grid is 'Vulnerable,' But Don't Panic Just Yet”, http://www.foxbusiness.com/features/2016/02/02/u-s-power-grid-is-vulnerable-but-dont-panic-just-yet.html)

The idea of the nation's power grids becoming the next battleground for cyber warriors could make hacking into consumers’ credit card accounts and personal information seem like child’s play. While U.S. power companies are likely targeted by foreign governments and others in increasingly sophisticated breaches, actually shutting off the lights and causing chaos is far more complicated than many pundits make it seem. Dan Scali, senior manager of industrial control systems at Mandiant, a cybersecurity consulting arm of FireEye ([FEYE](http://www.foxbusiness.com/quote.html?stockTicker=FEYE)), explained that while cyber criminals may gain access to power and utility data systems, it doesn’t necessarily mean the result will be a power outage and a total takedown of power grid control systems. In other words, the power grid is controlled by more than just a panel of digital buttons. “Losing the control system is bad from the perspective that it takes you out of your normal mode of operations of being able to control everything from one command center, but it doesn’t mean you’ve lost control or all the lights go out [in the city],” Scali explained. While many of the systems have been modernized to include digitized control panels, if a hacker were to infiltrate the system, a utility worker could still have the ability to manually control the machines by flipping a switch, pushing a button, or tripping a breaker. As the world saw with the recent attack in Ukraine, which caused a blackout for 80,000 customers of the nation’s western utility, the biggest problem may be ensuring the power grid’s control systems are not vulnerable to cyber break ins. The January attack in Ukraine was likely caused by a corrupted Microsoft Word attachment that allowed remote control over the computer, according to the U.S. Department of Homeland Security. Scali said there was no evidence from the incident in Ukraine that the hacker’s malware was able to physically shut down the power. “It wiped out machines, deleted all the files. Kill disk malware made it impossible to remotely control things. It caused chaos on the business network, and the area where control system operations sat. But the attacker, we believe, would have had to actually used the control system to cause load shedding, which caused the power to go out, or trip breakers to cause the actual problem. Malware itself didn’t turn the power out,” Scali said. He said what most likely happened in that incident was the hacker stole user credentials and logged into the system remotely. The bottom line: Yes, a similar event could happen in the U.S. And corporate America is concerned. A recent survey released in January on the state of information security, conducted by consulting firm Pricewaterhouse Coopers, showed cybersecurity as one of the biggest concerns among the top brass at U.S. power and utilities firms. Part of the problem, Brad Bauch, security and cyber sector leader at PwC said, is the interconnectedness of the industry’s tools. “Utilities want to be able to get information out of [their] systems to more efficiently operate them, and also share that information with customers so they have more real-time information into their usage,” he explained. While allowing access to their own consumption data allows the companies to give their customers more of what they want, it also opens up a host of access points for hackers, making the systems more vulnerable than they otherwise would be. But to say that the power grid is susceptible to cyber hackers is a bit of an oversimplification.

### 1AR---AT Dumping

#### 1] No dumping---tech solves

UCS No Date (Union of Concerned Scientists. “Safer Storage of Spent Nuclear Fuel”. <https://www.ucsusa.org/nuclear-power/nuclear-waste/safer-storage-of-spent-fuel#.W5_GeKZKjvA>) swap

The risks from spent fuel in storage pools can be reduced by moving some of it to dry casks. Typical dry casks are made of steel and concrete, with the concrete providing radiation shielding , and are stored at U.S. reactors outdoors on concrete pads. To become cool enough to be placed in the dry casks currently licensed and used in the United States, the spent fuel must first spend five years in a spent fuel pool. By then it is cool enough that further cooling can be accomplished by natural convection—air flow driven by the decay heat of the spent fuel itself. By transferring fuel from spent fuel pools to dry casks, plants can lower the risk from spent fuel in several ways: With less spent fuel remaining in the pools, workers will have more time to cope with a loss of cooling or loss of water from the pool, because the amount of heat released by the spent fuel is lower. With less heat, it takes longer for the water to heat up and boil away. If there is less fuel in the pool, it can be spread out more, making it easier for the fuel to be cooled by water, or even air if the pool is rapidly drained after an accident. Because there is less fuel in the pool, if workers are unable to prevent an accident, the amount of radioactive material emitted from the pool will be much lower than it would be otherwise.

#### 2] No link---the AFF’s use of modern disposal methods shields contamination.

Corby **Anderson 12**. Ph.D. in metallurgical engineering from the University of Idaho, served from 2010 to 2011 as a committee member for the National Academy of Sciences study on uranium mining in Virginia. 09-09-12. “What the uranium mining study said and did not say.” http://www2.timesdispatch.com/news/commentary/2012/sep/09/tdcomm03-what-the-uranium-mining-study-said-and-di-ar-2187800/

Much of the concern about uranium mining in Virginia is based on fears of an improbable catastrophic natural disaster releasing mill tailings. The NAS study directly addressed this concern and found that, "Over the past few decades, improvements have been made to tailings management systems to isolate tailings from the environment." Specifically, the report identified below-ground tailings disposal as a way to eliminate the possibility of catastrophic storm or flood-induced releases. Another concern expressed is the potential for groundwater contamination from the mine or tailings. Again, the NAS report addressed this directly: "To date, modern tailings disposal cells have been effective at preventing groundwater contamination." The report emphasized the effectiveness of runoff and wastewater collection systems, as well as buffer zones and groundwater monitoring wells surrounding the site to detect the slightest elevations in contaminant levels and prevent contaminated water from escaping the site.

### 1AR---AT ! D

#### Prefer our methodology—best climate models and includes negative feedbacks

**Robock ‘07** (Alan Robock Department of Environmental Sciences, Rutgers University, New Brunswick, New Jersey, USA Luke Oman Department of Environmental Sciences, Rutgers University, New Brunswick, New Jersey, USA Now at Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, Maryland, USA Georgiy L. Stenchikov Department of Environmental Sciences, Rutgers University, New Brunswick, New Jersey, USA, “Nuclear winter revisited with a modern climate model and current nuclear arsenals: Still catastrophic consequences,” JOURNAL OF GEOPHYSICAL RESEARCH, July 6, American Geophysical Union via University of North Carolina Libraries) Rct by JPark

[12] We conducted climate model **simulations** with a **state-of-the-art** general circulation model, ModelE from the National Aeronautics and Space Administration Goddard Institute for Space Studies [Schmidt et al., 2006], which includes a module to calculate the transport and removal of aerosol particles [Koch et al., 2006]. The atmospheric model is **connected** to a **full ocean** general **circulation** model with calculated sea ice, thus allowing the ocean to respond quickly at the surface and on yearly timescales in the deeper ocean. We run the atmospheric portion of the model at 4° × 5° latitude-longitude resolution, with 23 vertical layers extending to a model top of 80 km. The coupled oceanic general circulation model [Russell et al., 1995] has 13 layers and also a 4° × 5° latitude-longitude resolution. [13] This climate model has been tested extensively in global warming experiments [Hansen et al., 2005; Schmidt et al., 2006] and to examine the effects of volcanic eruptions on climate. The climate model (with a mixed-layer ocean) does an excellent job of **modeling the climatic response** to the 1783 Laki [Oman et al., 2006b] and the 1912 Katmai [Oman et al., 2005] **volcanic eruptions**. We have also used this model to simulate the transport and removal of sulfate aerosols from tropical and high-latitude volcanic eruptions [Oman et al., 2006a], and have shown that it does a good job of simulating the **lifetime and distribution** of the volcanic **aerosols**. In the stratosphere, these aerosols have an e-folding residence time of 12 months in the model, in excellent agreement with observations. [14] The aerosol module [Koch et al., 2006] accounts for black carbon particles. We assigned an effective radius of 0.1 μm to the soot particles, a standard value based on observations. At visible wavelengths, we assign the following optical properties to the black carbon particles: mass extinction coefficient of 5.5 m2/g, single scattering albedo of 0.64, and mass absorption coefficient of 2.0 m2/g. These are typical of a mixture of black soot, smoke, and dust that would be injected into the atmosphere using the baseline scenario of Turco et al. [1983]. [15] While Warren and Wiscombe [1985] and Ledley and Thompson [1986] suggested that soot falling on sea ice would increase the albedo and negate some of the cooling from a massive atmospheric aerosol loading, Vogelmann et al. [1988] used the Robock [1984] energy-balance climate model and showed that this effect would only be important with enough solar insolation to make snow and ice albedo important. By the time the atmosphere was clear enough, Vogelmann et al. showed that clean snow would have fallen on the dirty snow, making the effect small. Nevertheless, we included this feedback in the runs presented here.

## 1AR---DA

#### These are answers to common topic DAs.

### 1AR---AT Deterrence

#### 1] Doesn’t solve miscalc or cyber---countries can still accidentally strike

#### 2] Advantage 1 disproves the thesis of deterrence---irrational actors don’t abide by deterrence.

#### 3] Nuclear deterrence fails---cognitive studies, new tech, and geography

Krepinevich 18 (Andrew Krepinevich, defense policy analyst who is a distinguished senior fellow at the Center for Strategic and Budgetary Assessments, December 11, 2018. “The Decline of Deterrence.” https://www.foreignaffairs.com/articles/2018-12-11/eroding-balance-terror)

WAR’S NEW FRONTIERS Deterrence is ailing not just on account of new powers. New weapons have also done their part. Early on, high-tech weapons worked [to the United States’ advantage](https://www.foreignaffairs.com/articles/iraq/1991-09-01/desert-storm-and-deterrence). The 1990–91 Gulf War, for instance, showcased the power of integrating high-end intelligence, surveillance, and reconnaissance systems with precision-strike weapons. Russian military theorists feared that such capabilities represented an alarming glimpse of what was to come. As these capabilities matured, the argument went, the United States would be able to conduct pinpoint strikes to eviscerate Russia’s nuclear arsenal without having to go nuclear itself. Following such an attack, Russia could of course retaliate with whatever nuclear forces had survived. But this “broken-back” attack would be further diminished by U.S. air and missile defenses, and it would risk triggering a full-scale U.S. nuclear counterstrike that would be the end of Russia as a functioning society. To offset this perceived disadvantage, Russia has designed nuclear weapons with very low yields and adopted a [military doctrine](https://www.foreignaffairs.com/articles/russian-federation/2018-10-15/moscows-nuclear-enigma) that calls for such weapons to be used if Moscow fears that its nuclear arsenal is at risk or if it is losing a conventional war. A similar line of thinking may be taking hold in China, where political and military leaders have intimated that certain kinds of nuclear weapons are acceptable for use even in a conventional conflict, such as those used to generate an electromagnetic pulse that can disable any nearby electronic equipment. The result is that the firebreak between conventional and nuclear war is slowly disappearing—with worrying implications for deterrence. Both Beijing and Moscow may see conventional aggression as less risky, since they can employ certain types of nuclear weapons if things go badly. Many U.S. leaders, by contrast, still believe that the only purpose of maintaining nuclear weapons is to deter others from using them, a view that completely decouples nuclear from conventional war. As a result, U.S. leaders may enter a conventional war thinking that there’s little risk of it escalating into a nuclear conflict. But Chinese and Russian leaders, finding themselves in such a war, may be far less hesitant to cross the nuclear threshold than the United States expects. [Cyberweapons](https://www.foreignaffairs.com/articles/world/2018-08-14/battlefield-internet), with their enormous but untested potential to corrupt a state’s early warning and command systems, muddy the waters of deterrence even further. Some have speculated, for instance, that Israel’s 2007 air strike on a nuclear reactor under construction in Syria was accompanied by a cyberattack that blinded Syrian air defenses. Even though none of the Israeli aircraft was of stealth design, and even though they were attacking a high-value target, Syrian air defenses never fired at them. If other states think they can compromise a rival’s early warning and command systems, as Israel seems to have done in Syria, the anticipated costs and risks of striking first in a crisis may fall dramatically. The geographic location of today’s nuclear powers is undermining deterrence, too. During the Cold War, valuable Soviet and U.S. homeland targets were far enough apart to guarantee some warning time ahead of an attack. The spread of nuclear and other strategic weapons to states located relatively close to their rivals means that attack warning times are much shorter today. This is especially true for nuclear-armed states fielding fast, accurate ballistic missiles capable of striking their rivals’ nuclear forces. Short flight times may compel senior policymakers to place their strategic forces on heightened alert at all times, as well as to devolve to lower-ranking commanders the authority to release them. In theory, these decisions could enhance deterrence, but they would also increase the risk of an accidental or unauthorized use of strategic forces, thus undermining deterrence: faced with this risk in a moment of crisis, an adversary might decide that striking first was the safer bet. The problems for deterrence do not end there. The emergence of new domains of warfare is also eroding its foundations. Today’s major powers built their economic and military might on a vast but vulnerable network of satellites, as well as undersea pipelines and cables. The U.S. military, in particular, depends on government and commercial satellites for its operations. Other major militaries have followed suit, and national economies have come to rely on satellites for a wide range of services. Pipelines on the ocean floor carry over a quarter of the world’s oil and natural gas supply. Economies and militaries rely on the Internet, and almost all transoceanic data flow through undersea cables. Unfortunately, all this infrastructure is susceptible to disruption, and deterring aggression against it is not easy. Disabling a satellite, corrupting a computer network, or cutting an undersea data cable is often easier than fending off an attack, favoring the offense and undermining deterrence through denial. Deterrence through punishment is just as tricky in such cases. Quickly identifying and retaliating against an aggressor is far more difficult than in the case of conventional attacks via land, air, or sea. And because so many states are capable of operating effectively in these relatively new domains, attribution will be even more complicated. LOSE SOME, WIN SOME? In a sense, deterrence has become a victim of its own success. War serves as the ultimate test of military systems, force structures, and the doctrines governing their employment. The lack of a war between major powers since 1945 means that the true balance of conventional, nuclear, and cyber-military capabilities is uncertain. And if this is true for well-established technologies, it is doubly so for new capabilities that incorporate artificial intelligence, novel biological agents, laser weaponry, hypersonic speed, and robotics. Because few of these capabilities are thoroughly battle tested, future belligerents may have diverging beliefs about their benefits and dangers, increasing the likelihood that one side might opt for aggression. This is true particularly for risk-tolerant leaders who assume such uncertainties will work in their favor—undermining deterrence where it is most fragile. But the challenges to deterrence today go even deeper. Recent insights into the nature of human decision-making raise questions about the very logic of deterrence. As a theoretical concept, deterrence rests on the assumption that where risk is involved, humans act rationally, in the sense that they base their decisions on a cost-benefit calculus and act only when the expected gains outweigh the anticipated costs. Over the past 40 years, however, research in behavioral economics has cast great doubt on this assumption. Humans, it turns out, cannot be counted on to always maximize their prospective gains. And even when they do, they are remarkably inept at understanding how the other side—the opponent in a conflict—calculates its own costs, benefits, and risks. Human nature hasn’t changed, but our understanding of it has—in ways that bode ill for defense strategies built on deterrence. The first problem has to do with our understanding of how leaders conceive of losses. According to prospect theory, people will risk more to avoid losing what they already have than to gain something of equal value. Thus, for example, policymakers will run higher risks to retain their own territory than to seize foreign territory of equal value. In theory, this phenomenon would seem to strengthen deterrence, since it predicts that leaders generally prefer to stick with whatever land and resources they already own, rather than attempt to seize what belongs to another. But the matter does not end there. This is because of how decision-makers set their so-called reference point, which determines whether they consider their current situation to be one of loss or gain. One might expect that people always base their reference point on the status quo—the state of things at the time they make a decision. After a series of gains, for instance, individuals normally adjust their reference point to the new status quo. Any subsequent setback looks to them like a loss rather than a gain forgone. We should therefore expect them to be relatively risk tolerant in their efforts to defend their latest gains, which they now see as a potential loss. But this dynamic does not cut both ways. After individuals suffer losses, they tend not to adjust their reference point to the new, less favorable situation. Instead, they cling to the status quo ante. They therefore see their own attempts to retake what has been lost not as the pursuit of gains but as the avoidance of losses. As a result, they are often ready to take great risks and accept high costs to achieve this end. For a historical example, consider the U.S. economic embargo against Japan in the summer of 1941 and Japan’s decision to attack Pearl Harbor a few months later. In imposing the embargo, U.S. leaders were attempting to punish Japan for a series of invasions across East Asia, which the United States viewed as losses compared with the previous situation. Japan’s leaders, however, had updated their reference point to include their most recent territorial gains and so saw the embargo as an American attempt to take from the Japanese what was now rightfully theirs. Both sides, in other words, were operating under a paradigm of loss, which made them more willing to risk war. To understand how a similar dynamic could play out today, look to the [South China Sea](https://www.foreignaffairs.com/articles/china/2018-06-05/vanishing-borders-south-china-sea), where Beijing is occupying and fortifying disputed territory, apparently intent on creating new facts on the ground. The United States and its allies, however, continue to view China’s actions as illegitimate and retain the original situation as their reference point. If the dispute comes to a head, both China and its opponents will be operating from a reference point of loss. So deterring either side from pressing the issue may prove difficult. IRRATIONAL MINDS The logic of deterrence also depends a great deal on the people in charge. Research in cognitive science suggests that political leaders are unusually optimistic and overly confident in their ability to control events—the very traits that helped them come to power. Given their built-in optimism, they are also prone to doubling down in the face of failure instead of cutting their losses. Needless to say, any one of these characteristics can undermine deterrence. Assuming that uncertainty will resolve itself in one’s favor inflates the anticipated gains while reducing projected losses, making a risky path of action far more enticing. This bias for optimism may be especially pronounced when the leader in question is a personalist dictator. To rise to the top in a cutthroat political environment, such leaders must be extremely risk tolerant and believe they can beat the odds. Once in power, they are often surrounded by sycophants who feed their egos and self-images as skillful strategists. Excessive optimism may partly explain Adolf Hitler’s risky decision to remilitarize the Rhineland and annex Austria and Czechoslovakia while Germany was still weaker than France, Russia, and the United Kingdom. It may also provide some explanation for Joseph Stalin’s attempt to cut off U.S. access to West Berlin at a time when his own country was in ruins and the United States enjoyed a nuclear monopoly. Saddam Hussein’s willingness to take on the United States, not once but twice, suggests a propensity for high-stakes gambles, as does Mao Zedong’s decision to plunge China into the Korean War barely a year after he seized power. Indeed, the very notion that all humans share the same cognitive machinery, the same rational hard-wiring, is turning out to be just that: a notion, not a fact. Research in the behavioral sciences has found that one’s cultural environment can lead to dramatic differences in one’s cognitive processes, including in the ways people understand equity, costs, benefits, and risks. Economics experiments show these differences in action. In the so-called ultimatum game, for instance, Player A is given an amount of money—say, $100—and is told to offer some of the cash, anywhere from $1 to $100, to Player B, who can accept the payout or reject it, in which case both players leave empty-handed. American subjects typically agreed on something close to a 50-50 split. When they were in the role of Player B, they were more likely to reject offers that were significantly less than a rough split of the money, even though accepting any offer above zero would have improved their financial situation. In some less developed societies, however, such as found in parts of Central Asia and Latin America, those in the Player A position were often far less charitable, yet their Player B counterparts rarely refused even much lower amounts. And in other tests involving societies in Central Asia, East Africa, and New Guinea, those on the receiving end at times refused the money even when offered more than half the cash. Individuals, in other words, are not necessarily utility-maximizing machines that rationally pursue material gain and expect others to do the same. They are prepared to reject what they perceive as unfairness or slights to their personal honor, even at a substantial cost to themselves. This is why leaders sometimes reject win-win deals in favor of seemingly irrational outcomes in which both sides lose. The implications for deterrence are sobering. The [1962 Cuban missile crisis](https://www.foreignaffairs.com/articles/cuba/2012-07-01/cuban-missile-crisis-50) is a case in point. What motivated Soviet Premier Nikita Khrushchev was partly his sense that the balance of U.S. and Soviet overseas missile deployments was unfair. The United States had positioned nuclear-armed missiles on the Soviet Union’s southern flank, in Turkey, so Khrushchev expected U.S. leaders to tolerate the deployment of Soviet missiles in Cuba. When Kennedy demanded that Khrushchev remove the missiles from Cuba, both leaders found themselves playing a high-stakes version of the ultimatum game: Kennedy offered a guarantee that the United States would not invade Cuba in exchange for the Soviet Union’s withdrawal of the missiles—a mutually beneficial outcome, albeit with a modest payout to the Soviets. Should Khrushchev refuse, the ultimate lose-lose outcome—war—appeared likely. Khrushchev’s choice should have been easy. Given the United States’ enormous nuclear advantage over the Soviet Union, the U.S. missiles in Turkey were a nonissue. But because Khrushchev felt pressure to demonstrate to his colleagues in the Soviet Presidium (and, one suspects, to himself) that he had been treated fairly, the missiles in Turkey became a sticking point in negotiations to resolve the crisis. In the end, Kennedy committed to quietly withdrawing the missiles from Turkey, the Soviets removed their missiles from Cuba, and war was averted. The lessons of the episode are clear: even in matters of life and death, perceptions of fairness matter, and failing to account for them can push countries to the brink of nuclear war, overwhelming the rational calculus that underpins deterrence.

#### 4] Laundry list of empirics

Barash ‘18 David [evolutionary biologist and professor of psychology at the University of Washington. His most recent book is Out of Eden: The Surprising Consequences of Polygamy (2016). With his wife, the psychiatrist Judith Eve Lipton, he is currently writing a book that critiques nuclear deterrence] “The deterrence myth” January 09, 2018. https://aeon.co/essays/nuclear-deterrence-is-more-ideology-than-theory IB Rct by JPark

In his classic The Evolution of Nuclear Strategy (1989), Lawrence Freedman, the dean of British military historians and strategists, concluded: ‘The Emperor Deterrence may have no clothes, but he is still Emperor.’ Despite his nakedness, this emperor continues to strut about, receiving deference he doesn’t deserve, while endangering the entire world. Nuclear deterrence is an idea that became a potentially **lethal ideology**, one that **remains influential** despite having been **increasingly discredited**. After the United States’ nuclear bombings of Hiroshima and Nagasaki in 1945, war changed. Until then, the overriding purpose of military forces had ostensibly been to win wars. But according to the influential US strategist Bernard Brodie writing in 1978: ‘From now on its chief purpose must be to avert them. It can have almost no other useful purpose.’ Thus, nuclear deterrence was born, a **seemingly rational** arrangement by which peace and stability were to arise by the threat of **mutually assured destruction** (MAD, appropriately enough). Winston Churchill described it in 1955 with characteristic vigour: ‘Safety will be the sturdy child of terror, and survival the twin brother of annihilation.’ Importantly, deterrence became not only a purported strategy, but the **very grounds** on which governments **justified nuclear weapons** themselves. Every government that now possesses nuclear weapons claims that they deter attacks by their threat of **catastrophic retaliation**. Even a brief examination, however, reveals that deterrence is not **remotely as compelling** a principle as its reputation suggests. In his novel The Ambassadors (1903), Henry James described a certain beauty as ‘a jewel brilliant and hard’, at once twinkling and trembling, adding that ‘what seemed all surface one moment seemed all depth the next’. The public has **been bamboozled** by the **shiny surface** appearance of deterrence, with its promise of strength, security and safety. But what has been touted as profound strategic depth **crumbles with surprising ease** when subjected to critical scrutiny. Let’s start by considering the core of deterrence theory: that it has worked. Advocates of nuclear deterrence insist that we should thank it for the fact that a **third world war** has been avoided, even when **tensions between the two superpowers**---the US and the USSR---ran high. Some supporters even maintain that deterrence set the stage for the fall of the Soviet Union and the defeat of Communism. In this telling, the West’s nuclear deterrent prevented the USSR from invading western Europe, and delivered the world from the threat of Communist tyranny. There are, however, **compelling arguments** suggesting that the US and the former Soviet Union avoided world war for **several possible reasons**, most notably because **neither side wanted to go to war**. Indeed, the US and Russia never fought a war prior to the nuclear age. Singling out nuclear weapons as the reason why the **Cold War never became hot** is somewhat like saying that a junkyard car, without an engine or wheels, never sped off the lot only **because no one turned the key**. Logically speaking, there is **no way to demonstrate** that nuclear weapons kept the peace during the Cold War, or that they do so now. Perhaps peace prevailed between the two superpowers simply because they had no quarrel that justified fighting a terribly destructive war, even a conventional one. **There is no evidence**, for example, that the Soviet leadership **ever contemplated** trying to conquer western Europe, much **less that it was restrained** by the West’s nuclear arsenal. Post facto arguments---especially negative ones---might be the **currency of pundits**, but are **impossible to prove,** and offer **no solid ground** for evaluating a counterfactual claim, conjecturing why something has not happened. In colloquial terms, if a dog does not bark in the night, can we say with certainty that no one walked by the house? Deterrence enthusiasts are like the woman who **sprayed perfume on her lawn** every morning. When a perplexed neighbour asked about this strange behaviour, she replied: **‘I do it to keep the elephants away.’** The neighbour protested: ‘But **there aren’t any elephants** within 10,000 miles of here,’ whereupon the perfume-sprayer replied: **‘You see, it works!’** We should not congratulate our leaders, or deterrence theory, much less nuclear weapons, for keeping the peace. What we can say is that, as of this morning, those with the power to exterminate life have not done so. But this is not altogether comforting, and **history is no more reassuring**. The duration of ‘nuclear peace’, from the Second World War to the end of the Cold War, lasted less than five decades. More than 20 years separated the First and Second World Wars; before that, there had been more than 40 years of relative peace between the end of the Franco-Prussian War (1871) and the First World War (1914), and 55 years between the Franco-Prussian War and Napoleon’s defeat at Waterloo (1815). Even in war-prone Europe, **decades of peace** have not been so rare. Each time, when peace ended and the next war began, the war involved weapons available at the time---which, for the next big one, would likely include nuclear weapons. The only way to make sure that nuclear weapons are not used is to make sure that there are no such weapons. There is certainly **no reason to think** that the presence of nuclear weapons will prevent their use. The first step to ensuring that humans do not unleash **nuclear [winter]** holocaust might be to show that the Emperor Deterrence has no clothes---which would then open the possibility of **replacing the illusion** with something more suitable. It is possible that the post-1945 US-Soviet peace came ‘through strength’, but that need not imply nuclear deterrence. It is also undeniable that the presence of nuclear weapons on **hair-trigger alert** capable of reaching each other’s homeland in minutes has made **both sides** edgy. The **Cuban Missile Crisis** of 1962---when, by all accounts, the world came **closer to nuclear war** than at any other time---is not testimony to the effectiveness of deterrence: the crisis occurred **because of nuclear weapons**. It is more likely that we have been spared nuclear war **not because** of deterrence **but in spite of it**. Even when possessed by just one side, nuclear weapons have not deterred **other forms of war**. The **Chinese, Cuban, Iranian and Nicaraguan** revolutions all took place **even though** a nuclear-armed US backed the overthrown governments. Similarly, the US lost the **Vietnam War**, just as the Soviet Union lost in **Afghanistan**, despite both countries not only possessing nuclear weapons, but also more and better conventional arms than their adversaries. Nor did nuclear weapons aid Russia in its **unsuccessful war** against **Chechen rebels** in 1994-96, or in 1999-2000, when Russia’s conventional weapons devastated the suffering Chechen Republic. Nuclear weapons did not help the US achieve its goals in **Iraq** or **Afghanistan**, which have become **expensive catastrophic failures** for the country with the world’s most advanced nuclear weapons. Moreover, despite its nuclear arsenal, the US remains fearful of **domestic terrorist attacks**, which are more likely to be **made with nuclear weapons** than be deterred by them. In short, it is **not legitimate** to argue that nuclear weapons have deterred any sort of war, or that they will do so in the future. During the Cold War, each side engaged in conventional warfare: the Soviets, for example, in **Hungary** (1956), **Czechoslovakia** (1968), and **Afghanistan** (1979-89); the Russians in **Chechnya** (1994-96; 1999-2009), **Georgia** (2008), **Ukraine** (2014-present), as well as **Syria** (2015-present); and the **US in Korea** (1950-53), **Vietnam** (1955-75), **Lebanon** (1982), **Grenada** (1983), **Panama** (1989-90), **the Persian Gulf** (1990-91), the **former Yugoslavia** (1991-99), **Afghanistan** (2001-present), and **Iraq** (2003-present), to mention just a few cases. Nor have their weapons deterred attacks upon nuclear armed states by **non-nuclear opponents**. In 1950, China stood 14 years from developing and deploying **its own** nuclear weapons, whereas the US had a well-developed atomic arsenal. Nonetheless, as the **Korean War’s tide** was shifting dramatically against the North, that US nuclear arsenal **did not inhibit China** from sending more than 300,000 soldiers across the Yalu River, resulting in the stalemate on the Korean peninsula that divides it to this day, and has resulted in one of the world’s **most dangerous unresolved stand-offs**. In 1956, the nuclear-armed United Kingdom warned **non-nuclear Egypt** to refrain from nationalising the Suez Canal. To no avail: the UK, France and Israel ended up **invading Sinai** with conventional forces. In 1982, Argentina attacked the **British-held Falkland Islands**, even though the UK had nuclear weapons and Argentina did not. Following the US-led invasion in 1991, conventionally armed Iraq was **not deterred** from **lobbing Scud missiles** at nuclear-armed Israel, which did not retaliate, although it could have used its nuclear weapons to vaporise Baghdad. It is hard to imagine how doing so would have **benefitted anyone**. Obviously, US nuclear weapons did not deter the **terrorist attacks** on the US of 11 September 2001, just as the nuclear arsenals of the **UK and France** have not **prevented repeated terrorist attacks** on those countries. Deterrence, in short, **does not deter**. The pattern is deep and **geographically widespread**. Nuclear-armed France couldn’t prevail over the non-nuclear **Algerian National Liberation Front**. The US nuclear arsenal didn’t **inhibit North Korea** from seizing a US intelligence-gathering vessel, the USS Pueblo, in 1968. Even today, this boat remains in North Korean hands. US nukes didn’t enable China to get Vietnam to end its **invasion of Cambodia** in 1979. Nor did US nuclear weapons **stop Iranian Revolutionary Guards** from capturing US diplomats and holding them hostage (1979-81), just as fear of US nuclear weapons didn’t empower the US and its allies to force Iraq to **retreat from Kuwait** without a fight in 1990. In Nuclear Weapons and Coercive Diplomacy (2017), the political scientists Todd Sechser and Matthew Fuhrmann examined 348 territorial disputes occurring between 1919 and 1995. They used **statistical analysis** to see whether nuclear-armed states were **more successful** than conventional countries in **coercing their adversaries** during territorial disputes. **They weren’t**. Not only that, but nuclear weapons **didn’t embolden** those who own them to escalate demands; if anything, such countries were somewhat **less successful in getting their way**. In some cases, the analysis is **almost comical**. Thus, among the very few cases in which threats from a nuclear-armed country were coded as having compelled an opponent was the US insistence, in 1961, that the Dominican Republic hold democratic elections following the **assassination of** the dictator Rafael **Trujillo**, as well as the US demand, in 1994, following a **Haitian military coup**, that the Haitian colonels restore Jean-Bertrand Aristide to power. In 1974-75, nuclear China forced non-nuclear Portugal to surrender its claim to Macau. These examples were included because the authors honestly sought to **consider all cases** in which a nuclear-armed country got its way vis-à-vis a non-nuclear one. But **no serious observer** would attribute the capitulation of Portugal or the Dominican Republic to the nuclear weapons of China or the US. All of this also suggests that the **acquisition of nuclear weapons** by Iran or North Korea is **unlikely to enable** these countries to coerce others, whether their ‘targets’ are armed with **nuclear or conventional weapons**. It is one thing to conclude that nuclear deterrence **hasn’t** necessarily **deterred**, and hasn’t provided coercive power---but its **extraordinary risks are even more discrediting**. First, deterrence via nuclear weapons **lacks credibility**. A police officer armed with a backpack nuclear weapon would be unlikely to deter a robber: ‘Stop in the name of the law, or I’ll blow us all up!’ Similarly, during the Cold War, NATO generals lamented that towns in West Germany were less than two kilotons apart---which meant that defending Europe with nuclear weapons would destroy it, and so the claim that the Red Army would be deterred by nuclear means was **literally incredible**. The result was the elaboration of smaller, **more accurate tactical weapons** that would be more usable and, thus, whose employment in a crisis would be more credible. But deployed weapons that **are more usable**, and thus **more credible as deterrents**, are more liable to be used. Second, deterrence requires that each side’s arsenal **remains invulnerable** to attack, or at least that such an attack would be prevented insofar as a potential victim **retained a ‘second-strike’ retaliatory capability**, sufficient to prevent such an attack **in the first place**. Over time, however, nuclear missiles have become increasingly accurate, raising concerns about the vulnerability of these weapons to a ‘counterforce’ strike. In brief, nuclear states are **increasingly able** to target their adversary’s nuclear weapons for destruction. In the **perverse argot** of deterrence theory, this is called **counterforce vulnerability**, with ‘vulnerability’ referring to the target’s nuclear weapons, not its population. The **clearest outcome** of increasingly accurate nuclear weapons and the ‘counterforce vulnerability’ component of deterrence theory is to **increase the likelihood of a first strike**, while also **increasing the danger** that a potential victim, fearing such an event, might be tempted to **pre-empt with its own first strike**. The resulting situation---in which each side **perceives** a possible **advantage** in striking first---is **dangerously unstable**. Third, deterrence theory **assumes optimal rationality** on the part of decision-makers. It presumes that those with their fingers on the **nuclear triggers** are **rational actors** who will also remain calm and cognitively unimpaired under extremely stressful conditions. It also presumes that leaders will **always retain control** over their forces and that, moreover, they will always retain control over their emotions as well, making decisions based **solely on a cool calculation** of strategic costs and benefits. Deterrence theory maintains, in short, that each side will **scare the pants off the other** with the prospect of the most **hideous, unimaginable consequences**, and will then conduct itself with the **utmost deliberate and precise rationality**. Virtually everything known about human psychology suggests that **this is absurd**. In Black Lamb and Grey Falcon: A Journey Through Yugoslavia (1941), Rebecca West noted that: ‘Only part of us is sane: only part of us loves pleasure and the longer day of happiness, wants to live to our 90s and die in peace …’ It requires no arcane wisdom to know that people often act out of **misperceptions**, anger, despair, insanity, stubbornness, revenge, pride and/or dogmatic conviction. Moreover, in certain situations---as when either side is **convinced that war is inevitable**, or when the pressures to avoid losing face are **especially intense**---an irrational act, including a **lethal one**, can appear appropriate, even unavoidable. When he ordered the attack on Pearl Harbor, the Japanese defence minister observed that: ‘Sometimes it is necessary to close one’s eyes and jump off the platform of the Kiyomizu Temple [a renowned suicide spot].’ During the First World War, Kaiser Wilhelm II of Germany wrote in the margin of a government document that: ‘Even if we are destroyed, England at least will lose India.’ While in his bunker, during the final days of the Second World War, Adolf Hitler ordered what he hoped would be the total destruction of Germany, because he felt that Germans had ‘failed’ him. Consider, as well, a US president who shows signs of mental illness, and whose statements and tweets are **frighteningly consistent** with dementia or genuine psychosis. National leaders---nuclear-armed or not---aren’t immune to mental illness. Yet, deterrence theory **presumes otherwise**. Finally, there is **just no way** for civilian or **military leaders to know** when their country has **accumulated enough nuclear firepower** to **satisfy the requirement** of having an ‘effective deterrent’. For example, if one side is **willing to be annihilated** in a counterattack, **it simply cannot be deterred**, no matter the threatened retaliation. Alternatively, if one side is **convinced** of the other’s implacable hostility, or of its presumed indifference to loss of life, **no amount of weaponry** can suffice. Not only that, but so long as accumulating weapons **makes money** for defence contractors, and so long as designing, producing and deploying new ‘generations’ of nuclear stuff advances careers, the truth about deterrence theory will **remain obscured**. Even the sky is not the limit; militarists want to put weapons in outer space. Insofar as nuclear weapons also serve symbolic, psychological needs, by demonstrating the **technological accomplishments** of a nation and thus conveying legitimacy to otherwise **insecure leaders and countries**, then, once again, there is no **rational way** to establish the minimum (or cap the maximum) size of one’s arsenal. At some point, additional detonations nonetheless come up against the **law of diminishing returns**, or as Winston Churchill pointed out, they simply ‘make the rubble bounce’. In addition, ethical deterrence is an oxymoron. Theologians know that a nuclear war could never meet so-called ‘just war’ criteria. In 1966, the Second Vatican Council concluded: ‘Any act of war aimed indiscriminately at the destruction of entire cities or of extensive areas along with their populations is a crime against God and man itself. It merits unequivocal and unhesitating condemnation.’ And in a pastoral letter in 1983, the US Catholic bishops added: ‘This condemnation, in our judgment, applies even to the retaliatory use of weapons striking enemy cities after our own have already been struck.’ They continued that, if something is immoral to do, then it is also immoral to threaten. In a message to the 2014 Vienna Conference on the Humanitarian Impact of Nuclear Weapons, Pope Francis declared that: ‘Nuclear deterrence and the threat of mutually assured destruction cannot be the basis of an ethics of fraternity and **peaceful coexistence** among peoples and states.’ The United Methodist Council of Bishops go further than their Catholic counterparts, concluding in 1986 that: ‘Deterrence must no longer receive the churches’ blessing, even as a temporary warrant for the maintenance of nuclear weapons.’ In The Just War (1968), the Protestant ethicist Paul Ramsey asked his readers to imagine that traffic accidents in a particular city had suddenly been reduced to zero, after which it was found that everyone had been required to strap a newborn infant to the bumper of every car. Perhaps the most frightening thing about nuclear deterrence is its **many paths to failure**. Contrary to what is widely assumed, the **least likely** is a **‘bolt out of the blue’** (BOOB) attack. Meanwhile, there are **substantial risks** associated with **escalated conventional war**, accidental or unauthorised use, irrational use (although it can be argued that any use of nuclear weapons would be irrational) or **false alarms**, which have happened with **frightening regularity**, and could lead to **‘retaliation’ against an attack that hadn’t happened**. There have also been numerous **‘broken arrow’ accidents**---accidental launching, firing, theft or loss of a nuclear weapon---as well as circumstances in which such events as a **flock of geese, a ruptured gas pipeline or faulty computer codes** have been interpreted as a **hostile missile launch**. The above describes only some of the **inadequacies** and **outright dangers** posed by deterrence, the **doctrinal fulcrum** that manipulates nuclear hardware, software, deployments, accumulation and escalation. Undoing the ideology---verging on theology---of deterrence won’t be easy, but neither is living under the **threat of worldwide annihilation**. As the poet T S Eliot once wrote, unless you are in over your head, how do you know how tall you are? And when it comes to nuclear deterrence, we’re all in over our heads.

#### 5] Future arms races will cause deterrence to breakdown.

Tucker 18, Patrick Tucker (technology editor for Defense One. He’s also the author of The Naked Future: What Happens in a World That Anticipates Your Every Move? (Current, 2014). Previously, Tucker was deputy editor for The Futurist for nine years. Tucker has written about emerging technology in Slate, The Sun, MIT Technology Review, Wilson Quarterly, The American Legion Magazine, BBC News Magazine, Utne Reader, and elsewhere), 4-24-2018, "Experts Say AI Could Raise the Risks of Nuclear War," Defense One, https://www.defenseone.com/technology/2018/04/experts-say-artificial-intelligence-could-raise-risks-nuclear-war/147673/ //SW

Artificial intelligence could destabilize the delicate balance of nuclear deterrence, inching the world closer to catastrophe, according to a working group of experts convened by RAND. New smarter, faster intelligence analysis from AI agents, combined with more sensor and open-source data, could convince countries that their nuclear capability is increasingly vulnerable. That may cause them to take more drastic steps to keep up with the U.S. Another worrying scenario: commanders could make decisions to launch strikes based on advice from AI assistants that have been fed wrong information. Last May and June, RAND convened a series of workshops, bringing together experts from nuclear security, artificial intelligence, government, and industry. The workshops produced a report, released on Tuesday, that underlines how AI promises to rapidly improve Country A’s ability to target Country B’s nuclear weapons. And that may lead Country B to radically rethink the risks and rewards of acquiring more nuclear weapons or even launching a first strike. “Even if AI only modestly improves the ability to integrate data about the disposition of enemy missiles, it might substantially undermine a state’s sense of security and undermine crisis stability,” the report said. North Korea, China, and Russia use mobile launchers (even elaborate tunnel networks) to position ICBMs rapidly for strike. The U.S. would have less than 15 minutes of warning before a North Korean launch, Joint Chiefs of Staff Vice Chairman Gen. Paul Selva told reporters in January. If U.S. analysts could harness big data and AI to better predict the location of those launchers, North Korea might conclude that it needs more of them. Or Russia might decide that it needs nuclear weapons that are harder to detect, such as the autonomous Status-6 torpedo. “It is extremely technically challenging for a state to develop the ability to locate and target all enemy nuclear-weapon launchers, but such an ability also yields an immense strategic advantage,” the report said. “The tracking and targeting system needs only to be perceived as capable to be destabilizing. A capability that is nearly effective might be even more dangerous than one that already works.” Such a capability might employ drones with next-generation sensors, which “could enable the development of strategically destabilizing threats to the survivability of mobile ICBM launchers but also offer some hope that arms control could help forestall threats.” The workshop also explored how commanders might use artificially-intelligent decision aids when making judgment calls about nuclear strikes. Such aids might help commanders to make much better-informed decisions — or, if penetrated and fed malicious data by an adversary, catastrophically wrong ones.

#### 6] Conventional weapons deter better

Eric **Gomez 18**. Policy analyst for defense and foreign policy studies at the CATO Institute. 2-28-2018. "Book Review: Roundtable: The Future of Extended Deterrence." Cato Institute. https://www.cato.org/publications/commentary/book-review-roundtable-future-extended-deterrence

The U.S. nuclear umbrella is ill-suited for deterring such gray-zone scenarios in the East China Sea. It strains credulity to think U.S. leaders could convince Beijing that it will use nuclear weapons to prevent or reverse the seizure of uninhabited rocks in the East China Sea. According to Daryl Press’s book on credibility, “Leaders assess the credibility of threats by comparing the expected costs of carrying out those threats against the interests at stake.”21 Press’s views on credibility have been overturned in recent years by new research, but none of the new literature disputes his emphasis on the balance of interests for making credible threats.22 The U.S. nuclear umbrella plays no plausible role in a gray-zone scenario involving Chinese aggression in the East China Sea because the U.S. stake in uninhabited rocks is too negligible to risk Chinese nuclear retaliation. As Fiona Cunningham and M. Taylor Fravel’s work on China’s nuclear strategy argues, “[Chinese analysts] implicitly assume that the stakes would be too low for the United States…and that Washington would either restrain or abandon its allies if defending them gave rise to a situation in which the United States would need to threaten to use nuclear weapons.”23 While the U.S. nuclear umbrella offers little protection in an East China Sea scenario, improved conventional strike capabilities would allow Japan to implement a deterrence-by-denial approach much more credibly. As Roehrig explains in his chapter on deterrence theory, “Deterrence by denial seeks to defeat an attack or…to make an aggression so costly that it would not be worth attacking in the first place.”24 Intelligence gathering assets, anti-aircraft and anti-ship missiles stationed on nearby Japanese islands, and maritime patrol ships and aircraft would make it very difficult for China to covertly seize territory and would provide highly credible non-nuclear options for defending Japanese territorial claims. Beijing does possess a quantitative advantage in ships and aircraft, but Tokyo does not need parity with China to effectively impose high military costs that could deter Chinese overreach.

### 1AR---AT Conventional War

#### 1] Turn---nuclear deterrence increases risk of conventional war.

Zhao '18 (Tong Zhao; Tong Zhao is a senior fellow in Carnegie’s Nuclear Policy Program based at the Carnegie–Tsinghua Center for Global Policy., ; 5-8-2018; "A Response to Lewis A. Dunn’s Proposal of “Strategic Elimination of Nuclear Weapons”"; https://carnegietsinghua.org/2018/05/08/response-to-lewis-a.-dunn-s-proposal-of-strategic-elimination-of-nuclear-weapons-pub-76307, Carnegie-Tsinghua Center, accessed 12-3-2019; JPark)

For the NPT NWS, one potential obstacle to committing to the goal of strategic elimination by 2045 is that they still have doubts about the desirability of the ultimate goal of complete physical abolition. From the perspective of safeguarding security, the NWS remain concerned that the complete physical abolition of nuclear weapons by all nuclear-armed countries will undermine their national-security interests and those of their allies and will negatively affect regional or global stability. There are concerns that, without nuclear weapons, conventional wars would be more likely to break out. It would be more difficult for small countries with inferior military capabilities to deter and defend against aggression and for major powers to maintain stability among themselves. Major powers such as Russia and China, whose conventional capabilities are among the very best in the world but are **inferior** to those of the United States, worry that they would be **disadvantaged** in a **nuclear-weapon-free worl**d. Some societies may already be moving in this direction. But the continued **retention of nuclear deterrence** and the lingering threat of potentially killing hundreds of thousands of people make the **potential** loss of fewer lives in a conventional war look **comparatively acceptable**. In this sense, the retention of nuclear weapons is delaying a **progressive transformation** toward a more advanced and civilized state of international relations in which countries no longer need to rely on nuclear weapons to maintain peace and stability. Furthermore, as the stability–instability paradox illustrates, mutual nuclear deterrence assures both parties that **neither** will launch a nuclear war and therefore they don’t need to worry too much about the risk of nuclear wars.3This could actually encourage countries to behave **more assertively** at the conventional military level and thus **increase** the chances of conventional wars breaking out. In contrast, in a society where nuclear weapons were **no longer present** and the general public had become more appreciative of human lives, governments would be **more cautious** about initiating a **conventional** conflict. For the NWS, the greatest obstacle to self-restraint in maintaining and modernizing their nuclear arsenals and to the implementation of a program of true disarmament is the tendency to conduct worst case scenario thinking. There are always extreme military scenarios in which even the most conventionally powerful country could find the use of nuclear weapons helpful, let alone those countries with much weaker and smaller conventional forces. When it comes to national-security matters, worst-case scenario thinking prevents security strategists from taking any risk in preparing for extreme scenarios under which they think the use of nuclear weapons would be necessary, however unlikely such scenarios might be in practice. On the other hand, people tend to ignore the fact that the peace and stability provided by nuclear deterrence is **not risk-free**. The risk of nuclear deterrence failing to work always exists, and the consequences of such a failure would be catastrophic. In addition, there are risks of accidental nuclear launches due to technical or human errors. Close calls of this type have happened more than once in history.

#### 2] Ratcheting down nuclear threats is key to conventional military draw-down

Zhao 17 [Tong Zhao, Fellow, Nuclear Policy Program, Carnegie–Tsinghua Center for Global Policy, September 2, 2017, “Tong Zhao, Fellow, Nuclear Policy Program, Carnegie–Tsinghua Center for Global Policy.” The Nonproliferation Review, vol. 24, no. 5–6, pp. 454–462]

There are important arguments that can prove the desirability of a nuclear-free world but have not been sufficiently understood. For example, people tend to separate the possession of nuclear weapons from the existence of major security problems among countries. They believe that there exist in the world bad regimes and serious security problems, and that nuclear weapons are needed to contain and manage them. However, they seem to underestimate that, in many cases, efforts to maintain nuclear weapons and nuclear deterrence have themselves created serious international-security problems. The constant offense–defense competition around nuclear weapons generates much fear and distrust. To some extent, the possession of nuclear weapons creates the greatest threat perception and hostility between countries. In the long run, as economies have developed and the average standard of living has dramatically increased in most countries since World War II, people’s tolerance of suffering major losses of life and damage to their property and environment appears to have dropped considerably. This increasing appreciation of the value of life is an indicator of a more civilized society. At the same time, it means there is less need to rely on the threat to kill hundreds of thousands of people to maintain peace. If this trend continues, the consequences of even a conventional war that would cost many fewer human lives may become unacceptable to most societies. In that case, using nuclear weapons as weapons of deterrence would be overkill, and conventional weapons may be increasingly capable of replacing nuclear weapons in this role. Some societies may already be moving in this direction. But the continued retention of nuclear deterrence and the lingering threat of potentially killing hundreds of thousands of people make the potential loss of fewer lives in a conventional war look comparatively acceptable. In this sense, the retention of nuclear weapons is delaying a progressive transformation toward a more advanced and civilized state of international relations in which countries no longer need to rely on nuclear weapons to maintain peace and stability. Furthermore, as the stability–instability paradox illustrates, mutual nuclear deterrence assures both parties that neither will launch a nuclear war and therefore they don’t need to worry too much about the risk of nuclear wars.3 This could actually encourage countries to behave more assertively at the conventional military level and thus increase the chances of conventional wars breaking out. In contrast, in a society where nuclear weapons were no longer present and the general public had become more appreciative of human lives, governments would be more cautious about initiating a conventional conflict. For the NWS, the greatest obstacle to self-restraint in maintaining and modernizing their nuclear arsenals and to the implementation of a program of true disarmament is the tendency to conduct worst-case-scenario thinking. There are always extreme military scenarios in which even the most conventionally powerful country could find the use of nuclear weapons helpful, let alone those countries with much weaker and smaller conventional forces. When it comes to national-security matters, worst-case-scenario thinking prevents security strategists from taking any risk in preparing for extreme scenarios under which they think the use of nuclear weapons would be necessary, however unlikely such scenarios might be in practice. On the other hand, people tend to ignore the fact that the peace and stability provided by nuclear deterrence is not risk-free. The risk of nuclear deterrence failing to work always exists, and the consequences of such a failure would be catastrophic. In addition, there are risks of accidental nuclear launches due to technical or human errors. Close calls of this type have happened more than once in history. Ultimately, the decision to abolish nuclear weapons cannot be absolutely risk-free in terms of its potential implications for national security. If there is no willingness to take any risk in this process, nuclear disarmament will never be achieved. But, given the inherent security risks of using nuclear weapons to maintain peace and stability, there may be a strong argument for taking some risks to achieve the abolition of those weapons. This argument would have to overcome bureaucratic inertia and the tendency to preserve the status quo. Without some serious external pressure, particularly from a clearly stipulated deadline, the NWS will never willingly embrace the necessary risks or even conduct the necessary deep thinking about such fundamental issues. The Prohibition Treaty and Dunn’s proposal for achieving strategic elimination in the medium-term future introduce such needed pressure. In addition, nuclear disarmament is not only a security argument; it is a moral argument, too. The reason China adopted an unconditional no-first-use (NFU) policy as early as 1964 was not that NFU offered the maximum security benefits for China. Given the inferiority of China’s conventional military forces at that time and the serious conventional military threat it faced, China had every reason to maintain the option of using nuclear weapons to deter not only nuclear attacks but also conventional attacks. But, in addition to wanting to create a positive international image of their country and to reduce international criticism, the Chinese top leaders’ adoption of unconditional NFU at that time was also motivated by a sense of moral responsibility to use nuclear weapons only for retaliating against nuclear attacks. Research shows that moral considerations did play an important role in China’s nuclear decision making during the Cold War.4 There is no reason to argue that moral considerations should not continue to be part of nuclear decision making in the future.

### 1AR---AT DIB

#### 1] double bind – either the aff won’t trigger the impact or the litany of other reductions in arms sales that aren’t approved by the military thump

#### 2] DIB collapse inevitable --- monopolies, offshoring, no innovation.

Stoller 19 - Matt Stoller is a fellow at the Open Markets Institute. (“America’s Monopoly Crisis Hits the Military” The American Conservative, 6/27, <https://www.theamericanconservative.com/articles/americas-monopoly-crisis-hits-the-military/>

The Loss of the Defense Industrial Base But it’s not just the dual-use commercial manufacturing base that is collapsing. Our policy empowering Wall Street and offshoring has also damaged the more specialized defense base, which directly produces weaponry and equipment for the military. How pervasive is the loss of such capacity? In September 2018, the Department of Defense released findings of its analysis into its supply chain. The results highlighted how fragile our ability to supply our own military has become. The report listed dozens of militarily significant items and inputs with only one or two domestic producers, or even none at all. Many production facilities are owned by companies that are financially vulnerable and at high risk of being shut down. Some of the risk comes from limited production capability. Mortar tubes, for example, are made on just one production line, and some Marine aircraft parts are made by just one company—one which recently filed for bankruptcy. At risk is everything from chaff to flares to high voltage cable, fittings for ships, valves, key inputs for satellites and missiles, and even material for tents. As Americans no longer work in key industrial fields, the engineering and production skills evaporate as the legacy workforce retires. Even more unsettling is the reliance on foreign, and often adversarial, manufacturing and supplies. The report found that “China is the single or sole supplier for a number of specialty chemicals used in munitions and missiles…. A sudden and catastrophic loss of supply would disrupt DoD missile, satellite, space launch, and other defense manufacturing programs. In many cases, there are no substitutes readily available.” Other examples of foreign reliance included circuit boards, night vision systems, batteries, and space sensors. The story here is similar. When Wall Street targeted the commercial industrial base in the 1990s, the same financial trends shifted the defense industry. Well before any of the more recent conflicts, financial pressure led to a change in focus for many in the defense industry—from technological engineering to balance sheet engineering. The result is that some of the biggest names in the industry have never created any defense product. Instead of innovating new technology to support our national security, they innovate new ways of creating monopolies to take advantage of it. A good example is a company called TransDigm. While TransDigm presents itself as a designer and producer of aerospace products, it can more accurately be described as a designer of monopolies. TransDigm began as a private equity firm, a type of investment business, in 1993. Its mission, per its earnings call, is to give “private equity-like returns” to shareholders, returns that are much higher than the stock market or other standard investment vehicles. It achieves these returns for its shareholders by buying up companies that are sole or single-source suppliers of obscure airplane parts that the government needs, and then increasing prices by as much as eight times the original amount. If the government balks at paying, TransDigm has no qualms daring the military to risk its mission and its crew by not buying the parts. The military, held hostage, often pays the ransom. TransDigm’s gross profit margins using this model to gouge the U.S. government are a robust 54.5 percent. To put that into perspective, Boeing and Lockheed’s profit margins are listed at 13.6 percent and 10.91 percent. In many ways, TransDigm is like the pharmaceutical company run by Martin Shkreli, which bought rare treatments and then price gouged those who could not do without the product. Earlier this year, TransDigm recently bought the remaining supplier of chaff and one of two suppliers of flares, products identified in the Defense Department’s supply chain fragility report. TransDigm was caught manipulating the parts market by the Department of Defense Inspector General in 2006, again in 2008, and finally again this year. It is currently facing yet another investigation by the Government Accountability Office. Yet, Trandigm’s stock price thrives because Wall Street loves monopolies, regardless of who they are taking advantage of. Take this analysis from TheStreet from March 2019, published after the latest Inspector General report and directly citing many of the concerning facts from the report as pure positives for the investor: The company is now the sole supplier for 80% of the end markets it serves. And 90% of the items in the supply chain are proprietary to TransDigm. In other words, the company is operating a monopoly for parts needed to operate aircraft that will typically be in service for 30 years…. Managers are uniquely motivated to increase shareholder value and they have an enviable record, with shares up 2,503% since 2009. Fleecing the Defense Department is big business. Its executive chairman W. Nicholas Howley, skewered by Democrats and Republicans alike in a May 2019 House Oversight hearing for making up to 4,000 percent excess profit on some parts and stealing from the American taxpayer, received total compensation of over $64 million in 2013, the fifth most among all CEOs, and over $13 million in 2018, making him one of the most highly compensated CEOs no one has ever heard of. Shortly after May’s hearing, the company agreed to voluntarily return $16 million in overcharges to the Pentagon, but the share price is at near record highs. L3 Technologies, created in 1997, has taken a different, but also damaging, approach to monopolizing Defense Department contracts. Originally, it sought to become “the Home Depot of the defense industry” by going on an acquisition binge, according to its former CEO Frank Lanza. Today, L3 uses its size, its connections within the government, and its willingness to offer federal employees good-paying jobs at L3, to muscle out competitors and win contracts, even if the competitor has more innovative and better priced products. This practice attracted the ire of two Republican congressmen from North Carolina, Ted Budd and the late Walter Jones, who found in 2017 that L3 succeeds, in part, due to “blatant corruption and obvious disregard of American foreign interest in the name of personal economic profit.” Like TransDigm, this isn’t L3’s first brush with trouble. It was temporarily suspended from U.S. government contracting for using “extremely sensitive and classified information” from a government system to help its international business interests. It was the subject of a scathing Senate Armed Services Committee investigation for failing to notify the Defense Department that it supplied faulty Chinese counterfeit parts for some of its aircraft displays. And it agreed to pay a $25.6 million settlement to the U.S. government for knowingly providing defective weapon sights for years to soldiers serving in Iraq and Afghanistan. Yet, also like TransDigm, L3 has thrived despite its troubles. When the company was granted an open-ended contract to update the Air Force’s electronics jamming airplane in 2017, Lieutenant General Arnold Bunch outlined the Air Force’s logic at a House Armed Services Subcommittee meeting. L3, he said, is the only company that can do the job. “They have all the tooling, they have all the existing knowledge, and they have the modeling and all the information to do that work,” he said. In other words, because L3 has a monopoly, there was no one else to pick. The system—a system designed by the financial industry that rewards monopoly and consolidation at the expense of innovation and national security—essentially made the pick for him. It is no wonder our military capacities are ebbing, despite the large budget outlays—the money isn’t going to defense.

#### 3] No link - the US only spends less than 50 billion per year on nukes – that’s only 7% of what we pump into the industry

Mehta 19 (Mehta, Aaron. “Here's How Many Billions the US Will Spend on Nuclear Weapons over the next Decade.” Defense News, Defense News, 24 Jan. 2019, [www.defensenews.com/space/2019/01/24/heres-how-many-billions-the-us-will-spend-on-nuclear-weapons-over-the-next-decade/](http://www.defensenews.com/space/2019/01/24/heres-how-many-billions-the-us-will-spend-on-nuclear-weapons-over-the-next-decade/). [Aaron Mehta is Deputy Editor and Senior Pentagon Correspondent for Defense News, covering policy, strategy and acquisition at the highest levels of the Department of Defense and its international partners.])//LK [Accessed 2/9/19]

WASHINGTON — If the U.S. carries out all of its plans for modernizing and maintaining the nuclear arsenal, it will cost $494 billion over the next decade, an average of just less than $50 billion per year, a new government estimate has found. The number, part of a biannual estimate put out by the Congressional Budget Office, is 23 percent over the previous estimate of $400 billion released in 2017. That 2017 figure was a 15 percent increase over the 2015 number. The number will likely grab attention in Congress, especially on the House Armed Services Committee, where new Chairman Rep. Adam Smith, D-Wash., has made it clear he’s looking for ways to save money by cutting nuclear costs. Told of the new estimate, ranking member Rep. Mac Thornberry, R-Texas, acknowledged the topic as a possible partisan friction point and defended nuclear modernization as worth the cost. “What I believe all the previous estimates have been is that at no point does it take more than 7 percent of the defense budget — and from my standpoint, it’s upon which most of our defense efforts are based,” Thornberry said. “I have no doubt it will be a topic we discuss this year.”

#### 4] UQ o/w the link – stocks are at an all time high and any form of conflict is sufficient to boost them

Winck 20 (Winck, Ben. “Defense Stocks Tear Higher Following Iran's Missile Strikes on Bases Housing US Troops | Markets Insider.” Business Insider, Business Insider, 8 Jan. 2020, markets.businessinsider.com/news/stocks/defense-stocks-rise-iran-missile-strikes-us-raytheon-northrop-grumman-2020-1-1028803105.)//LK [Accessed 2/9/20]

Defense stocks including Northrop Grumman, Lockheed Martin, and Raytheon leaped in early Tuesday trading after Iran launched missile strikes on two military bases housing US troops. Northrop Grumman and Lockheed Martin, both major players in the aerospace sector, traded as much as 1.2% higher Tuesday morning. L3Harris Technologies surged as much as 1.4%, and Raytheon jumped about 0.9%. Iran targeted two Iraqi bases Tuesday night with more than a dozen ballistic missiles in "proportionate measures in self-defense," according to Iranian Foreign Minister Javad Zarif. Neither Iraqi nor coalition forces "recorded any losses," The New York Times reported, citing the Joint Command in Baghdad. Aerospace and defense companies typically surge higher in the wake of heightened geopolitical tensions or new threats of war. The firms supply key parts, vehicles, and weapons to the US military, and wartime often drives increased orders for their products. The missile attacks were made in response to the US's assassination of top Iranian general Qassem Soleimani on Friday. The attack came "at the direction of" President Trump and was meant to deter "future Iranian attack plans," according to the Defense Department. Several Democrats have since called on the president to reveal intelligence justifying the airstrike. Iranian officials hinted at the Tuesday airstrikes soon after, with the nation's supreme leader, Ayatollah Ali Khamenei, warning "harsh retaliation is waiting" for the US. The US drone strike led global stocks to tank and pushed gold and oil prices higher. Some analysts deemed the event a good opportunity to pile into safe-haven assets, while others advised clients to stay in stocks and potentially buy more while prices are lower. "Iran does usually retaliate so the current situation brings rising uncertainty. But our view about this being a bull market has not changed," David Donabedian, CIBC Private Wealth Management's chief investment officer, wrote Friday. "Iran is something that must be watched, but investors should not overreact." The S&P 500 Aerospace & Defense Industry Index closed at 17,529.38 on Tuesday, up roughly 2.4% from Thursday's close and before reports of Soleimani's assassination.

### 1AR---AT CBW Shift

#### 1] Prolif causes bioweapons

**Mezzour 15---**Ph.D. in Electrical and Computer Engineering and Computation, Organizations and Society (now Societal Computing) from Carnegie Mellon University (Ghita Mezzour , Assessing the Global Cyber and Biological Threat, <http://casos.cs.cmu.edu/publications/protected/2015-2016/thesis_ghita_mezzour_final.pdf>, April 2015)

Countries are motivated to develop BW mainly due to in-kind deterrence [76, 149] and deterrence of nuclear weapon use [149]. Having a BW enemy may cause a country to seek BW in order to fill the perceived security imbalance [76, 149]. Similarly, having a nuclear enemy may cause a country to seek BW in order to improve its deterrence posture [149]. This is particularly true when the country lacks the financial and technical infrastructure necessary to build nuclear weapons. It is worth noting that countries that seek BW to deter nuclear enemies are aware of the fact that BW are not perfect substitutes for nuclear weapons [10, 64] and may continue pursuing nuclear weapons even after acquiring BW [64] It may be unclear at first that BW can play a deterrent role despite BW programs being secret. However, Tucker [149], the founding director of the Chemical and Biological Weapons program at the James Martin Center for Nonproliferation Studies of the Monetary Institute of International Studies, explains that BW can play such a role because countries may hint about their weapons without formally admitting to having them. For example, Israel is able to use nuclear weapons as a deterrent without formally acknowledging having such weapons. The primary disincentive against seeking BW is the absence of a perceived security deficit [64, 76, 149]. A country that has nuclear reassurance may not see a need for BW. Nuclear reassurance results from the country’s own nuclear weapons or from nuclear weapons of an ally that promises retaliation in case the country is attacked. Similarly, strong conventional weapons of the country or its allies may provide reassurance and reduce the need for BW. Other disincentives include the risk of provoking countermeasures, uncertain BW military utility, security problems associated with a BW capability, availability of BW defenses and moral constraints [149].

#### 2] BW won’t fill in---BUT, even if it did, no impact

Michael C. Horowitz & Neil Narang 18. Horowitz is a professor of political science and the associate director of Perry World House at the University of Pennsylvania; Narang is an Assistant Professor in the Department of Political Science at the University of California, Santa Barbara. 02/22/2018. “Poor Man’s Atomic Bomb? Exploring the Relationship between ‘Weapons of Mass Destruction’ 1.” The Logic of American Nuclear Strategy: Why Strategic Superiority Matters, Oxford University Press.

Biological and chemical weapons may also have utility for the purposes of international bargaining—especially at lower levels of hostility—compared to nuclear weapons, because they are perceived as more usable. Despite their perception as inhumane, chemical weapons have been used in warfare several times in the last fifty years. Although biological weapons have not often been used, international perceptions of their importance have always been high. The United States maintained an active offensive BW research program until the 1970s. Revelations about Iraq’s biological weapons program after 1991, and about the former Soviet BW program, exposed the possibility of biological warfare to a broad international audience (Moodie 2001). Combined with widespread policy analysis of the risks of biological warfare, the credibility of biological weapons threats may be relatively high compared to nuclear weapons, due to perceptions that nations are unlikely to use nuclear weapons. This supposition is plausible, given that the blast radius—the area effected by the delivery of a single weapon—and the number of people likely to be killed, would be much higher for an average nuclear attack, in comparison to an average biological or chemical attack (Cordesman 2001). If chemical and biological weapons are perceived as more usable than nuclear weapons, and fulfill somewhat different missions, they might complement each other in a national military arsenal. Additionally, most countries do not view chemical and biological weapons as destructive enough to actually substitute for nuclear weapons. To this end, Zelicoff (2001) argues that the magnitude of destruction possible from chemical weapons means they are not WMD. 3 The historical record provides some support for this view. While the Germans achieved an important tactical breakthrough at the Second Battle of Ypres in 1915, once both sides in World War I developed their own chemical arsenals and defenses, the weapons ceased to be decisive. Also, weather conditions, such as sunlight and wind, can heavily influence the relative effectiveness of chemical weapons (Hammond Jr. 1999, 65). This makes them relatively unreliable in many cases. The difficulty of mating chemical weapons onto missiles also complicates perceptions of their relative effectiveness (Karp 1996). Even for the United States in World War I, when 26.8 percent of US casualties were due to chemical weapons, only 2 percent of those casualties died (Spiers 1994, 4). Attempted uses of chemical weapons in the post-Cold War era may also illustrate the difficulties involved in their delivery. When Aum Shinrikyo distributed sarin gas in the Japanese subway system in 1995, thousands were sent to the hospital but only twelve died (Tucker 2001). Similarly, biological weapons, while offering the possibility for massive destruction, also face a multiplicity of technical complications that potentially reduces their relative utility. 4 First, biological agents are unlikely to survive for a long time in the open atmosphere—meaning they have to be delivered rapidly. Second, changing weather conditions could undermine the effectiveness of a BW attack (Panofsky 1998). Third, biological weapons would either have to be directly placed in a position to cause destruction, such as the poisoning of a water supply, or sprayed in the air above a city. This is harder to do than many realize, and reduces the probability of a successful BW attack (Karp 1996). Finally, if proper warning and containment occur, passive defense measures can substantially reduce the impact of a BW attack (Office of Technology Assessment 1993, 52). For these reasons, it is perhaps not surprising that the empirical record is mixed on the perceived effectiveness of biological weapons. For instance, the United States abandoned its offensive biological weapons program in the early 1970s, believing biological weapons did not provide a relative edge in combat. Biological and chemical weapons also have limited utility in counterforce usages against infrastructure and strategic targets. Since they are predominantly useful for generating casualties, they cannot substitute for the destructive counter-force power of nuclear weapons. Together, the substantial technical limitations of biological and chemical weapons, and the distinct patterns in their historical usage on the battlefield (smaller scale and often domestic threats), suggest that to some degree the three weapons may be treated as complements in states’ overall weapons portfolios. If this supposition is accurate, the popular usage of the term WMD may obscure more than it clarifies, especially if it leads to a single WMD counter-proliferation policy under the assumption that the demand for each type is driven by the same factors. Hypothesis 1: Nuclear weapons and CBWs should function as complements: countries with a nuclear weapon will be equally, if not more likely to pursue CBWs (simultaneously), compared to countries without nuclear weapons

#### 3] No transition or retaliation from CBW.

Sundaram '10 (P K Sundaram; P K Sundaram is a Senior Research Fellow at the Indian Pugwash Society, New Delhi; 6-1-2010; "De-linking CBW from Nuclear Deterrence"; https://idsa.in/cbwmagazine/DelinkingCBWfromNuclearDeterrence\_pksundram\_0410, No Publication, accessed 12-8-2019; JPark)

The pertinence of the role of using nuclear weapons against chemical or biological attacks was under discussion for a long time. Since the C&B weapons are **already banned** and there are multilateral mechanisms to deal with **violations through** the **UN Security Council**, the US unilateralism of linking nuclear deterrence to Chemical and Biological threats was deemed **unwarranted**. However, in the December 2002 “National Strategy to Combat Weapons of Mass Destruction,” the Bush administration stated that the US reserves the right to retaliate with overwhelming force, including nuclear weapons, in case of a CBW attack.7 On the operational side, the option to use nuclear weapons to destroy identified enemy stockpiles of chemical or biological weapons was included in the draft “Doctrine for Joint Nuclear Operations” of The Joint Chiefs of Staff in 2005.8 China in its Unilateral Security Assurance of 1978, was the first state to come up with a comprehensive no-first-use policy affirming “at no time and in no circumstances it will be the first to use nuclear weapons”.9 This obviously means CBW threats are **de-linked** from nuclear deterrence in **China’s** policy. In **Russia’s** case, it has a **clear declaration** about using nuclear weapons in response to a WMD attack against or a major conventional attack against itself or its allies.10 Pakistan’s stance on using nuclear weapons is perhaps most amorphous in the world. It has no stated nuclear doctrine but it has linked its nuclear posture to India and its military leaders have been evoking nuclear threats even in case of water disputes.11 India has a declared no-first-use policy on nuclear weapons under its nuclear doctrine adopted in August 1999.12 However, in the pronouncements in the wake of establishment of the Strategic Force Command (SFC) in 2003, India practically revised this stance by allowing for the use of nuclear weapons in response to a biological or chemical attack. It added a phrase saying “…..in the event of a major attack against India, or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons.”13 This revision in India’s nuclear doctrine is also seen as diluting the NFU stance against the NNWS.14 India has been demanding a universal No-First-Use treaty. This demand found place in its 7-point agenda submitted to UN Conference on Disarmament in 2008.15 However, this can be meaningfully done only with de-linking chemical and biological weapons from nuclear deterrence. Scholars have been arguing that clubbing CBW weapons with nuclear weapons under the rubric of ‘Weapons of Mass Destruction’ is misleading.16 The major justification provided for linking nuclear deterrence to CBW threat is that in case of a CBW attack, states can not retaliate in kind, as Chemical and Biological Weapons have been outlawed. However, a close scrutiny would suggest that the supposed role of nuclear weapons in CBW deterrence goes against nonproliferation imperatives. Whether nuclear weapons can deter chemical or biological threats has also been **under question**. Contrary to the credo of nuclear proliferation optimists, the **experts** on **Chemical and Biological Arms Control** have held that pushing nuclear weapons to the background would actually help in making chemical or biological weapon programs less attractive.17 The International Commission on Nuclear Non-proliferation and Disarmament (ICNND)’s “Draft Treaty on Non-First use of Nuclear Weapons” also in its introduction asserts that No-First-Use doctrines, with stated non-use against CBW threats “would give **less motivation** for other states to develop nuclear —or for that matter chemical or biological—weapons capabilities of their own”.18 Moreover, to actually reduce the danger of chemical weapons, meeting the extended deadline of 2012 for destroying chemical weapons stockpiles, universalizing the CWC, strengthening the Organisation for the Prohibition of Chemical Weapons (OPCW) are much urgent needs than a hollow threat of nuclear weapons. Nuclear weapons have not been used since 1945 and there a great deal of political taboo and extremely complex strategic calculations would be involved in actually using nuclear weapons. Therefore, nuclear threat is **not** likely to be an effective deterrent for **chemical weapons** anyways. De-emphasizing the role of nuclear weapons in dealing with CBW threats did not come to Obama’s Nuclear Posture Review only because of some exigent imperative of disarmament politics. In the process of drafting of the Nuclear Posture Review, the Nuclear Weapons Complex Consolidation (NWCC) Policy Network’s recommendation for a new strategic posture highlighted the need of eliminating any reference to the sue of nuclear weapons in retaliation to CBW attacks, holding that “military means other than the threat of nuclear preemption or retaliation can and must suffice to address these lesser threats.”19 the report went further in its recommendations and underlined that the new US Posture review should “forego integrating the potential use of nuclear weapons with strategies for use of conventional force” and mandate nuclear weapons to be used only against nuclear attacks or threats. Defining the “Sole Purpose” of Nuclear Weapons With chemical and nuclear weapons already internationally banned, the only real possibility of their use is by **malicious non-state actors**. And when it comes to non-state actors, nuclear weapons do not provide any credible deterrence promise against them.20 Moreover, in case of CBW weapons, the forensics to determine the source of such attacks is an extremely complex process and identifying the state harbouring or commanding the terrorists will always be disputable. This will blunt the possibility of retaliatory strike. The best ways to reduce CBW terrorist threats have been identified as---intelligence collection and analysis, control spread of precursor chemical or biological agents, reducing vulnerability of high-profile targets, strengthening biosecurity measures including management of consequences of CBW attack, increased security at chemicals and biological plants and research centres and enhanced international co-operation.21 Experts, including the ICNND Report on Non-proliferation and Disarmament strongly recommend strengthening of compliance mechanism of the Chemical Weapons Convention and Biological and Toxin Weapons Convention, while making retaliation against nuclear attacks “sole purpose” of nuclear weapons.22 Hence, there is a strong case for **de**-linking chemical and biological weapons **from nuclear deterrence doctrines**. This will make no-first-use policies meaningful and further contribute to de-valuing nuclear weapons, an essential step towards a world free of nuclear weapons.

#### 3] No bioweapons prolif---intangible factors

Sonia 12 (Sonia Ben Ouagrham-Gormley, ey is Assistant Professor in the Biodefense Program at George Mason University, Spring 2012. “Barriers to Bioweapons: Intangible Obstacles to Proliferation.” https://www.jstor.org/stable/pdf/41428121.pdf?refreqid=excelsior%3A40e8d7a63f623904c29007ee12ba64f8)

The U.S. and Soviet bioweapons programs offer valuable insights for assessing future bioweapons proliferation threats. Certainly, the globalization of the pharmaceutical and biotechnology industries has enabled an increasingly widespread diffusion of information, materials, and equipment that could prove beneficial to states or terrorist groups interested in developing biological weapons. But although such inputs are necessary, they are hardly sufficient to produce a significant weapons capability As demonstrated in the U.S. and Soviet cases, such intangible factors as organizational makeup and management style greatly affect the use of acquired knowledge, the creation of tacit knowledge, and its transfer within the organization to enable ultimate success. Importantly, these intangible elements are local in character and cannot be easily transferred among individuals or from one place to another. Although the effects of intangible factors are more pronounced in large-scale bioweapons programs, given the increasing complexity introduced by the need to produce a tested weapon with repeatable results, they also affect smaller-scale state and terrorist group programs, as illustrated by South Africa's and Aum Shinrikyo's programs. Even programs with more modest ambitions need to acquire the expertise required to handle, manipulate, and disseminate the agents selected, create an environment conducive to teamwork and learning, integrate the ac- quired knowledge into the existing knowledge base, and adapt the technology to their environment. These are complex and time-consuming tasks for pro- grams operating in a stable environment. For covert programs fearful of detection, the task is made more challenging as the imperatives of maintaining covertness directly contradict the requirement of efficient knowledge use and production. The revolution in biotechnology has not reduced the importance of the in- tangible factors that shape bioweapons program outcomes. Although new breakthroughs in biotechnology can frequently accelerate progress in labora- tory work, these new techniques still depend heavily on teams of scientists and technicians developing new sets of skills through extensive experimentation. Only in this way can they demonstrate the utility of these new breakthroughs for particular applications. Thus, by taking into account the in- tangible dimension of proliferation, intelligence and policy officials can under- stand more holistically how a state or terrorist group can actually use the tangible resources they may have acquired. Ideally, developing a more thor- ough understanding of a program's existing research and knowledge base, as well as how the program is organized and managed, will provide intelligence and policy officials with a better analytical basis for determining the time re- quired for the program to achieve its goal. This in turn will help policymakers fashion interventions that are most appropriate to respond to specific threats. Gathering information about these intangible factors is dependent on intelli- gence efforts, and this article provides insights into how better collection and analysis on WMD threats might be accomplished. However, actions against a suspected program can beneficially be implemented even in the absence of de- tailed information about its knowledge base and organizational makeup. A policy aimed at frustrating the acquisition of skills, the collective interpretation and integration of data and individual knowledge, and the accumulation of knowledge can delay progress in a suspected program and possibly cause its failure.

#### 4] No extinction from disease---burnout and variation checks

York ‘14 (Ian, head of the Influenza Molecular Virology and Vaccines team in the Immunology and Pathogenesis Branch of the Influenza Division at the CDC, PhD in Molecular Virology and Immunology from McMaster University, M.Sc. in Veterinary Microbiology and Immunology from the University of Guelph, former Assistant Prof of Microbiology & Molecular Genetics at Michigan State, “Why Don't Diseases Completely Wipe Out Species?” 6/4/2014, http://www.quora.com/Why-dont-diseases-completely-wipe-out-species)

But mostly diseases don't drive species extinct. There are several reasons for that. For one, the most dangerous diseases are those that spread from one individual to another. If the disease is highly lethal, then the population drops, and it becomes less likely that individuals will contact each other during the infectious phase. Highly contagious diseases tend to burn themselves out that way.¶ Probably the main reason is variation. Within the host and the pathogen population there will be a wide range of variants. Some hosts may be naturally resistant. Some pathogens will be less virulent. And either alone or in combination, you end up with infected individuals who survive.¶ We see this in HIV, for example. There is a small fraction of humans who are naturally resistant or altogether immune to HIV, either because of their CCR5 allele or their MHC Class I type. And there are a handful of people who were infected with defective versions of HIV that didn't progress to disease. ¶ We can see indications of this sort of thing happening in the past, because our genomes contain many instances of pathogen resistance genes that have spread through the whole population. Those all started off as rare mutations that conferred a strong selection advantage to the carriers, meaning that the specific infectious diseases were serious threats to the species.

### ---AT Narang

#### You’re miscutting that card – Narang was criticizing the study and thought it inconclusive – here’s the abstract

Narang 16 (Neil Narang; Neil Narang is an Associate Professor in the Department of Political Science and Co-Director of the Global Security hub in the Orfalea Center at the University of California, Santa Barbara. In 2015-2016, he served as a Senior Advisor in the Office of the Secretary of Defense on a Council on Foreign Relations International Affairs Fellowship. He is currently a research scholar and steering committee member at the University of California Institute for Global Conflict and Cooperation (IGCC), faculty affiliate at the Stanford University Center for International Security and Cooperation (CISAC), affiliated researcher at the Centre for Conflict Development and Peacebuilding (CCDP) at the Graduate Institute, Geneva, and Term Member of the Council on Foreign Relations. Narang specializes in international relations, with a focus on issues of international security and conflict management. Specifically, his research explores the role of signaling under uncertainty in situations of bargaining and cooperation, particularly as it applies to two substantive domains: (1) crisis bargaining in both interstate and civil war, and (2) cooperation through nuclear and conventional military alliances. His articles have appeared in the Journal of Politics, International Studies Quarterly, Journal of Conflict Resolution, Journal of Peace Research, among others. He received his PhD in Political Science from UCSD and he holds a BA in Molecular Cell Biology and Political Science from the University of California, Berkeley. He has previously been a fellow at the University of Pennsylvania’s Browne Center for International Politics, a nonproliferation policy fellow at the Los Alamos National Laboratory, and a junior faculty fellow and visiting professor at Stanford University’s Center for International Security and Cooperation; 4-1-2016; "All Together Now? Questioning WMDs as a Useful Analytical Unit for Understanding Chemical and Biological Weapons Proliferation"; https://www.tandfonline.com/doi/abs/10.1080/10736700.2016.1153184, Taylor &amp; Francis)//LK [Accessed 2/2/20]

The popular use of the term “weapons of mass destruction” (WMD) can be understood to imply a relationship between nuclear, chemical, and biological weapons proliferation insofar as it assumes that the separate weapons technologies can be usefully grouped into a single analytic category. This article explores whether WMD is actually a useful construct. It begins by reviewing the literature on nuclear, chemical, and biological weapons proliferation, including a recent study that sought to estimate the relationship between the pursuit and acquisition of these different weapons. It then explores some policy inferences that academics and policy makers may be tempted to draw from these studies, particularly regarding the Barack Obama administration's pursuit of deep nuclear reductions. It argues that many of these policy inferences are premature at best and misleading at worst. It concludes with a call for additional research into the causes and consequences of chemical and biological weapons proliferation, and a call for scholars to remain cautious in their desire to draw premature policy implications from their studies in order to be “policy relevant.”

#### Seriously – Narang is very disappointed in you

Narang 16 (Neil Narang; Neil Narang is an Associate Professor in the Department of Political Science and Co-Director of the Global Security hub in the Orfalea Center at the University of California, Santa Barbara. In 2015-2016, he served as a Senior Advisor in the Office of the Secretary of Defense on a Council on Foreign Relations International Affairs Fellowship. He is currently a research scholar and steering committee member at the University of California Institute for Global Conflict and Cooperation (IGCC), faculty affiliate at the Stanford University Center for International Security and Cooperation (CISAC), affiliated researcher at the Centre for Conflict Development and Peacebuilding (CCDP) at the Graduate Institute, Geneva, and Term Member of the Council on Foreign Relations. Narang specializes in international relations, with a focus on issues of international security and conflict management. Specifically, his research explores the role of signaling under uncertainty in situations of bargaining and cooperation, particularly as it applies to two substantive domains: (1) crisis bargaining in both interstate and civil war, and (2) cooperation through nuclear and conventional military alliances. His articles have appeared in the Journal of Politics, International Studies Quarterly, Journal of Conflict Resolution, Journal of Peace Research, among others. He received his PhD in Political Science from UCSD and he holds a BA in Molecular Cell Biology and Political Science from the University of California, Berkeley. He has previously been a fellow at the University of Pennsylvania’s Browne Center for International Politics, a nonproliferation policy fellow at the Los Alamos National Laboratory, and a junior faculty fellow and visiting professor at Stanford University’s Center for International Security and Cooperation; 4-1-2016; "All Together Now? Questioning WMDs as a Useful Analytical Unit for Understanding Chemical and Biological Weapons Proliferation"; https://www.tandfonline.com/doi/abs/10.1080/10736700.2016.1153184, Taylor &amp; Francis)//LK [Accessed 2/2/20]

Misleading Inferences So what inferences—if any—from this research can we draw to the likely impact of deep nuclear reductions on the risk of chemical and biological weapons proliferation? Might policies that limit the supply of nuclear weapons simply shift proliferation risk elsewhere? Even more to the point, could actors increasingly view chemical and biological weapons as the “poor man's atomic bomb,” in inverse relationship to declining global nuclear stockpiles? The short answer to these questions is that we cannot yet know the likely impact of deep nuclear reductions on chemical and biological weapons proliferation. This is because existing research—including our own study—does not provide the type of empirical evidence needed to forecast these outcomes with any real confidence. To illustrate this, I anticipate four mechanisms through which restrictions in the global supply of nuclear weapons might be posited to increase the risk of chemical and biological weapons proliferation. I then show that each of these inferences is nevertheless unsustainable based on the findings described above. The first inference that one may be tempted to draw from past findings is that a policy focused on achieving reductions in the global nuclear stockpile could cause a rise in chemical and biological weapons proliferation as more states view them as a “poor man's atomic bomb.” As noted above, our findings suggested that states appear to seek chemical and biological weapons for many of the same reasons as they pursue nuclear weapons. Furthermore, our findings also indicate that states that do not possess nuclear weapons appear to be systematically more likely to pursue chemical and biological weapons than states that do possess them. When combined, it may seem reasonable to suppose that, conditional on some level of demand for one of these types of weapons, reductions in the global supply of nuclear weapons could cause some states to pursue chemical and biological weapons as “imperfect substitutes” for the deterrence and compellence benefits of nuclear weapons. A second inference that one may be tempted to draw is that a strengthened NPT may increase the risk of chemical and biological weapons proliferation. Understood in the terms of our study, policies and institutions designed to monitor and sanction the unilateral pursuit or dissemination of nuclear weapons material and technical expertise—like the NPT or the Nuclear Suppliers Group—might be understood as supply constraints that effectively increase the transaction costs of nuclear weapons acquisition. Furthermore, previous research has shown that the supply of sensitive nuclear assistance and civilian nuclear assistance are both positively associated with the risk of nuclear weapons pursuit and acquisition across states and over time.17 When combined, it may seem reasonable to suppose that, given some demand for a “weapon of mass destruction,” chemical and biological weapons could seem like relatively cheaper pursuits under a more robust global nuclear nonproliferation regime that further regulates the supply of nuclear weapons. A third inference that one may be tempted to draw is that reductions in the global supply of nuclear weapons and a strengthening of the nuclear nonproliferation regime could increase the risk of chemical and biological weapons pursuit by terrorist groups. If one is willing to assume terrorist groups aim to influence governments by threatening to impose costs in order to achieve concessions— whether this be through strategies like coercion, provocation, spoiling, or outbidding—then it may seem reasonable to suppose that limiting the availability of nuclear weapons might shift the demand to other coercive instruments such as chemical or biological weapons.18 A final inference that one might be tempted to draw is that unilateral reductions in global nuclear stockpiles could have a second order effect of weakening extended deterrence commitments to nuclear client-states, and thereby increase the risk of chemical and biological weapons pursuit among them. Today, it is widely believed that the US commitment to extended deterrence over South Korea and Japan is partly responsible for their decision to forgo nuclear weapons.19 However, one explanation for why the United Kingdom and France chose to develop their own nuclear capabilities fifty years ago—despite their inclusion under the US “nuclear umbrella”—is that these two states ultimately doubted the credibility of the US commitment to defend Western Europe in the event of a Soviet attack.20 If accurate, it may seem reasonable to suppose that unilateral reductions in the nuclear weapon stockpile of a patron-state may influence the perceived credibility of its commitments to extended nuclear deterrence, and thereby increase the risk that client-states will pursue some kind of WMD to fill an unmet demand for security. Although each of these four mechanisms seem like plausible inferences, it is important to note that they are all based on empirical findings that are highly contingent. For example, the first and second inferences are based on research designs in which the marginal effects of individual factors are estimated while holding everything else constant across states and over time. As a result, one may only infer that reductions in the overall supply of nuclear weapons could shift proliferation risk to chemical and biological weapons, if—and only if—other factors do not change in anticipation of this effect. But policy makers could take this risk into account when proceeding with nuclear disarmament efforts. If, for example, policy makers are careful to simultaneously lower the ease of acquiring chemical and biological weapons (perhaps by strengthening the CWC and the 1972 Biological and Toxin Weapons Convention as a basis for cooperation), one should not expect to observe substitution. Similarly, although the inferences here are based on analyses that attempted to control for the effect of the chemical and biological weapons conventions—along with any emerging norm against the use of these weapons—historical patterns in the pursuit and acquisition of WMDs may be less diagnostic today if the norm against non-use of chemical and biological weapons strengthens. Finally, the analyses behind these inferences do not explicitly consider the role of conventional forces, or how the pursuit of acquisition of different WMDs is related to the pursuit of conventional weapons superiority.21 As a result, it is not clear how and to what extent the risk of chemical and biological weapons pursuit will be affected by the pursuit of conventional weapons. The third and fourth inferences are even harder to sustain. In addition to the problems listed above, these inferences require additional assumptions that have little to no empirical support. For example, to sustain the third inference, one would need to further assume that the demand for NBCs is similarly correlated for terrorist groups, something neither our study nor any other research has the data to support. Without an explicit analysis of terrorist groups, it is simply impossible to know whether the demand for different WMDs is more or less elastic among groups compared to states in the international system. Similarly, to sustain the fourth inference, one would need to assume that any unilateral reductions in the nuclear weapon stockpile of a patron-state would lower the perceived credibility of an extended nuclear deterrence commitment. And yet, there is no systematic evidence to date that such reductions leave allies any less assured, nor is there any evidence that having some unmet demand for security would cause client-states to pursue any WMD without distinction.

### ---AT NoKo CBW

#### 1] No motive, no tech, and reports overexaggerate – be skeptical about the negative’s claims

**Parachini ’19** (Parachini, John. “Why We Should Be Skeptical About Recent Reports on North Korea's Biological Weapons Programs: 38 North: Informed Analysis of North Korea.” 38 North, 30 Jan. 2019, www.38north.org/2019/01/jparachini013019/. John Parachini is a senior international policy analyst and the former director of the Intelligence Policy Center at the RAND Corporation. He has led RAND projects on North Korean decision making, WMD proliferation, intelligence and strategic warning, emerging technology forecasting, the propensity of terrorists to acquire chemical, biological, radiological, and nuclear weapons; foreign terrorist fighter adaptations to counter measures; and scenario development for counterterrorism planning. Parachini has testified before both houses of Congress and published articles on terrorism and weapons proliferation in the Washington Quarterly, Arms Control Today, RAND Review, The Nonproliferation Review, Studies in Conflict and Terrorism, Prism, the Los Angeles Times, the San Francisco Chronicle, Newsday, USA Today, Prism and International Herald Tribune. Previously, Parachini served as the executive director of the Washington office of the Monterey Institute of International Studies’ Center for Nonproliferation Studies. Prior to joining the Monterey Institute, he was a senior associate at the Henry L. Stimson Center, where he focused on nonproliferation and arms control issues. He served in short assignments at the U.S. State Department. Parachini has taught at Georgetown University, George Washington University, the University of Southern California Washington Policy Center and the City University of New York’s Baruch College. Parachini holds a B.A. in philosophy from Haverford College; an M.A. in international relations from the Paul H. Nitze School of Advanced International Studies, Johns Hopkins University; and an M.B.A. from Georgetown University. Accessed 2/1/20.) //ZL

While the use of biological weapons (BW) can have great consequences and any state having them in their military arsenal is a major international concern, assessments are made about the extent and sophistication of North Korean BW capabilities that are based on very little information. A [recent news story](https://www.nytimes.com/2019/01/15/science/north-korea-biological-weapons.html) reviewing the danger that North Korea’s biological weapons capabilities may pose is a case in point. One former government official quoted in the report opined that North Korea is “Far more likely to use biological weapons than nuclear ones” and that “the program is advanced, underestimated and highly lethal.” These assertions may be true, but it is virtually impossible to know given North Korea’s secrecy and its track record of hiding military research and production facilities. US Assessments of North Korean BW Capabilities: Not as Definitive as Portrayed US government unclassified statements over the years about North Korea’s BW capabilities do not clarify our understanding. A [threat assessment](https://www.cia.gov/library/reports/general-reports-1/report-of-proliferation-related-acquisition-in-1997.html#North-Korea) by the Central Intelligence Agency (CIA) in 1997 indicated that North Korea was “capable of supporting a limited [biological weapons] effort.” Eight years later, in 2005, then CIA Director Porter Goss [reported](https://www.cia.gov/news-information/speeches-testimony/2005/Goss_testimony_02162005.html) that “North Korea has active [chemical weapons] and [biological weapons] programs and probably has chemical and possibly biological weapons ready for use. However, since 2014, the US Intelligence Community’s unclassified assessments on BW have dropped North Korea from the list of suspect programs. In 2014, US Director of National Intelligence (DNI) James Clapper only [singled out](https://www.dni.gov/files/documents/Intelligence%20Reports/2014%20WWTA%20%20SFR_SSCI_29_Jan.pdf) Syria as having “some elements” of a biological warfare program that had “advanced beyond the research and development stage.” One year later, Clapper [cited](https://www.dni.gov/files/documents/Unclassified_2015_ATA_SFR_-_SASC_FINAL.pdf) no state BW weapons programs of concern. The current DNI, Daniel Coats, also failed to mention any biological programs in his first World Wide Threat (WWT) [testimony](https://www.dni.gov/files/documents/Newsroom/Testimonies/SSCI%20Unclassified%20SFR%20-%20Final.pdf) before Congress in May 2017. In his 2018 WWT [statement](https://www.dni.gov/files/documents/Newsroom/Testimonies/2018-ATA---Unclassified-SSCI.pdf), he said “North Korea has a longstanding BW capability and biotechnology infrastructure that could support a BW program.” Coats does not say “North Korea has one of the most robust offensive bioweapons programs on the earth,” as John Bolton did in a 2002 speech. With much less bravado, Coats uses language that describes what could be the case in a very large number of countries, including North Korea. Assessing ROK and Defector Claims: Cause for Skepticism Many assessments of North Korea’s biological capabilities draw heavily from South Korean sources. These are legitimate sources of information, but like any stream of information, they are imperfect. In a 2012 white paper, the South Korean Ministry of National Defense (MND), [assessed](https://www.nti.org/media/pdfs/ROK_2012_White_Paper.pdf) that North Korea “likely has the capability to produce a variety of biological weapons including anthrax, smallpox, pest, francisella, tularensis, and hemorrhagic fever virus,” but provided no supportive documentation or evidence. In 2016, the MND [altered the language](http://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_201705180357180050.pdf) to “sources indicate that North Korea is capable of cultivating and producing various types of biological agents such as anthrax, smallpox, and pest on its own.”[[1]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn1) Defectors are also important but not definitive sources of information; their reports present a worrisome picture, but many are based on indirect or secondhand knowledge, repeat what has appeared in the open press, or are implausible.[[2]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn2) During 2003–04 and again in 2009, several defectors claimed that North Korea tested poisonous materials on political prisoners.[[3]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn3) However, these charges refer to the use of chemicals on humans and not biological agents. In 2014, a group of scientists, Korea experts and human rights advocates attempted to verify these claims by speaking with South Koreans working with the North Koreans who made these allegations. The group was unable to corroborate the allegations and discovered inaccuracies discrediting the defectors’ claims.[[4]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn4) There are reports that recent defectors have been vaccinated for smallpox and anthrax, which has led some to assert that the regime has weaponized these agents and is prepared to use them.[[5]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn5) While we cannot not rule out the possibility, it is also possible that such vaccinations might be a routine practice of North Korea’s defensive program. The Soviet Union, Warsaw Pact nations and Iraq all vaccinated their forces as standard practice. The US military vaccinates its troops before deploying them to potential war zones. North Korean propaganda has claimed since 1951 that the US attacked it with BW during the Korean War. These claims lack credible evidence and have been [discredited](https://www.wilsoncenter.org/sites/default/files/cwihp_wp_78_china_false_bw_allegations_korean_war_march_16.pdf) by Soviet and Chinese documents. While some North Korean leaders may have known the truth about these allegations, others may not have. Continuing to depict the US as an evil power that may invade using all manner of terrible weapons fits with North Korea propaganda and inspires the North Korean people to prepare for it. North Korea also justifies its fear of other states’ biological capabilities by citing how in 2015 the US military acknowledged that it mistakenly sent live anthrax cultures to an American military base in South Korea.[[6]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn6) Shortly after this mishap, Kim Jong Un [visited](http://www.38north.org/2015/07/mhanham070915) Pyongyang Bio-technical Institute. Photographic images from Kim’s 2015 visit do not exhibit the military security, safety precautions, and other common measures associated with facilities that could produce biological weapons. Biological weapons production facilities are not places one just strolls around without wearing protective gear. Furthermore, none of the countries that revealed and decommissioned their BW programs ever housed them in dual-use facilities. They were always located in heavily guarded military facilities. The Kim regime might have arranged the visit to sow concern about its potential capabilities and serve as a deterrent. What the images do reveal is that the regime evaded export sanction restrictions and obtained equipment that could be used perniciously. Even if North Korea has lab samples of smallpox and some of the other pathogens previously described, weaponizing them is a formidable scientific and engineering challenge. Assessments by the South Korean government estimate that North Korea has a dozen biological agents—if true, it is the exact number of BW agents the US produced and just one short of what the former Soviet Union produced.[[7]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn7) The US and the Soviet Union spent huge sums of money on their BW programs over several decades, experiencing tremendous difficulties including accidents that resulted in some deaths. Despite its progress in various scientific domains, North Korea is unlikely to have matched the efforts of Cold War superpowers at the same time it was developing nuclear weapons and missile capabilities to deliver them. Moreover, smallpox was eradicated in 1979 and only the US and Russia store and handle the disease under World Health Organization supervision. The assumption of the international community has been that these are the only two remaining repositories of smallpox. A [recent report](https://www.nonproliferation.org/wp-content/uploads/2018/12/op43-dprk-international-scientific-collaborations.pdf) identifying scientific articles North Korean scientists co-authored with foreign scientists raised concern that the Kim regime is taking advantage of international scientific collaboration to boost its technological capabilities and in turn aid its BW programs. The report rightly raises concerns that some of these collaborative efforts violate various international sanctions. It also provides the basis for valuable follow-up research with the foreign co-authors to see how they perceived the implications of the collaboration. This report represents a much more rigorous approach to assessing North Korean capabilities than the statement by one North Korea watcher who opined that North Korea scientists must be experimenting “with gene editing that could enhance bacteria and viruses…because scientists love to tinker.”[[8]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn8) Again, while this may be possible, more evidence is needed than just the notion that scientists love to tinker. The Need for Greater Transparency North Korea has publicly stated that it is a member of the Biological Weapons Convention when challenged about its biological weapons capabilities and has [asserted](https://www.reuters.com/article/us-northkorea-syria/north-korea-denies-chemical-weapons-link-with-syria-state-media-idUSKCN1GD6IZ) that it “does not develop, produce and stockpile chemical weapons and opposes chemical weapons themselves,” reflecting at least some acknowledgment that these are taboo weapons. Until there is greater transparency, however, on the regime’s dual-use facilities, its claims will be suspect. Although North Korea may not be willing to engage in any dialogue about its actual or latent BW, it might be willing to engage in some confidence building exchanges on medical, agricultural, and other issues that might provide some view on its dual-use facilities that create suspicions. Embarking upon scientific and medical exchanges on clear civilian issues might build important relationships that lead to additional transparency and understanding of the capabilities in biological science. Additionally, as a corollary to the dialogue on North Korea’s nuclear and missile programs, the US and South Korea could invite North Korea to join in a pledge never to use biological weapons. All three countries are parties to the international convention banning biological weapons (the BWC), so, in theory, this should be a diplomatic opportunity to get the three nations to reaffirm their commitment to the BWC. A few attempts to further transparency into North Korea’s biological activities could contribute to the goal of gaining more insight on whether it is complying with the terms of the BWC. If they have a clandestine biological program, such efforts may cause them to halt or dismantle it. As to whether and to what extent North Korea has a clandestine biological weapons program we will not know unless there is more transparency. Without more insight, the US and its allies may risk repeating some of the mistakes made about Iraq’s weapons of mass destruction. The Bottom Line on North Korea’s BW North Korea perceives itself as being on a constant war footing, has engaged in aggressive actions and weapons development programs, treats many of its people inhumanely and is a secretive state. Given how the regime has brutalized its people and inflicted violence on its opponents, human testing is imaginable and should be investigated. Yet, until there is more evidence, uncorroborated reports are not a sound basis for asserting North Korea has produced biological weapons. Does North Korea have infrastructure that could be used for biological weapons? Yes. Do we have clear evidence that it has produced and stockpiled these weapons and has nefarious ambitions? The best one can say is that some North Korea watchers fear that they do but the available open source evidence it is not so clear.[[9]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn9) As one scholar noted in a historical review of state biological weapons programs “Intelligence assessments of foreign BW programs often have been wrong, sometimes overestimating, sometimes underestimating, and sometimes missing them altogether.”[[10]](https://www.38north.org/2019/01/jparachini013019/%22%20%5Cl%20%22_ftn10) Hence, DNI Coats’ cautious language in his most recent Worldwide Threat Assessment is by no means a [“slam dunk” moment](https://www.washingtonpost.com/blogs/in-the-loop/wp/2015/05/05/heres-why-ex-cia-director-tenet-said-iraq-would-be-a-slam-dunk/?utm_term=.1e9dbbf0df4a).

### 1AR---Modi Base

#### 1] The lashout argument assumes upcoming elections, but Modi crushed them – UQ overwhelms and economy thumps

**Gettleman ’19** (Gettleman, Jeffrey, et al. “India Election Gives Modi a 2nd Term. Here Are 5 Takeaways.” The New York Times, 23 May 2019, [www.nytimes.com/2019/05/23/world/asia/india-election-narendra-modi.html](http://www.nytimes.com/2019/05/23/world/asia/india-election-narendra-modi.html). Accessed 2/7/2020) //ZL

After hundreds of millions of Indians cast ballots across megacities, mountains and islands, [Prime Minister Narendra Modi won the biggest re-election India has witnessed in decades](https://www.nytimes.com/2019/05/23/world/asia/narendra-modi-election-win.html). Mr. Modi, 68, has dominated India since he won a first term in 2014. Many Indians praise his efforts to stamp out corruption and bring development to poor regions, but his commitment to empowering the nation’s Hindu majority has raised fears in its Muslim minority. Mob lynchings have increased, and right-wing Hindus have felt emboldened to push an extreme agenda. [[Read more about how Narendra Modi scored a historic election victory.]](https://www.nytimes.com/2019/05/23/world/asia/modi-india-election.html?action=click&module=Intentional&pgtype=Article) Here are five takeaways from his re-election. Modi has become one of the most powerful politicians in Indian history. Mr. Modi’s Bharatiya Janata Party and its allies won close to 350 seats in the 545-seat lower house of Parliament, according to nearly complete results. He is the first prime minister in nearly 50 years to win majorities in the Parliament in back-to-back elections, and now commands a sweeping mandate to govern a nation of 1.3 billion people. To his supporters, Mr. Modi is entering the pantheon of India’s most legendary leaders, such as Jawaharlal Nehru, the country’s first prime minister, and Indira Gandhi, Mr. Nehru’s daughter and India’s iron lady of the 1960s, ’70s and early ’80s. India has no term limits, and people are already talking of a third Modi term. Many voters were drawn to Mr. Modi’s intense speaking style, his reputation for getting things done and his carefully crafted image of being a tough defender of India. He called himself the chowkidar — the watchman — and he has pushed a more forceful foreign policy than India has pursued in years, including standing up to China, [nearly going to war](https://www.nytimes.com/2019/03/07/world/asia/kashmir-attack-india-pakistan.html) with Pakistan and drawing closer to the United States. Part of Mr. Modi’s appeal also lies in his Hindu nationalist beliefs, which emphasize India’s Hindu heritage and seek to further empower the country’s Hindu majority, making up about 80 percent of the population. The Hindu right is ascendant. Hindu nationalism has been a thread in Indian politics since even before the country won independence from Britain in 1947. With this election, Hindu nationalists have more power than ever before in modern Indian history. Hindu nationalism is a major plank of the B.J.P., and according to the voting results, the party expanded its reach beyond its base in northern India, considered the conservative Hindu heartland, and won more than a dozen seats in West Bengal, what used to be a leftist stronghold, while picking up others in Odisha and Karnataka. Many analysts expect Mr. Modi to push a more aggressive Hindu nationalist agenda, including the construction of a Hindu temple at [the site of a destroyed mosque in the city of Ayodhya](https://www.nytimes.com/reuters/2019/05/10/world/asia/10reuters-india-election-religion.html) and the expulsion of recent Muslim immigrants from Bangladesh, who Mr. Modi’s party claims have illegally taken up residence in India. All these moves could unsettle many of India’s Muslims, who make up about 15 percent of the population. Mr. Modi may also seek to change the special laws regarding the disputed territory of Kashmir, which has a large Muslim population and [is claimed by both India and Pakistan](https://www.nytimes.com/interactive/2019/world/asia/india-pakistan-crisis.html), to make it easier for Hindus to move there and buy property. Hindu extremists are likely to feel emboldened by Mr. Modi’s election win. The prime minister came up in politics through a far-right Hindu nationalist group, the Rashtriya Swayamsevak Sangh, which he joined as a boy. A Hindu nationalist who once belonged to that group, [Nathuram Godse](https://en.wikipedia.org/wiki/Nathuram_Godse), assassinated the independence leader Mohandas K. Gandhi in 1948. An admirer of Mr. Godse and a member of Mr. Modi’s B.J.P., Sadhvi Pragya Thakur, ran for a Parliament seat in the election, even as she was awaiting trial, accused of a role in a 2008 terrorist attack. Ms. Thakur won that seat on Thursday, just days after she praised Gandhi’s assassin as a “patriot.” The Congress party was eviscerated. Results for the opposition Indian National Congress party, once an unbeatable political force — it led India to independence, counted Gandhi as a member and governed for most of the decades since — were dismal. By Thursday evening, the party had won or was leading in just 51 seats, a small improvement from 2014 but still one of its worst showings ever. As reality set in on Thursday evening, Congress leaders said they needed to revamp their approach to elections. They admitted that the B.J.P. had raised more money and run a superior campaign. Rahul Gandhi, the head of Congress and the great-grandson of India’s first prime minister, conceded defeat in a brief news conference in New Delhi. Looking heartbroken, he told supporters to prepare for a long battle ahead. “I said during the campaign that the people were the masters, and today they have given their verdict,” he said. Mr. Gandhi, 48, is seen by many voters as a lightweight compared with Mr. Modi, and has struggled to compete with his much more assertive and intense rival. Of the two Parliament seats Mr. Gandhi contested, he lost one in northern India that the Gandhi family had held for many years. In just one sign of how dire things have become for the party, Mr. Gandhi [offered to resign](https://www.indiatoday.in/elections/lok-sabha-2019/story/-rahul-gandhi-offers-to-resign-as-congress-chief-after-humiliating-lok-sabha-loss-1532930-2019-05-23) as party leader, according to India Today, a major news outlet. The markets like Modi. Many investors are confident that another Modi government will be good for business, and his victory was seen as a vote for stability. During his first term, Mr. Modi simplified a byzantine tax system, cracked down on corruption and overhauled India’s corporate bankruptcy system. After it became clear that Mr. Modi’s government was returning to power, India’s stock market shot up 2 percent, to a record high. Though small- and medium-size industries have not always kept up with the pace of change, the last thing many in the business community wanted was a fractured coalition government, run by small regional parties that struggle to get along. Voters felt similarly about the economy. Analysts said India’s electorate was clearly not upset enough about the deep-seated challenges facing India, including stagnant job growth, to vote against Mr. Modi. Many wanted to give him a second chance, seeing his first five years as not enough time to make the sweeping changes he has promised. And many voters said they had already noticed positive changes. In interviews throughout the campaign, they pointed to the B.J.P.’s campaigns [to build millions of toilets](https://www.nytimes.com/2017/09/03/world/asia/india-toilet-movie.html), clean up smaller cities and ensure that government money reached recipients without being lost to bribes. The elections were orderly and mostly peaceful. There was no election in the world as big as this one. About 600 million people voted, with more than 8,000 candidates contesting seats in the Parliament. The elections were mostly peaceful, though there were a few [sporadic clashes between supporters of rival parties](https://www.nytimes.com/2019/05/18/world/asia/india-election-violence.html). At least one person was killed. But this was far less violent than during the 2014 elections, when 16 election officials were killed and more than 2,000 people were injured in poll-related violence, according to an [analysis by India Today](https://www.indiatoday.in/elections/lok-sabha-2019/story/west-bengal-election-political-violence-history-trinamool-congress-bjp-left-mamata-banerjee-amit-shah-1526598-2019-05-16). The turnout was a record high, at 67.1 percent. And despite strong passions, gargantuan numbers and high stakes, the elections have nearly concluded with no major allegations of fraud or rigging. Most of the voting was done on electronic voting machines that seemed to work just fine, according to observers and election officials.

#### 2] No link – Modi spins literally anything into a positive

**Kumar ’19** (Kumar, Raksha. “India's Media Can't Speak Truth to Power.” Foreign Policy, 2 Aug. 2019, foreignpolicy.com/2019/08/02/indias-media-cant-speak-truth-to-power-modi-bjp-journalism/. Accessed 2/7/2020) //ZL

After an emphatic electoral victory in May, Indian Prime Minister Narendra Modi faces important challenges in his second term. Growth has slowed to a five-year low, with Modi’s own former top economic advisor [publishing research](https://indianexpress.com/article/opinion/columns/indias-gdp-growth-new-evidence-for-fresh-beginnings-5774138/) in June that showed India’s GDP growth was likely overestimated by 2.5 percentage points. Unemployment is at its highest since the 1970s; hundreds of car dealerships have closed amid a shortage of liquidity in the country’s credit sector; and many promises from Modi’s first term remain unfulfilled, such as his proposals to launch sweeping infrastructure projects across the country. But as Modi looks to address these issues, there’s one big problem for regular Indians: The media is no longer able to adequately hold the prime minister or his government to scrutiny. And in an era of fake news and low trust in the media, an enfeebled class of journalists could eventually lead to a weakening of the very democracy that defines modern India. The signs have been clear for a while now. For much of Modi’s first five years in office, his government seemed to get a free pass from the country’s pliant media. In November 2016, when Modi abruptly recalled 86 percent of the country’s currency—to fight corruption, he said at the time—many influential media outlets failed to ask crucial questions. By [initially lauding](https://www.firstpost.com/business/demonetisation-one-month-what-defines-the-success-of-note-ban-3145634.html) what most economists called a damaging move and by buying the government line, journalists helped spread the incorrect perception that phony economics could fix big problems. In the end, India’s growth rate dropped for several quarters. By buying the government line, journalists helped spread the incorrect perception that phony economics could fix big problems. There are other examples. Last February, Indian military pilots struck the Pakistani town of Balakot in response to a suicide attack on its soldiers. India’s media was awash in jingoistic sentiments, unquestioningly publishing in print and broadcasting on TV the government line that New Delhi had killed a “very large number” of militants from the Jaish-e-Mohammed terrorist group. Days later, [Reuters](https://in.reuters.com/article/uk-india-kashmir-pakistan-airstrike-insi/satellite-images-show-madrasa-buildings-still-standing-at-scene-of-indian-bombing-idINKCN1QN02Z) and some other international media challenged the government line with satellite imagery as evidence; but the damage, once again, was done, as most Indians had already been sold New Delhi’s version of events. Or consider how the Modi government has changed how the country calculates its growth data. In an [open letter](https://cdn-live.theprint.in/wp-content/uploads/2019/03/1552578453615_Press-Release-14-3-2019-Economic-Statistics-in-Shambles.pdf) written last March, more than a hundred economists and social scientists expressed concern that India’s statistical machinery was being “controlled by political considerations.” Again, India’s media barely covered the letter’s release, let alone the dodgy data behind the government’s growth proclamations. In each of these cases, mainstream media—especially the country’s influential TV news channels—functioned largely as government mouthpieces, with only a few exceptions. Perhaps the best example of how journalists have become accustomed to not challenging the government is the fact that Modi failed to hold a single press conference in his first term in office. (On May 17, days before he was reelected, Modi invited the press to his party headquarters and delivered a prepared speech. Amit Shah, then-president of the Bharatiya Janata Party, or BJP, [fielded questions](https://www.indiatoday.in/elections/lok-sabha-2019/story/pm-modi-first-press-conference-amit-shah-bjp-1527526-2019-05-17) from reporters as Modi looked on.) During both state and national elections over the last five years, television news channels frequently carried live campaign speeches by Modi without challenging his assertions or matching the free airtime with coverage of his opponents. Modi failed to hold a single press conference in five years. One way in which the government exerts control over domestic media is through advertising. In June, New Delhi cut off state advertising with at least three publishers of prominent English-language newspapers. Senior executives of those groups and opposition leaders contend that the ad freeze was retaliation for news reports critical of the government. According to a Reuters [report](https://in.reuters.com/article/india-media/modi-government-freezes-ads-placed-in-three-indian-newspaper-groups-idINKCN1TT1R6), these newspaper groups—the publishers of the Times of India, the Hindu, and the Telegraph—have a combined monthly readership of more than 26 million. Not surprisingly, India’s media compares unfavorably to those of other countries. According to Reporters Without Borders, India ranks 140 out of 180 countries for press freedom, behind violence-ridden Afghanistan and South Sudan. And things are getting steadily worse: In 2002, India had ranked 80 of 139 countries surveyed. Worryingly, the rot in Indian journalism is not limited to the corridors of power in New Delhi: It has seeped deep into remote towns and villages. Nearly 70 percent of the country’s 1.3 billion people live in rural areas, and they are served by local-language journalism that is often blighted by poor ethics and no real divide between editorial and sales teams.

### 1AR---AT 2020

#### 1] Thumpers – he just beat impeachment, coronavirus, Iran, all draw attention away

#### 2] Trump wins – Iowa bruh moment

**Levitz 2/4** (Levitz, Eric. “Donald Trump Is Winning the 2020 Democratic Primary.” Intelligencer, 4 Feb. 2020, nymag.com/intelligencer/2020/02/iowa-caucuses-conspiracy-theories-debunked-trump-wins.html. Accessed 2/6/2020) //ZL

On Monday, the Democratic Party kicked off the 2020 campaign by broadcasting [a marathon infomercial](https://nymag.com/intelligencer/2020/02/abolish-iowa-caucuses-fiasco-app-no-winner-sanders-buttigieg.html) for its own administrative incompetence and internecine enmity over every major news channel. The fine details of the party’s general-election strategy have yet to be determined. But it’s hard to name a prominent anti-Trump message that the Iowa caucuses didn’t undermine. Hoping to sell voters on a return “return to normalcy” and presidential professionalism? Your party just orchestrated a [historically abnormal and amateurish fiasco](https://www.businessinsider.com/goddamn-mess-democrats-furious-about-iowa-caucus-catastrophe-2020-2). Planning to paint Trump as a synecdoche for the endemic corruption of American politics? Democrats just gave their most unreliable supporters cause for leveling incendiary allegations of election tampering and egregious graft against the party’s Establishment. Eager to make this race into a referendum on Trump’s opportunistic assaults on liberal democratic norms? Your (former?) front-runner’s [surrogates](https://twitter.com/rickklein/status/1224562658302623744) have been sowing doubts about the legitimacy of election results that look bad for them. Put yourself in the shoes of a low-information swing voter. For all of 2016, every well-credentialed expert and organ of respectable liberal opinion assured you that Donald Trump was an agent of chaos whose election would tank the stock market and sow global disorder. Trump, meanwhile, told you that he was a brilliant businessman who would make great deals to strengthen the economy. You do not consume much news. Or else you take in a discordant cacophony of competing narratives from CNN, Fox News, your liberal aunt and MAGA co-workers. But you do know that the unemployment rate is near half-century lows, and that there are fewer boarded-up retail spaces on the downtown mall, and that wages seem to be rising (however tepidly) even among your less well-off friends, and that your 401(k) is way better off now than it was four years ago. Which of the aforementioned narratives about Donald Trump would you find more plausible? How about if the party that had told you Trump would be an agent of chaos and gross mismanagement then botched an election because it didn’t consider the possibility that the septuagenarian retirees who staff their caucuses [might struggle to use an (untested) app without some training](https://www.nytimes.com/2020/02/04/us/politics/iowa-caucus-problems.html)? A comprehensive account of what went wrong at Monday’s caucuses will take time to compile. But at present, we do know that the Iowa Democratic Party: • Decided to debut a new technology for reporting results on a night when any IT hiccup would mean calamity. • Did not provide 70-something precinct captains with any training on how to use the app and advised them to simply phone in the results if they couldn’t get it to work. • Understaffed the Caucus Night hotline that staffers would need to use in the event of a problem with the app. • Spent $60,000 on a results-reporting app that was always going to be much less secure than more primitive technologies and — when put into practice — reportedly suffered from a [“coding issue”](https://www.nytimes.com/2020/02/04/us/politics/iowa-caucus-nh-primary.html?action=click&module=Spotlight&pgtype=Homepage) that caused it to send only partial results. Which is to say: This was not some perfect storm that descended on Iowa Democrats. It was the culmination of a series of blatant misjudgments. Many within the party saw Monday night’s calamity coming. On the morning of the election, long before the caucuses commenced, the Atlantic’s Elaine Godfrey [published a report](https://www.theatlantic.com/politics/archive/2020/02/new-rules-might-complicate-iowa-caucus/605950/) titled, “The Iowa Caucus Could Go Very Wrong.” The failures were not merely foreseeable; they were foreseen. And those failures haven’t just undermined the Democratic Party’s attacks on Trump’s incompetence. They’ve also inflamed the party’s most wrenching internal disputes and demoralized its most ardent activists. In the wake of [reports](https://www.politico.com/news/2020/01/31/dnc-superdelegates-110083) that (a tiny fraction of) Democratic National Committee members discussed rule changes to block Bernie Sanders’s nomination at a contested convention, and the bizarre [last-minute cancellation](https://nymag.com/intelligencer/2020/02/concern-raised-by-buttigieg-cancels-selzer-poll-in-iowa.html) of a highly anticipated Iowa poll last weekend, many of the Vermont senator’s supporters went into Monday night primed to witness Establishmentarian machinations. The ensuing events did little to dispel their paranoia. After early returns showed Bernie Sanders running slightly ahead of Pete Buttigieg for first place, Iowa Democrats suddenly froze the results in the name of performing “quality control” on the vote tallies. And then word of the [mysterious app](https://nymag.com/intelligencer/2020/02/the-real-problems-with-the-iowa-caucuses-shadow-app.html) began to spread. And then someone got their hands on FEC documents revealing that Pete Buttigieg’s campaign [had paid tens of thousands of dollars](https://www.washingtonexaminer.com/news/buttigieg-campaign-paid-firm-that-developed-voting-app-blamed-for-iowa-caucus-delays) to the very technology firm that designed the app! And then, Buttigieg [went before the cameras](https://www.cnn.com/2020/02/04/politics/pete-buttigieg-iowa-caucus/index.html) and declared himself the winner despite the absence of any official results.

#### 3] Predictions fail

**Elving 1/1** (Elving, Ron. “Trump Will Win Again. No Way He'll Win. Be Wary Of 2020 Election Predictions.” NPR, 1 Jan. 2020, www.npr.org/2020/01/01/792760468/trump-will-win-again-no-way-hell-win-be-wary-of-2020-election-predictions. He is also a professorial lecturer and Executive in Residence in the School of Public Affairs at American University, where he has also taught in the School of Communication. In 2016, he was honored with the University Faculty Award for Outstanding Teaching in an Adjunct Appointment. He has also taught at George Mason and Georgetown. He was previously the political editor for USA Today and for Congressional Quarterly. He has been published by the Brookings Institution and the American Political Science Association. He has contributed chapters on Obama and the media and on the media role in Congress to the academic studies Obama in Office 2011, and Rivals for Power, 2013. Ron's earlier book, Conflict and Compromise: How Congress Makes the Law, was published by Simon & Schuster and is also a Touchstone paperback. Accessed 2/6/2020) //ZL

Don't put too much stock in all those New Year's predictions you're hearing and seeing about American politics in 2020. Anyone saying they know what will happen is probably just trying to get our attention. And probably succeeding. We've all fallen for headlines and clickbait proclaiming foreknowledge of events. We do it for sports, the stock market and just about any other outcome that cannot be foreseen. That goes for elections — especially for elections — and particularly in a high-stakes, pivotal cycle such as we are in now. "He's going to win again," solemn voices say, referring to President Trump and the re-election bid he formally launched shortly after his inauguration in 2017. "There's no way he can win again," say others, with much the same tone of finality and certitude. Both conclusions come from the same place. No matter how many rational arguments or pieces of evidence are deployed to justify it, these are statements straight from the gut. Fact is, no one knows or can know what will happen to Trump in 2020 — or to his challengers. No one knows what else will happen in 2020 that will affect and perhaps determine the November outcome. Things large and small will intervene, things that cannot be foreseen or assessed until they intervene. Striving to mesmerize "eyeballs" The presidential race is not the only one we see through a glass darkly. We do not know whether Republicans or Democrats will win the majority in either chamber of Congress. We can run the numbers and calculate probabilities based on polls and past experience. But we are left saying both chambers will most likely retain their current majorities, possibly with narrower margins. Such a ho-hum, belt-and-suspenders prediction is not going to mesmerize all those "eyeballs" that all media now pursue and perseverate on. Nothing has the allure of a confident — even if unreliable — prediction about the presidency. The more confident the prediction, the more arresting the assertion, the more it demands our attention. But attention is one thing; credence should be another. 2016 surprises Take the most obvious example: 2016. As the corks were popping on New Year's Eve four years ago, few could have foreseen how that year in politics would unfold. Think back. Hillary Clinton was seen as unassailable in the Democratic primaries and a strong prospect to be the nation's first female president. She had dominated the early Democratic debates and polling. She had weathered multiple hearings in Congress set up by Republicans who blamed her for American deaths in Libya (where attackers assaulted a U.S. Consulate and killed the American ambassador in 2012). Bernie Sanders, an independent socialist in the Senate, was not a Democrat but was the only threat to Clinton in the primaries. A huge Republican field was steadily devouring itself. Onetime presumptive nominee Jeb Bush was fading, and the rising candidates were Sen. Ted Cruz, a hardcore conservative from Texas, and Donald Trump, a self-defining businessman and TV personality from Manhattan. Trump was still regarded as a novelty act by many, despite his lead in many polls. He had survived, and even thrived, through innumerable statements widely regarded as fatal errors. Few foresaw the surge for Sanders in Iowa (a virtual tie) and New Hampshire (a landslide win) or in later portentous primaries such as Michigan and Wisconsin. The party unity Clinton was supposed to enjoy proved illusory. The coalition that twice elected Barack Obama would weaken in nearly all its elements. Clinton would lose the vote among white women. Meanwhile, Trump would prosper through unimaginable controversies and rally to his side even those who had savaged him as untruthful and unqualified — including Cruz and Sen. Lindsey Graham of South Carolina. The actual events of the election year were not just improbable but impossible to foresee, as were the remarkable reactions of many of the voters themselves. The recent unpredictables It is easy to dismiss 2016 as an outlier — even as outlandish. But past presidential cycles may well look more predictable in hindsight than they were in real time. In hindsight, whatever happened can come to seem inevitable. (After all, somebody winds up winning and making some prediction seem prescient.) For example, few look back on 2012 as a highly suspenseful cycle. But eight years ago, it was far from clear that Obama would win a second term. In mid-December 2011, his approval in the Gallup Poll was just 42%, 3 points lower than the latest Trump reading in the Gallup this month. Back then, on the Republican side, half a dozen contenders topped the polls for at least a week or two late in 2011 and it took months to winnow the field. The nomination fell to Mitt Romney, who ran a creditable race and had a plausible scenario for winning through October. On election night, his staff was so confident that they did not even prepare a concession speech in case he lost. Four years before that, needless to say, the 2008 cycle did not begin with great certainty for the eventual winner. Then-Sen. Obama was making a move in the polls and getting noticed. But he had yet to win the Iowa caucuses. After a long intraparty battle, he wound up with about as many votes in the nominating events as rival Hillary Clinton, but with an edge in delegates. On the Republican side, the hot ticket in late 2007 was still a former mayor of New York named Rudy Giuliani. His candidacy would soon crash without ever getting truly airborne, and the nod went to Sen. John McCain of Arizona, who shocked the party by picking a largely unknown running mate in Gov. Sarah Palin of Alaska. Even so, McCain might have won if a Wall Street meltdown had not kicked off what became known as the Great Recession. Needless to say, none of these developments had been glimpsed in the waning days before that election year began. Some incumbents proved resilient But surprising outcomes are scarcely a recent development. The Gallup organization has been tracking presidential popularity since the 1940s, and its findings are fascinating when one focuses on the transition into each presidential election year. Some incumbents end the preelection year spiking or falling, but most are found chugging along in the mid-range. There are relatively few clues as to what awaits. Thus you have Harry Truman at the end of 1947 beginning a slide that would take him down to 36% approval by spring of his reelection year. No wonder so few thought he had a chance, even before a split over civil rights at the Democratic National Convention spawned a third-party challenge and seemed to seal Truman's fate. Yet he won. You also have the example of Richard Nixon, who in December 1971 faced his reelection year stuck at 50% approval in the Gallup — but wound up with nearly 60% of the popular vote in 1972 (carrying every state but Massachusetts). As that landslide piled up on election night it was hard to believe the Democratic nomination had been deemed so desirable by so many hopefuls when the primaries began. It's hard to remember now, but Ronald Reagan also looked vulnerable in his third year in office, falling as low as 35% in early 1983 in a lingering recession. By December, things were better and Reagan had climbed all the way back to 54%. Still, the Democratic nomination in 1984 was a prize sought by many and contested all the way to the convention. (It went to former Vice President Walter Mondale of Minnesota, who in November carried that state and that state alone.) When polls may mislead The presidential fortunes of Jimmy Carter were particularly difficult to read. He had fallen as low as 29% approval in the Gallup in the summer of 1979 before rocketing back to 54% in the rally-round-the-flag days after the seizing of the U.S. Embassy in Tehran. At first, the hostages taken there seemed to bolster support for the incumbent, helping him dismiss the intraparty challenge of Sen. Edward Kennedy in 1980. But in the longer run, the crisis undermined his presidency, his polling collapsed in 1980, and he lost badly to challenger Reagan. The classic case of a president whose polling may have created a false sense of security was provided by George H.W. Bush. Bush went to a vertiginous 89% approval rating in the Gallup in February/March 1991 after U.S. troops achieved victory in the Persian Gulf War. But a recession set in later that year and Bush fell all the way to 52% by December. That number alone may not have been ominous, had it not been for the long descent. Bush kept falling, even after the recession ended, all the way down to 29% in August. Although he recovered in the fall, he lost the presidency to Bill Clinton that November. His son, George W. Bush, was president in September 2001 and riding at 51% approval in the Gallup when terrorists struck the World Trade Center and the Pentagon. The next Gallup pegged him at 90% approval, but like his father, he saw this soaring score fall back to earth — or more specifically to 50% — late in his third year in office. He stayed in that midrange, never falling or rising more than 3 points, right through 2004 and a narrow re-election that November. The only consistent lesson So electoral history gives us a variety of looks. Presidents can appear formidable and still falter. They can wobble along seeming comparatively weak and yet reassert themselves. They can muddle through as so many do, getting thumbs up from half the electorate or less. Yet from that plateau they may rise like Nixon or plummet like Carter and the first President Bush. Much has to do with how the world behaves during a presidential year. Much, too, depends on the opposition party, its nominee and its unity. Then there are the prospective pitfalls of third parties or independent candidates — especially those who can self-finance. Even an underfunded distraction such as Ralph Nader in 2000 can make a difference in a state, which can make the difference in the Electoral College. So at this point, no one should rest easy, but no one should despair. It is best not to bet the ranch at any stage of the game, and surely not one year out. The one thing we can safely say is that there's nothing that can be safely said. History, our one best guide, directs us to keep an open mind and await further developments.

### 1AR---AT AI Shift

#### 1] No runaway AI and it takes forever

Walsh 16 (Toby Walsh is professor of artificial intelligence at the University of New South Wales and the author of, 9/20/17 "Android Dreams: The Past, Present and Future of AI" (Hurst, £16.99) https://www.wired.co.uk/article/elon-musk-artificial-intelligence-scaremongering)

It seems you can’t open a newspaper without Elon Musk predicting that artificial intelligence (AI) needs regulating---before it starts World War III. And if it’s not Elon, its Vladimir telling us AI will rule the world. I’m starting to feel like I’m a very dangerous guy. That’s because I’m a professor of artificial intelligence. There was a time, 20 years back, when people just smiled at me when I told them I was working on building intelligent machines. And I knew that smile was one of sympathy. Back then, AI was simply so hopeless. But now, as AI begins to make some progress, people seem to live in fear of the next thing that will emerge from AI labs across the world. Elon is, in fact, right. AI does need regulating. But he’s also almost surely wrong---AI isn’t going to start World War III anytime soon. Or rule the world. Or end humanity. AI needs regulating because the big tech companies have got too big for their own good. And like every other industry sector before it that has got too big---the banks, the oil companies, the telecom firms---regulation is needed to ensure the public good. To ensure that we all benefit and not just the tech elite. We’re beginning to see the corrosive effects of Facebook’s algorithms on political debate, of Amazon’s dominance of the retail sector, and of Google’s monopoly on search. And it’s hard to know where to begin with a company like Uber. There’s just so much to criticise. However, the problems today are not caused by super smart AI, but stupid AI. We’re letting algorithms make decisions that impact on society. And these algorithms are not very smart. Joshua Brown discovered this to his cost last year when he became the first person killed by his autonomous car. In fact, a smarter car might have seen the truck turning across the road and saved his life. There’s a very seductive and dangerous idea that is getting people like Elon all worked up: the idea of the "technological singularity". At some point, we’ll build machines sufficiently smart that they’ll be able to re-design themselves to be even smarter. And these smarter machines will then re-design themselves again. This will signify a tipping point, when machine intelligence snowballs away. Before we know it, we’ll no longer be the smartest creatures on the planet. And if we’re not careful, these machines will use their superior intelligence to take over the planet. Just as we used our intelligence to take over the planet from the apes, the dolphins and the dinosaurs before us. Now, the first thing you need to know about the singularity is that it is an idea mostly believed by people not working in artificial intelligence. People like the philosopher Nick Bostrom, and the futurist and inventor Ray Kurzweil. Most people working in AI like myself have a healthy skepticism for the idea of the singularity. We know how hard it is to get even a little intelligence into a machine, let alone enough to achieve recursive self-improvement. There are many technical reasons why the singularity might never happen. We might simply run into some fundamental limits. Every other field of science has fundamental limits. You can’t, for example, accelerate past the speed of light. Perhaps there are some fundamental limits to how smart you can be? Or perhaps we run into some engineering limits. Did you know that Moore’s Law is officially dead? Intel is no longer looking to double transistor count every 18 months. But even if we do get to the singularity, machines don’t have any consciousness, any sentience. They have no desires or goals other than the ones that we give them. AlphaGo isn’t going to wake up tomorrow and decide humans are useless at Go, and instead opt to win some money at online poker. And it is certainly not going to wake up and decide to take over the planet. It’s not in its code. All AlphaGo will ever do is maximise one number: its estimate for the probability it will win the current game of Go. Indeed, it doesn’t even know that it is playing Go. So, we don’t have to fear that the machines are going to take over anytime soon. But we do have to worry about the impact even stupid AI is starting to have on our lives. It will widen inequality. It will put some people out of work. It will corrode political debate. Even stupid AI can be used by the military to transform warfare for the worse. So, Elon, stop worrying about World War III and start worrying about what Tesla’s autonomous cars will do to the livelihood of taxi drivers. And don’t just take my word for it. A recent survey of 50 Nobel Laureates ranked the climate, population rise, nuclear war, disease, selfishness, ignorance, terrorism, fundamentalism, and Trump as bigger threats to humanity than AI.

#### 2] No AI or autonomous weapons arms race

Elsa Kania 18, Adjunct Fellow with the technology and national security program at CNAS, 4/19/18, “The Pursuit of AI Is More Than an Arms Race,” https://www.defenseone.com/ideas/2018/04/pursuit-ai-more-arms-race/147579/

However, the concept of an “arms race” is too simplistic a way to think of the coming AI revolution. To confront its challenges wisely requires reframing the current debates. First and foremost, AI is not a weapon, nor is “artificial intelligence” a single technology but rather a catch-all concept alluding to a range of techniques with varied applications in enabling new capabilities. Just in the near term, the utility of AI in defense may include the introduction of machine learning to cyber security and operations, new techniques for cognitive electronic warfare, and the application of computer vision to analyze video and imagery (as in Project Maven), as well as enhanced logistics, predictive maintenance, and more. Despite the active research and development underway, these technologies remain nascent and brittle enough that “fully autonomous” weapons (or even cars) are hardly imminent. Moreover, militaries---even those that care less about laws and ethics---may be unwilling to relinquish human control due to the risks.

#### 3] Super intelligent AI is impossible---risk calculus must fight uncertainty bias

Eleni Vasilaki 18 {Professor of Computational Neuroscience, University of Sheffield. 9-24-2018. ”http://theconversation.com/worried-about-ai-taking-over-the-world-you-may-be-making-some-rather-unscientific-assumptions-103561}//JM

Should we be afraid of artificial intelligence? For me, this is a simple question with an even simpler, two letter answer: no. But not everyone agrees – many people, including the late physicist Stephen Hawking, have raised concerns that the rise of powerful AI systems could spell the end for humanity. Clearly, your view on whether AI will take over the world will depend on whether you think it can develop intelligent behaviour surpassing that of humans – something referred to as “super intelligence”. So let’s take a look at how likely this is, and why there is much concern about the future of AI. Humans tend to be afraid of what they don’t understand. Fear is often blamed for racism, homophobia and other sources of discrimination. So it’s no wonder it also applies to new technologies – they are often surrounded with a certain mystery. Some technological achievements seem almost unrealistic, clearly surpassing expectations and in some cases human performance. No ghost in the machine But let us demystify the most popular AI techniques, known collectively as “machine learning”. These allow a machine to learn a task without being programmed with explicit instructions. This may sound spooky but the truth is it is all down to some rather mundane statistics. The machine, which is a program, or rather an algorithm, is designed with the ability to discover relationships within provided data. There are many different methods that allow us to achieve this. For example, we can present to the machine images of handwritten letters (a-z), one by one, and ask it to tell us which letter we show each time in sequence. We have already provided the possible answers – it can only be one of (a-z). The machine at the beginning says a letter at random and we correct it, by providing the right answer. We have also programmed the machine to reconfigure itself so that next time, if presented with the same letter, it is more likely to give us the correct answer for the next one. As a consequence, the machine over time improves its performance and “learns” to recognise the alphabet. In essence, we have programmed the machine to exploit common relationships in the data in order to achieve the specific task. For instance, all versions of “a” look structurally similar, but different to “b”, and the algorithm can exploit this. Interestingly, after the training phase, the machine can apply the obtained knowledge on new letter samples, for example written by a person whose handwriting the machine has never seen before. Humans, however, are good at reading. Perhaps a more interesting example is Google Deepmind’s artificial Go player, which has surpassed every human player in their performance of the game. It clearly learns in a way different to humans – playing a number of games with itself that no human could play in their lifetime. It has been specifically instructed to win and told that the actions it takes determine whether it wins or not. It has also been told the rules of the game. By playing the game again and again it can discover in each situation what is the best action – inventing moves that no human has played before. Toddlers versus robots Now does that make the AI Go player smarter than a human? Certainly not. AI is very specialised to particular type of tasks and it doesn’t display the versatility that humans do. Humans develop an understanding of the world over years that no AI has achieved or seem likely to achieve anytime soon. The fact that AI is dubbed “intelligent” is ultimately down to the fact that it can learn. But even when it comes to learning, it is no match for humans. In fact, toddlers can learn by just watching somebody solving a problem once. An AI, on the other hand, needs tonnes of data and loads of tries to succeed on very specific problems, and it is difficult to generalise its knowledge on tasks very different to those trained upon. So while humans develop breathtaking intelligence rapidly in the first few years of life, the key concepts behind machine learning are not so different from what they were one or two decades ago. The success of modern AI is less due to a breakthrough in new techniques and more due to the vast amount of data and computational power available. Importantly, though, even an infinite amount of data won’t give AI human-like intelligence – we need to make a significant progress on developing artificial “general intelligence” techniques first. Some approaches to doing this involve building a computer model of the human brain – which we’re not even close to achieving. Ultimately, just because an AI can learn, it doesn’t really follow that it will suddenly learn all aspects of human intelligence and outsmart us. There is no simple definition of what human intelligence even is and we certainly have little idea how exactly intelligence emerges in the brain. But even if we could work it out and then create an AI that could learn to become more intelligent, that doesn’t necessarily mean that it would be more successful.

#### 4] Too many tech barriers

Edward Moore Geist 8-9-2015; MacArthur Nuclear Security Fellow at Stanford University's Center for International Security and Cooperation (CISAC). Is artificial intelligence really an existential threat to humanity? http://thebulletin.org/artificial-intelligence-really-existential-threat-humanity8577

In the 1950s, the founders of the field of artificial intelligence assumed that the discovery of a few fundamental insights would make machines smarter than people within a few decades. By the 1980s, however, they discovered fundamental limitations that show that there will always be diminishing returns to additional processing power and data. Although these technical hurdles pose no barrier to the creation of human-level AI, they will likely forestall the sudden emergence of an unstoppable “superintelligence.” The risks of self-improving intelligent machines are grossly exaggerated and ought not serve as a distraction from the existential risks we already face, especially given that the limited AI technology we already have is poised to make threats like those posed by nuclear weapons even more pressing than they currently are. Disturbingly, little or no technical progress beyond that demonstrated by self-driving cars is necessary for artificial intelligence to have potentially devastating, cascading economic, strategic, and political effects. While policymakers ought not lose sleep over the technically implausible menace of “superintelligence,” they have every reason to be worried about emerging AI applications such as the Defense Advanced Research Projects Agency’s submarine-hunting drones, which threaten to upend longstanding geostrategic assumptions in the near future. Unfortunately, Superintelligence offers little insight into how to confront these pressing challenges.

#### 5] If it is, it’s thousands of years away anyway

Daniel C. Dennett 19 {Daniel C. Dennett is University Professor and Austin B. Fletcher Professor of Philosophy and director of the Center for Cognitive Studies at Tufts University. 4-10-2019. “Is Superintelligence Impossible? On Possible Minds: Philosophy and AI.” https://www.edge.org/conversation/david\_chalmers-daniel\_c\_dennett-is-superintelligence-impossible}//JM

Let’s talk about "possible" for the moment. There are lots of things that are possible, and philosophers love to talk about what’s possible, but many things that are obviously possible are never going to be actual. It’s possible to build a bridge across the Atlantic. We’re not going to do it, not now, not in a hundred years, not in a thousand years. It would cost too much money and would be a foolish endeavor. A lot of the imagined AI projects that are perfectly possible in principle are not worth doing. In fact, some of them are definitely things that we shouldn’t do because they’ll make more problems for us than they'll solve. Just bear that in mind. Somebody said that the philosopher is the one who says, "We know it’s possible in practice, we’re trying to figure out if it’s possible in principle." Unfortunately, philosophers sometimes spend too much time worrying about logical possibilities that are importantly negligible in every other regard. So, let me go on the record as saying, yes, I think that conscious AI is possible because, after all, what are we? We’re conscious. We’re robots made of robots made of robots. We’re actual. In principle, you could make us out of other materials. Some of your best friends in the future could be robots. Possible in principle, absolutely no secret ingredients, but we’re not going to see it. We’re not going to see it for various reasons. One is, if you want a conscious agent, we’ve got plenty of them around and they’re quite wonderful, whereas the ones that we would make would be not so wonderful.

### 1AR---AT Nuclear Power

#### 1] Fusion is totally useless and impossible

De Podesta 13 [Michael de Podesta, 2013, scientist at the UK’s[National Physical Laboratory](http://www.npl.co.uk/), Controlled Nuclear Fusion: Forget about it, https://protonsforbreakfast.wordpress.com/2013/10/13/controlled-nuclear-fusion-forget-about-it/]

The future is very difficult to predict. But I am prepared to put on record my belief that controlled nuclear fusion as a source of power on Earth will never be achieved. This is not something I want to believe. And the intermittent drip of news stories about ‘[progress](http://www.bbc.co.uk/news/science-environment-23408073)‘ and ‘[breakthroughs](http://www.bbc.co.uk/news/science-environment-24429621)‘ might make one think that the technique would eventually yield to humanity’s collective ingenuity. But in fact that just isn’t going to happen. Let me explain just some of the problems and you can judge for yourself whether you think it will ever work. One option for controlled fusion is called [Inertial Fusion Energy](https://lasers.llnl.gov/programs/ife/how_ife_works.php), and the centre of research is the [US National Ignition Facility](https://lasers.llnl.gov/about/nif/about.php). Here the most powerful laser on Earth can be focussed onto a pellet of deuterium and tritium and the temperature and pressure reached induce fusion. The process releases neutrons and a flash of X-rays and UV light which are captured to produce heat which generates electricity using a conventional steam generator. Reality Check#1: Currently one pellet can be hit every few hours. In order to make a one gigawatt power plant this process must be speeded up so that around 10 pellets every second are ignited. This is equivalent to firing a ‘machine gun’ into the centre of the high vacuum reaction chamber, but none of the ‘bullets’ must reach the other side of the chamber: every one must be tracked individually in-flight and blasted by the most powerful laser on Earth. No misses can be tolerated, otherwise a ‘bullet’ will hit the far side of the chamber. This process must continue night and day for months on end. The explosions will release energy at a rate of several gigawatts of thermal power, but this must not affect the vacuum through which the lasers reach their target. Every ‘bullet’ must be identical to within a manufacturing tolerance of 1 micrometre. Getting all this to work is IMHO impossible. The other option for controlled fusion is called magnetic plasma confinement, and the centre of research is ITER being built near Marseille in the south of France. Here a plasma of deuterium and tritium is heated to around 150 million °C (about 10 times hotter than the centre of the Sun). Reality Check#2: About one metre away from the 150 million degree plasma releasing neutrons with several gigawatts of energy are gigantic superconducting magnets at approximately 4 degrees above absolute zero. Superconducting materials are sensitive to radiation and their special property will be lost if they are intensely irradiated. To visualise the temperature, think of about 1 million one kilowatt heaters trapped in a room the size of a small theatre. The plasma must not touch the walls of its container ever. Once initiated, the facility will become intensely radioactive and humans can never enter it again, and the hot plasma must remain confined for months on end exceeding the few seconds that have been achieved to date. Getting all this to work is IMHO impossible. And even if we suppose these impossible things were somehow made possible by the application of ingenuity, good fortune and cash, there is one more ‘show stopper’: the availability of tritium. In either approach, deuterium (which is found in seawater) is fused with tritium (which is not found naturally at all). Where will all the tritium come from? Reality Check#3: The tritium must be generated by capturing everyneutron released in the fusion reaction in a blanket of lithium metal (or a salt containing lithium). The neutrons from the miniature star in the reactor induce a reaction in the nucleus of one of the isotopes of lithium (7) which causes it to split in two, releasing helium and tritium. The tritium must be captured and fed back into the fusion reaction. This process must operate close to 100% efficiency otherwise the plant will run out of tritium. Getting all this to work is IMHO impossible. I am a technological utopian: I think technology can make life better for people. And I would really like to believe that fusion will ‘somehow work’. But when I look at these obstacles, I just can’t see how anyone can overcome them.

#### **No fusion even by 2050**

Gupta and Schuppe 14 [Rajan Gupta1,2 and Thomas Elmar Schuppe2 1Theoretical Division, Los Alamos National Laboratory, Supply Side Economic and the Need for Energy Diversification, 2014, https://www.economic-policy-forum.org/wp-content/uploads/2014/05/EPF-Website\_Gupta\_supplyside.pdf]

Electric power generation is currently dominated by coal, natural-gas, nuclear and hydroelectric systems. These are likely to grow until countries achieve adequate total capacity and energy security. Of these, nuclear and hydroelectric are essentially carbon neutral, at least during production. Wind and solar present the largest opportunity for growth. It is unlikely that the total capacity of other low-carbon systems such as geothermal, bio-mass fired power plants, tidal and wave energy systems, etc., will scale to more than a few hundred gigawatts by 2050. Their contribution will be important and constitutes part of the last wedge called “others” but since current trends in their growth rate indicate that these will continue to present a local and limited opportunity in the near to mid-term we do not discuss them further in this paper. Similarly, the probability of fusion technology maturing to the point that commercial fusion reactors will be operating by 2050 is tiny.

#### 2] Turn---we get better nuclear power post-plan.

Siegel '17 (Ethan Siegel; Ph.D. astrophysicist, author, and science communicator, who professes physics and astronomy at various colleges, ; 9-9-2017; "Ask Ethan: How Can A Nation Have Nuclear Power Without The Danger Of Nuclear Weapons?"; https://www.forbes.com/sites/startswithabang/2017/09/09/ask-ethan-how-can-a-nation-have-nuclear-power-without-the-danger-of-nuclear-weapons/#5210d56739cd, Forbes, accessed 12-21-2019; JPark)

In 2015, John Kerry, then the Secretary of State, brought nuclear physicist and Secretary of Energy Ernest Moniz with him to Iran, to try and negotiate a nuclear deal. The hope was that Iran would have the freedom and ability to **create energy** using nuclear power, **but** in such a way that creating a nuclear weapon **would be impossible** on timescales shorter than a year. Is such a peaceful, nuclear dream scientifically possible? And if so, what would it look like? That's what Patreon supporter Patrick Dennis wants to know: Could you elaborate some of the scientific background on which Dr. Moniz must have briefed Kerry for those talks? Among issues that are sometimes mentioned with little or no explanation are uranium vs plutonium; materials and technology suitable for peacetime energy production vs those suitable only for weapons; breeder reactors; and illegal technology transfer. By many metrics, nuclear power is a winner that other energy sources can't hope to touch. Every other energy source we have relies on either mechanical, chemical, or electromagnetic (including solar and geothermal) energy to power it. Wind power is a great example of mechanical energy: the moving wind catches the blades, which cause an internal turbine to spin, converting mechanical energy into electrical energy. Fossil fuels — including coal, oil, and natural gas — involve the combustion of carbon-containing compounds, which release chemical energy (by rearranging electron/atomic configurations) and convert it into electrical power in a variety of ways. Electromagnetic energy has an advantage that it can be converted directly into electrical energy under the right conditions, albeit in the form of direct (rather than alternating) current. But nuclear power has the advantage here. Reactor nuclear experimental RA-6 (Republica Argentina 6), en marcha. As long as there's the right... [+] nuclear fuel present, along with control rods and the proper type of water inside, energy can be generated with only 1/100,000th the fuel of conventional, fossil-fuel reactors. Reactor nuclear experimental RA-6 (Republica Argentina 6), en marcha. As long as there's the right... [+] CENTRO ATOMICO BARILOCHE, VIA PIECK DARÍO Unlike wind, solar, or hydroelectric power, it isn't subject to hourly, daily, or seasonal variation: you supply the fuel and the right conditions and nuclear delivers the power you need on demand. Unlike coal, oil, or natural gas, it doesn't produce greenhouse gas emissions (because it doesn't combust carbon), and we're not in any danger of running out of nuclear fuel for tens of thousands of years. Instead of relying on chemical transitions, where the configurations of electrons in atoms and molecules are changed to release energy, nuclear power relies on the process of nuclear fission, where heavy elements are split apart, releasing energy via Einstein's E = mc2. The nuclear transitions are some 100,000 times more efficient, meaning the same amount of fuel that can power a city for a day via chemical reactions can, with nuclear reactions, last for centuries. The Uranium-235 chain reaction that both leads to a nuclear fission bomb, but also generates power... [+] inside a nuclear reactor. The Uranium-235 chain reaction that both leads to a nuclear fission bomb, but also generates power... [+] E. SIEGEL, FASTFISSION / WIKIMEDIA COMMONS But there's an insidious downside to nuclear power that goes far beyond the fear of environmental and ecological catastrophe: the fact that the by-products of these nuclear reactions produce material that could be used to build an atomic bomb. With recent nuclear tests by North Korea having just occurred, the lingering fears of the Cold War still remaining, and many people still alive who remember the effects of the 1945 bombing of Hiroshima and Nagasaki, the fear of nuclear proliferation is real and valid, and a concern that must be addressed. The cloud from the atomic bomb over Nagasaki from Koyagi-jima in 1945 was one of the first nuclear... [+] detonations to take place on this world. After decades of peace, North Korea is now detonating nuclear bombs. The cloud from the atomic bomb over Nagasaki from Koyagi-jima in 1945 was one of the first nuclear... [+] HIROMICHI MATSUDA In its most basic form, nuclear fission arises from uranium ore, which is a mix of fissionable U-235 and the non-fissionable U-238. After that fuel is spent, where most of the U-235 was split apart, there are a slew of additional products. These include lower elements on the periodic table, from zinc on up, along with some highly radioactive, heavy elements not found in nature. These include: U-236, which is a surefire "fingerprint" of spent nuclear fuel, four different isotopes of plutonium: Pu-238, Pu-239, Pu-240, and Pu-241, and some Curium: Cu-245. At the simplest level, the plutonium produced by burning this fissile uranium is what's key to the possibility of producing a nuclear weapon. By simply adding neutrons to U-238, an inevitable consequence of leaving your uranium fuel in a... [+] nuclear reactor, many isotopes of heavy elements are produced, including Pu-239 and Pu-240. By simply adding neutrons to U-238, an inevitable consequence of leaving your uranium fuel in a... [+] JWB AT ENGLISH WIKIPEDIA About 1% of the mass of spent nuclear fuel will turn out to be plutonium. In general, there are three classifications for the "grade" of plutonium, because there's no good, cheap, efficient way to separate out the different isotopes. Instead, the classifications are as follows: Super weapons grade plutonium contains less than 3% Pu-240, Weapons grade plutonium contains less than 7% Pu-240, and Reactor grade plutonium contains 7% or more Pu-240. It's the Pu-239 that's the key to building a nuclear weapon in most cases, so the key to preventing nuclear proliferation, in the simplest case, is to ensure that any plutonium that's produced is neither weapons-grade nor super **weapons-grade**. When a reactor is run "normally," which means for a long period of time and until the U-235 fuel is spent, you have **no danger** of producing weapons-grade plutonium. In fact, under those conditions, less than **80% of your plutonium** will be the fissile Pu-239, with 19% or more becoming Pu-240. The reason for this is straightforward: nuclear fission produces neutrons, bigger nuclei have a bigger cross-section for absorbing neutrons, so while U-238 can easily absorb a neutron to become Pu-239 (after some radioactive decays), that Pu-239 can also easily absorb a neutron to become Pu-240. The key, then, to making weapons-grade plutonium, is to irradiate that U-238 for only short periods of time: enough time to produce Pu-239, but not for long enough to create Pu-240. It's pretty easy, by performing this short-period irradiation, to produce weapons-grade plutonium, where up to 93% of the plutonium created is the fissile Pu-239, with somewhere between 6% and 7% Pu-240. Since one of the main concerns is preventing nations other than the established nuclear weapons-having states from obtaining them — the whole point of non-proliferation — it's very likely that the primary concern Ernest Moniz had back in the 2015 talks with Ali Akbar Salehi (the physicist overseeing Iran's nuclear programme) was in ensuring that any plutonium that was created was **not weapons-grade**. The other main concern would be the separation of U-235 from U-238. Normal uranium ore only contains a few percent of U-235, with more than 95% of naturally-occurring uranium existing as U-238. However, it isn't just plutonium that gets used to make fission bombs, but fissile uranium, which is heavily enriched with U-235 well above the naturally occurring levels. Nuclear physicists often talk about SWU, which stands for separative work units, or the amount of work needed to create enriched uranium. Part of the negotiations is each side estimating the efficiency and capabilities of the non-nuclear state to create that enriched uranium, with the USA having the goal of requiring at least a year of efforts for the non-nuclear state in question to create bomb-worthy materials. Those two issues, involving the creation of enriched uranium and weapons-grade plutonium, are likely going to be at the center of any talks concerning nuclear proliferation among non-nuclear states, with extraordinary expertise required to perform the estimates and calculations accurately. If we get it right, and all sides act relatively responsibly, we could live in a world where **many nations** have access to the tremendous benefits that nuclear power brings, while **still maintaining** a level of global security that relies on those same nations not having access to **nuclear bombs**. While many think this is too dangerous of a plan for planet Earth, that ship sailed way back in 1953, with Eisenhower's Atoms For Peace plan. Ever since, part of the role of the Department of Energy has been to work with the State Department to work to prevent nuclear proliferation, which is why so many of our Energy Secretaries have been Ph.D. nuclear physicists. While the present one isn't, that doesn't doom us to failure in this realm; it simply means we need to ensure that the **right expertis**e is available to do the proper calculations and make the proper policies. With the political issues affecting our nation and our world today, it's never been more vital to do this responsibly, and to get things right. The safety and security of the world depends on it.

### ---DD version

#### 1] No link---durable fiat means we just get rid of arsenals

Merriam Webster https://www.merriam-webster.com/dictionary/arsenal

: an establishment for the manufacture or storage of arms and military equipment

#### 2] Kumar ev says anti-prolif norms like the NPT have traditionally blocked access to nuclear material BUT IN SPITE OF THOSE the nuclear renaissance happened---either no link or uq overwhelms

#### 3] Fusion is totally useless and impossible

De Podesta 13 [Michael de Podesta, 2013, scientist at the UK’s[National Physical Laboratory](http://www.npl.co.uk/), Controlled Nuclear Fusion: Forget about it, https://protonsforbreakfast.wordpress.com/2013/10/13/controlled-nuclear-fusion-forget-about-it/]

The future is very difficult to predict. But I am prepared to put on record my belief that controlled nuclear fusion as a source of power on Earth will never be achieved. This is not something I want to believe. And the intermittent drip of news stories about ‘[progress](http://www.bbc.co.uk/news/science-environment-23408073)‘ and ‘[breakthroughs](http://www.bbc.co.uk/news/science-environment-24429621)‘ might make one think that the technique would eventually yield to humanity’s collective ingenuity. But in fact that just isn’t going to happen. Let me explain just some of the problems and you can judge for yourself whether you think it will ever work. One option for controlled fusion is called [Inertial Fusion Energy](https://lasers.llnl.gov/programs/ife/how_ife_works.php), and the centre of research is the [US National Ignition Facility](https://lasers.llnl.gov/about/nif/about.php). Here the most powerful laser on Earth can be focussed onto a pellet of deuterium and tritium and the temperature and pressure reached induce fusion. The process releases neutrons and a flash of X-rays and UV light which are captured to produce heat which generates electricity using a conventional steam generator. Reality Check#1: Currently one pellet can be hit every few hours. In order to make a one gigawatt power plant this process must be speeded up so that around 10 pellets every second are ignited. This is equivalent to firing a ‘machine gun’ into the centre of the high vacuum reaction chamber, but none of the ‘bullets’ must reach the other side of the chamber: every one must be tracked individually in-flight and blasted by the most powerful laser on Earth. No misses can be tolerated, otherwise a ‘bullet’ will hit the far side of the chamber. This process must continue night and day for months on end. The explosions will release energy at a rate of several gigawatts of thermal power, but this must not affect the vacuum through which the lasers reach their target. Every ‘bullet’ must be identical to within a manufacturing tolerance of 1 micrometre. Getting all this to work is IMHO impossible. The other option for controlled fusion is called magnetic plasma confinement, and the centre of research is ITER being built near Marseille in the south of France. Here a plasma of deuterium and tritium is heated to around 150 million °C (about 10 times hotter than the centre of the Sun). Reality Check#2: About one metre away from the 150 million degree plasma releasing neutrons with several gigawatts of energy are gigantic superconducting magnets at approximately 4 degrees above absolute zero. Superconducting materials are sensitive to radiation and their special property will be lost if they are intensely irradiated. To visualise the temperature, think of about 1 million one kilowatt heaters trapped in a room the size of a small theatre. The plasma must not touch the walls of its container ever. Once initiated, the facility will become intensely radioactive and humans can never enter it again, and the hot plasma must remain confined for months on end exceeding the few seconds that have been achieved to date. Getting all this to work is IMHO impossible. And even if we suppose these impossible things were somehow made possible by the application of ingenuity, good fortune and cash, there is one more ‘show stopper’: the availability of tritium. In either approach, deuterium (which is found in seawater) is fused with tritium (which is not found naturally at all). Where will all the tritium come from? Reality Check#3: The tritium must be generated by capturing everyneutron released in the fusion reaction in a blanket of lithium metal (or a salt containing lithium). The neutrons from the miniature star in the reactor induce a reaction in the nucleus of one of the isotopes of lithium (7) which causes it to split in two, releasing helium and tritium. The tritium must be captured and fed back into the fusion reaction. This process must operate close to 100% efficiency otherwise the plant will run out of tritium. Getting all this to work is IMHO impossible. I am a technological utopian: I think technology can make life better for people. And I would really like to believe that fusion will ‘somehow work’. But when I look at these obstacles, I just can’t see how anyone can overcome them.

#### **No fusion even by 2050**

Gupta and Schuppe 14 [Rajan Gupta1,2 and Thomas Elmar Schuppe2 1Theoretical Division, Los Alamos National Laboratory, Supply Side Economic and the Need for Energy Diversification, 2014, https://www.economic-policy-forum.org/wp-content/uploads/2014/05/EPF-Website\_Gupta\_supplyside.pdf]

Electric power generation is currently dominated by coal, natural-gas, nuclear and hydroelectric systems. These are likely to grow until countries achieve adequate total capacity and energy security. Of these, nuclear and hydroelectric are essentially carbon neutral, at least during production. Wind and solar present the largest opportunity for growth. It is unlikely that the total capacity of other low-carbon systems such as geothermal, bio-mass fired power plants, tidal and wave energy systems, etc., will scale to more than a few hundred gigawatts by 2050. Their contribution will be important and constitutes part of the last wedge called “others” but since current trends in their growth rate indicate that these will continue to present a local and limited opportunity in the near to mid-term we do not discuss them further in this paper. Similarly, the probability of fusion technology maturing to the point that commercial fusion reactors will be operating by 2050 is tiny.

#### 4] Turn---we get better nuclear power post-plan.

Siegel '17 (Ethan Siegel; Ph.D. astrophysicist, author, and science communicator, who professes physics and astronomy at various colleges, ; 9-9-2017; "Ask Ethan: How Can A Nation Have Nuclear Power Without The Danger Of Nuclear Weapons?"; https://www.forbes.com/sites/startswithabang/2017/09/09/ask-ethan-how-can-a-nation-have-nuclear-power-without-the-danger-of-nuclear-weapons/#5210d56739cd, Forbes, accessed 12-21-2019; JPark)

In 2015, John Kerry, then the Secretary of State, brought nuclear physicist and Secretary of Energy Ernest Moniz with him to Iran, to try and negotiate a nuclear deal. The hope was that Iran would have the freedom and ability to **create energy** using nuclear power, **but** in such a way that creating a nuclear weapon **would be impossible** on timescales shorter than a year. Is such a peaceful, nuclear dream scientifically possible? And if so, what would it look like? That's what Patreon supporter Patrick Dennis wants to know: Could you elaborate some of the scientific background on which Dr. Moniz must have briefed Kerry for those talks? Among issues that are sometimes mentioned with little or no explanation are uranium vs plutonium; materials and technology suitable for peacetime energy production vs those suitable only for weapons; breeder reactors; and illegal technology transfer. By many metrics, nuclear power is a winner that other energy sources can't hope to touch. Every other energy source we have relies on either mechanical, chemical, or electromagnetic (including solar and geothermal) energy to power it. Wind power is a great example of mechanical energy: the moving wind catches the blades, which cause an internal turbine to spin, converting mechanical energy into electrical energy. Fossil fuels — including coal, oil, and natural gas — involve the combustion of carbon-containing compounds, which release chemical energy (by rearranging electron/atomic configurations) and convert it into electrical power in a variety of ways. Electromagnetic energy has an advantage that it can be converted directly into electrical energy under the right conditions, albeit in the form of direct (rather than alternating) current. But nuclear power has the advantage here. Reactor nuclear experimental RA-6 (Republica Argentina 6), en marcha. As long as there's the right... [+] nuclear fuel present, along with control rods and the proper type of water inside, energy can be generated with only 1/100,000th the fuel of conventional, fossil-fuel reactors. Reactor nuclear experimental RA-6 (Republica Argentina 6), en marcha. As long as there's the right... [+] CENTRO ATOMICO BARILOCHE, VIA PIECK DARÍO Unlike wind, solar, or hydroelectric power, it isn't subject to hourly, daily, or seasonal variation: you supply the fuel and the right conditions and nuclear delivers the power you need on demand. Unlike coal, oil, or natural gas, it doesn't produce greenhouse gas emissions (because it doesn't combust carbon), and we're not in any danger of running out of nuclear fuel for tens of thousands of years. Instead of relying on chemical transitions, where the configurations of electrons in atoms and molecules are changed to release energy, nuclear power relies on the process of nuclear fission, where heavy elements are split apart, releasing energy via Einstein's E = mc2. The nuclear transitions are some 100,000 times more efficient, meaning the same amount of fuel that can power a city for a day via chemical reactions can, with nuclear reactions, last for centuries. The Uranium-235 chain reaction that both leads to a nuclear fission bomb, but also generates power... [+] inside a nuclear reactor. The Uranium-235 chain reaction that both leads to a nuclear fission bomb, but also generates power... [+] E. SIEGEL, FASTFISSION / WIKIMEDIA COMMONS But there's an insidious downside to nuclear power that goes far beyond the fear of environmental and ecological catastrophe: the fact that the by-products of these nuclear reactions produce material that could be used to build an atomic bomb. With recent nuclear tests by North Korea having just occurred, the lingering fears of the Cold War still remaining, and many people still alive who remember the effects of the 1945 bombing of Hiroshima and Nagasaki, the fear of nuclear proliferation is real and valid, and a concern that must be addressed. The cloud from the atomic bomb over Nagasaki from Koyagi-jima in 1945 was one of the first nuclear... [+] detonations to take place on this world. After decades of peace, North Korea is now detonating nuclear bombs. The cloud from the atomic bomb over Nagasaki from Koyagi-jima in 1945 was one of the first nuclear... [+] HIROMICHI MATSUDA In its most basic form, nuclear fission arises from uranium ore, which is a mix of fissionable U-235 and the non-fissionable U-238. After that fuel is spent, where most of the U-235 was split apart, there are a slew of additional products. These include lower elements on the periodic table, from zinc on up, along with some highly radioactive, heavy elements not found in nature. These include: U-236, which is a surefire "fingerprint" of spent nuclear fuel, four different isotopes of plutonium: Pu-238, Pu-239, Pu-240, and Pu-241, and some Curium: Cu-245. At the simplest level, the plutonium produced by burning this fissile uranium is what's key to the possibility of producing a nuclear weapon. By simply adding neutrons to U-238, an inevitable consequence of leaving your uranium fuel in a... [+] nuclear reactor, many isotopes of heavy elements are produced, including Pu-239 and Pu-240. By simply adding neutrons to U-238, an inevitable consequence of leaving your uranium fuel in a... [+] JWB AT ENGLISH WIKIPEDIA About 1% of the mass of spent nuclear fuel will turn out to be plutonium. In general, there are three classifications for the "grade" of plutonium, because there's no good, cheap, efficient way to separate out the different isotopes. Instead, the classifications are as follows: Super weapons grade plutonium contains less than 3% Pu-240, Weapons grade plutonium contains less than 7% Pu-240, and Reactor grade plutonium contains 7% or more Pu-240. It's the Pu-239 that's the key to building a nuclear weapon in most cases, so the key to preventing nuclear proliferation, in the simplest case, is to ensure that any plutonium that's produced is neither weapons-grade nor super **weapons-grade**. When a reactor is run "normally," which means for a long period of time and until the U-235 fuel is spent, you have **no danger** of producing weapons-grade plutonium. In fact, under those conditions, less than **80% of your plutonium** will be the fissile Pu-239, with 19% or more becoming Pu-240. The reason for this is straightforward: nuclear fission produces neutrons, bigger nuclei have a bigger cross-section for absorbing neutrons, so while U-238 can easily absorb a neutron to become Pu-239 (after some radioactive decays), that Pu-239 can also easily absorb a neutron to become Pu-240. The key, then, to making weapons-grade plutonium, is to irradiate that U-238 for only short periods of time: enough time to produce Pu-239, but not for long enough to create Pu-240. It's pretty easy, by performing this short-period irradiation, to produce weapons-grade plutonium, where up to 93% of the plutonium created is the fissile Pu-239, with somewhere between 6% and 7% Pu-240. Since one of the main concerns is preventing nations other than the established nuclear weapons-having states from obtaining them — the whole point of non-proliferation — it's very likely that the primary concern Ernest Moniz had back in the 2015 talks with Ali Akbar Salehi (the physicist overseeing Iran's nuclear programme) was in ensuring that any plutonium that was created was **not weapons-grade**. The other main concern would be the separation of U-235 from U-238. Normal uranium ore only contains a few percent of U-235, with more than 95% of naturally-occurring uranium existing as U-238. However, it isn't just plutonium that gets used to make fission bombs, but fissile uranium, which is heavily enriched with U-235 well above the naturally occurring levels. Nuclear physicists often talk about SWU, which stands for separative work units, or the amount of work needed to create enriched uranium. Part of the negotiations is each side estimating the efficiency and capabilities of the non-nuclear state to create that enriched uranium, with the USA having the goal of requiring at least a year of efforts for the non-nuclear state in question to create bomb-worthy materials. Those two issues, involving the creation of enriched uranium and weapons-grade plutonium, are likely going to be at the center of any talks concerning nuclear proliferation among non-nuclear states, with extraordinary expertise required to perform the estimates and calculations accurately. If we get it right, and all sides act relatively responsibly, we could live in a world where **many nations** have access to the tremendous benefits that nuclear power brings, while **still maintaining** a level of global security that relies on those same nations not having access to **nuclear bombs**. While many think this is too dangerous of a plan for planet Earth, that ship sailed way back in 1953, with Eisenhower's Atoms For Peace plan. Ever since, part of the role of the Department of Energy has been to work with the State Department to work to prevent nuclear proliferation, which is why so many of our Energy Secretaries have been Ph.D. nuclear physicists. While the present one isn't, that doesn't doom us to failure in this realm; it simply means we need to ensure that the **right expertis**e is available to do the proper calculations and make the proper policies. With the political issues affecting our nation and our world today, it's never been more vital to do this responsibly, and to get things right. The safety and security of the world depends on it.

#### 5] No impact to even unchecked warming---best data is based on observations, not models and predicts warming will stay within the harmless range

Matt Ridley 13, Ph.D. in Zoology from Oxford, worked for the Economist for nine years as science editor, Washington correspondent and American editor, fellow of the Royal Society of Literature and of the Academy of Medical Sciences, and a foreign honorary member of the American Academy of Arts and Sciences, 9/17/13, “Dialing Back the Alarm on Climate Change,” http://online.wsj.com/news/articles/SB10001424127887324549004579067532485712464?mod=trending\_now\_1&mg=reno64-wsj&url=http%3A%2F%2Fonline.wsj.com%2Farticle%2FSB10001424127887324549004579067532485712464.html%3Fmod%3Dtrending\_now\_1

Later this month, a long-awaited event that last happened in 2007 will recur. Like a returning comet, it will be taken to portend ominous happenings. I refer to the Intergovernmental Panel on Climate Change's (IPCC) "fifth assessment report," part of which will be published on Sept. 27.¶ There have already been leaks from this 31-page document, which summarizes 1,914 pages of scientific discussion, but thanks to a senior climate scientist, I have had a glimpse of the key prediction at the heart of the document. The big news is that, for the first time since these reports started coming out in 1990, the new one dials back the alarm. It states that the temperature rise we can expect as a result of man-made emissions of carbon dioxide is lower than the IPCC thought in 2007. ¶ Admittedly, the change is small, and because of changing definitions, it is not easy to compare the two reports, but retreat it is. It is significant because it points to the very real possibility that, over the next several generations, the overall effect of climate change will be positive for humankind and the planet. ¶ Specifically, the draft report says that "equilibrium climate sensitivity" (ECS)—eventual warming induced by a doubling of carbon dioxide in the atmosphere, which takes hundreds of years to occur—is "extremely likely" to be above 1 degree Celsius (1.8 degrees Fahrenheit), "likely" to be above 1.5 degrees Celsius (2.4 degrees Fahrenheit) and "very likely" to be below 6 degrees Celsius (10.8 Fahrenheit). In 2007, the IPPC said it was "likely" to be above 2 degrees Celsius and "very likely" to be above 1.5 degrees, with no upper limit. Since "extremely" and "very" have specific and different statistical meanings here, comparison is difficult. ¶ Still, the downward movement since 2007 is clear, especially at the bottom of the "likely" range. The most probable value (3 degrees Celsius last time) is for some reason not stated this time. ¶ A more immediately relevant measure of likely warming has also come down: "transient climate response" (TCR)—the actual temperature change expected from a doubling of carbon dioxide about 70 years from now, without the delayed effects that come in the next century. The new report will say that this change is "likely" to be 1 to 2.5 degrees Celsius and "extremely unlikely" to be greater than 3 degrees. This again is lower than when last estimated in 2007 ("very likely" warming of 1 to 3 degrees Celsius, based on models, or 1 to 3.5 degrees, based on observational studies). ¶ Most experts believe that warming of less than 2 degrees Celsius from preindustrial levels will result in no net economic and ecological damage. Therefore, the new report is effectively saying (based on the middle of the range of the IPCC's emissions scenarios) that there is a better than 50-50 chance that by 2083, the benefits of climate change will still outweigh the harm. ¶ Warming of up to 1.2 degrees Celsius over the next 70 years (0.8 degrees have already occurred), most of which is predicted to happen in cold areas in winter and at night, would extend the range of farming further north, improve crop yields, slightly increase rainfall (especially in arid areas), enhance forest growth and cut winter deaths (which far exceed summer deaths in most places). Increased carbon dioxide levels also have caused and will continue to cause an increase in the growth rates of crops and the greening of the Earth—because plants grow faster and need less water when carbon dioxide concentrations are higher. ¶ Up to two degrees of warming, these benefits will generally outweigh the harmful effects, such as more extreme weather or rising sea levels, which even the IPCC concedes will be only about 1 to 3 feet during this period. ¶ Yet these latest IPCC estimates of climate sensitivity may still be too high. They don't adequately reflect the latest rash of published papers estimating "equilibrium climate sensitivity" and "transient climate response" on the basis of observations, most of which are pointing to an even milder warming. This was already apparent last year with two papers—by scientists at the University of Illinois and Oslo University in Norway—finding a lower ECS than assumed by the models. Since then, three new papers conclude that ECS is well below the range assumed in the models. The most significant of these, published in Nature Geoscience by a team including 14 lead authors of the forthcoming IPCC scientific report, concluded that "the most likely value of equilibrium climate sensitivity based on the energy budget of the most recent decade is 2.0 degrees Celsius." ¶ Two recent papers (one in the Journal of the American Meteorological Society, the other in the journal Earth System Dynamics) estimate that TCR is probably around 1.65 degrees Celsius. That's uncannily close to the estimate of 1.67 degrees reached in 1938 by Guy Callendar, a British engineer and pioneer student of the greenhouse effect. A Canadian mathematician and blogger named Steve McIntyre has pointed out that Callendar's model does a better job of forecasting the temperature of the world between 1938 and now than do modern models that "hindcast" the same data. ¶ The significance of this is that Callendar assumed that carbon dioxide acts alone, whereas the modern models all assume that its effect is amplified by water vapor. There is not much doubt about the amount of warming that carbon dioxide can cause. There is much more doubt about whether net amplification by water vapor happens in practice or is offset by precipitation and a cooling effect of clouds. ¶ Since the last IPCC report in 2007, much has changed. It is now more than 15 years since global average temperature rose significantly. Indeed, the IPCC chairman Rajendra Pachauri has conceded that the "pause" already may have lasted for 17 years, depending on which data set you look at. A recent study in Nature Climate Change by Francis Zwiers and colleagues of the University of Victoria, British Columbia, found that models have overestimated warming by 100% over the past 20 years. ¶ Explaining this failure is now a cottage industry in climate science. At first, it was hoped that an underestimate of sulfate pollution from industry (which can cool the air by reflecting heat back into space) might explain the pause, but the science has gone the other way—reducing its estimate of sulfate cooling. Now a favorite explanation is that the heat is hiding in the deep ocean. Yet the data to support this thesis come from ocean buoys and deal in hundredths of a degree of temperature change, with a measurement error far larger than that. Moreover, ocean heat uptake has been slowing over the past eight years. ¶ The most plausible explanation of the pause is simply that climate sensitivity was overestimated in the models because of faulty assumptions about net amplification through water-vapor feedback. This will be a topic of heated

### 1AR---AT Hypersonics Shift

#### 1] Hypersonics can’t fill in.

Omar **Lamrani 16**. Senior Military Analyst, Stratfor, private intelligence corporation, M.A. Diplomatic Academy of Vienna, B.A. international relations, Clark University. 03-21-2016. “What the Next Arms Race Will Look Like.” https://www.stratfor.com/analysis/what-next-arms-race-will-look

Hypersonic missiles travel at least five times the speed of sound. Only a few other manmade devices are capable of reaching hypersonic speeds, including ballistic missiles, space launch vehicles and unmanned spacecraft such as the Boeing X-37. The only manned aircraft to achieve hypersonic speed is the rocket-powered North American X-15, which broke speed and altitude records when it was introduced in the 1960s. Recently, the focus of research in hypersonic technologies has shifted toward missile development, but several challenges must be overcome to make hypersonic missiles a reality. First, it is difficult to create a weapon that can reach hypersonic speeds while enduring the stress and extreme temperatures of hypersonic flight. It is harder still to ensure that the weapon can maintain those speeds for an extended period — enough time to reach its target. Second, high velocities can make a hypersonic vehicle sensitive to changes in flight conditions, resulting in instability in the missile's airframe during flight. Coupled with the fact that high speeds leave less time to course correct, this instability can make guidance of hypersonic missiles problematic. Finally, hypersonic vehicles' actual flight paths often do not match the predictions researchers derive from ground tests and theoretical models, lengthening the process of development. Despite these obstacles, hypersonic missiles have some considerable advantages. Their speed enables them to reach their targets much more quickly than other missiles and to better penetrate enemy defense systems. Those with gliding capabilities can also cover great distances, enabling one country to strike at another from farther away. Guided hypersonic missiles would be more accurate than traditional ballistic missiles, and they could conceivably be armed with nuclear warheads, becoming a strike asset or a deterrent in nuclear warfare.

### ---AT Space

**1] Economic costs to militarizing are too high, and war is constrained by terrestrial factors.**

Dobos ’19 Bohumil Doboš, scholar at the Institute of Political Studies, Faculty of Social Sciences, Charles University in Prague, Czech Republic, and a coordinator of the Geopolitical Studies Research Centre, ’19, Geopolitics of the Outer Space, Chapter 3: Outer Space as a Military-Diplomatic Field, Pg. 56

This might be one of the explanations why space has not witnessed more aggressive military presence, yet. Not only that it is economically unviable and technologically challenging with possibly dire consequences for space utilization by everyone, but space is also still not price itself. It is only meant to enhance capabilities to dominate much more valuable interests on Earth-despite the outer space's vast and yet largely untapped potential. Space diplomacy was from the beginning centered on terrestrial competition, and treaties and principles were reflecting the terrestrial needs (disarmament, reconnaissance, prestige, etc.). **Space war or weaponization simply did not meet any of the criteria set by the terrestrial politics**. Nevertheless, some activities and directives pushing toward this direction may be observable, for example, in the Bush space policy at the beginning of the 2000s. Yet even if some actor decides to wage space war, it must in the first place capable to develop many new technologies and understand its consequences. These include high cost, high probability of destruction of its assets, and the substantial chance of rendering the terrestrial orbits useless for any meaningful space activity for generations to come (the increase of the number of space debris connected to such an activity). **Strategic gains for any nation in possible space warfare are very low.**

#### 2] Ost solves

Cristea 16 [Emil M., PhD at Air Command and Staff College, Air University, the U.S. Air Force's center for professional military education (PME), “Planetary Defense”, May 2016, https://apps.dtic.mil/dtic/tr/fulltext/u2/1031581.pdf]

As shown previously, international organizations already exist and solutions are considered. However, a major problem regarding Planetary Defense that still needs to be addressed concerns international space treaties. The current regime of space related treaties is a big obstacle for space development. For example, Outer Space Treaty (OST), signed by all the relevant countries to the matter, is the basic legal framework of international space law and introduced the term res communis, which hinder space endeavors. OST states that space is not subject to national appropriation or sovereignty claims and the conduct of any military maneuvers on the Moon or celestial bodies is prohibited. Although these articles sound good in theory, in practice they are a major obstacle, and represent one of the main reason for lack of space exploration and of political motivation. While the interpretation of this ranges from absolutely no military activities in space to allowing activities that are military but do not constitute a kinetic attack, the result is that military activities are curtailed and limit space as a realm for employing national security activities and also prevents military force to act in support for Planetary Defense.20 Additionally The Moon Treaty and The Agreement of Activities of States on the Moon and Other Celestial Bodies state that exploration of the Moon and other celestial bodies will be in interest and for benefit of all countries. Again, although noble in its intention, this article undermines competition in space exploration, which leads to stagnation.

### 1AR---AT Terror

#### 1] Aff solves---checking state actors is enough to stop dirty bombs

Litwak '16 (Robert S. Litwak; Robert S. Litwak, the Vice President for Scholars and Director of International Security Studies at the Wilson Center, is one of the world’s preeminent experts on nuclear issues and policy, from Iran to North Korea to Russia. A consultant to the Los Alamos National Laboratory, he served on the National Security Council as Director for Nonproliferation., ; 2016; "Deterring Nuclear Terrorism"; https://www.wilsoncenter.org/book/deterring-nuclear-terrorism, Wilson Center, accessed 12-2-2019; JPark)

Since 9/11, the Cold War concept of deterrence has been retooled to address the threats of a **new era**. Classic deterrence theory distinguishes between two variants. **Deterrence by punishment** seeks to affect the intention of a state to carry out a hostile act through the credible threat of a punitive response, whereas **deterrence by denial** seeks to affect the capabilities of the target state (either by blocking the acquisition of those means or through the adoption of defensive measures to render them ineffective). The vast majority of work done in the nonproliferation area to counter nuclear terrorism falls under the rubric of deterrence by denial. This covers a range of activities, such as export controls to limit access to technology and physical security at sensitive sites to lock down fissile material to prevent illicit diversion. The Obama administration pursued "**cooperative threat reduction**" --a deterrence by denial strategy--to secure nuclear weapons and materials globally through a series of four Nuclear Security Summits, which brought together some 50 heads of state and made significant progress (e.g., reducing the number of countries with weapons-usable nuclear materials from 32 in 2010 to 24 by the end of 2015). To prevent a state from transferring nuclear weapons or technologies to a terrorist group, the United States has employed deterrence by punishment. Dating back to 2006, when North Korea conducted its first nuclear test, U.S. declaratory policy has held that a state that supports or enables terrorist groups to acquire or use nuclear weapons would be held "fully accountable." Because North Korea is the one state that might sell a weapon or nuclear technology to a terrorist group, this general declaratory policy should be made explicit: The deliberate transfer of nuclear capabilities by the Pyongyang regime to a non-state entity could trigger a non-nuclear, regime-changing response from the United States. A highly contentious issue relating to nuclear leakage is whether potentially negligent states, such as Pakistan, should be held "fully accountable." Technical advances in the area of nuclear "attribution" will increasingly permit experts to determine the source of fissile material should an attack occur. The United States has an interest in publicizing its attribution capabilities so that states of proliferation concern will know that they need to take possibility of detection, and the attendant risk of retaliation, into account. The deterrent threat captured in the calculatedly ambiguous phrase "fully accountable" does not commit the United States to a retaliatory response against the country of origin. The fear of deterrence by punishment could lead countries that are the potential sources of nuclear leakage to implement more effective strategies of deterrence by denial. An inherent tension exists between the twin variants of deterrence--punishment and denial. An over-emphasis on the punitive threat of the former potentially undercuts the target state's incentive for cooperating in the implementation of the latter. The policy tension between punishment and denial can be managed but not resolved. The Iran nuclear accord set an important nonproliferation precedent--deterrence by denial through arms control. That approach should be attempted to constrain the nuclear capabilities of two other hard cases, North Korea and Pakistan. In both, the objective would be to cap and secure those countries' nuclear weapons and weapons-usable fissile material. Opting for a negotiated freeze of capabilitie srecognizes that a full rollback of either North Korea's orPakistan's nuclear programs is not a diplomatically attainable objective. That said, even the more modest goal of capping and securing their nuclear arsenals would face formidable political obstacles in both countries. Negotiating a freeze would buy time and prevent the problem from getting worse. China, which has balked at applying meaningful pressure on North Korea to curb its nuclear ambitions, faces a strategic choice of either acquiescing toPyongyang's strategic breakout or living with its adverse consequences in northeast Asia (e.g., the August 2016 decision to deploy the THAAD antimissile system in South Korea). The Obama administration has reportedly floated a deal that would cap Pakistani nuclear capabilities (in particular, the expansion into vulnerable tactical nuclear weapons for battlefield use) in return for relaxing the strict controls on nuclear exports to Pakistan. The proposal would essentially trade off Pakistani restraint and transparency for measures to normalize the Pakistani nuclear program. Constraining the Pakistani program so that this fragile state does not become the world's fourth largest nuclear state can only be accomplished within the broader geopolitical context. China, which played a constructive role in negotiating the Iran nuclear deal, should have an interest in avoiding a spiraling arms race in South Asia that increases the risk of nuclear leakage from Pakistan. Denying ISIS the capabilities of a state is essential. Rolling back the Islamic State's control over territory in Iraq and Syria would block its access to the economic and technological capabilities of a state. Such a strategy of deterrence by denial would not eliminate ISIS's threat of WMD terrorism, but would substantially reduce it. A much more likely event of lower consequence would be the detonation of a radiological dispersal device (RDD)--a socalled "**dirty bomb**"--by ISIS or another terrorist group. RDDs have been called "weapons of mass disruption" because their consequences would be primarily economic and psychological. A strategy of deterrence by denial would aim both to block ISIS&'s (or any other terrorist group's) access to RDD capabilities and to deploy defenses to prevent a successful attack on a nuclear power plant. The former would entail securing radiological materials as is being done with weapons and weapons-usable materials. But radiological isotopes are in pervasive use throughout society in medicine and business, so a denial approach, while necessary, cannot realistically eliminate the threat. Nuclear terrorism encompasses a spectrum of threats--the detonation of a nuclear bomb, an attack on a civil nuclear installation, or the dispersal of radiological materials through a "dirty bomb." Each differs in probability and consequence. But the strategies adopted to counter these variegated threats share a fundamental characteristic. Their focus is on state actors, who through their intent or laxness, would be the **source countries of** the weapons, nuclear technology, and radioactive materials that terrorists would either use to perpetrate attacks or target. This underscores the leitmotif of this monograph: Effective strategies of deterrence, which coherently integrate both the denial and punishment variants, on the state level remain the **prerequisite** for countering the non-state threat of **nuclear terrorism**.

#### 2] Terror’s unlikely---they don’t want nukes.

Mueller '18 (John Mueller; John Mueller is Adjunct Professor of Political Science and Woody Hayes Senior Research Scientist at Ohio State University and a Senior Fellow at the Cato Institute. He is the author of Atomic Obsession: Nuclear Alarmism From Hiroshima to Al Qaeda; 10-15-2018; "Nuclear Weapons Don’t Matter"; https://www.cato.org/publications/commentary/nuclear-weapons-dont-matter, Cato Institute, accessed 12-3-2019; JPark)

As for nuclear terrorism, ever since al Qaeda operatives used box cutters so effectively to hijack commercial airplanes, **alarmists have warned** that **radical Islamist terroris**ts would soon apply equal talents in science and engineering to make and deliver nuclear weapons so as to destroy various so-called infidels. In practice, however, terrorist groups have exhibited only a limited **desire** to go nuclear and even less progress in doing so. Why? Probably because developing one's own bomb from scratch requires a series of **risky actions**, all of which have to go right for the scheme to work. This includes trusting **foreign collaborators** and other criminals; acquiring and transporting **highly guarded fissile** material; establishing a sophisticated, professional machine shop; and moving a cumbersome, **untested weapon** into position for detonation. And all of this has to be done while hiding from a vast global surveillance net looking for and trying to disrupt such activities. Terrorists are unlikely to get a bomb from a generous, like-minded nuclear patron, because no country wants to run the risk of being blamed (and punished) for a terrorist's nuclear crimes. Nor are they likely to be able to steal one. Notes Stephen Younger, the former head of nuclear weapons research and development at Los Alamos National Laboratory: "All nuclear nations take the security of their weapons very seriously." The **grand mistake** of the Cold War was to infer desperate intent from apparent capacity. For the war on terrorism, it has been to infer **desperate capacity** from **apparent intent**.

#### 3] Terrorism good—ensures nanotech innovation that enables rapid detection and neutralization of future attacks

Tiebreakers:

From dr. curry

Environmental benefit: new nanotech turns venom into eco-friendly shit lmao

Yes uniqueness is a problem—here’s my spin: terrorism is not a yes/no question, some will always exist; if the aff reduces terrorism that decreases the incentive to focus on developing more and more new nanotech to stop it which means when attacks occur in the future and as terrorists adapt to the plan there will be less resistance and we will be less prepared; in the world of the impact turn (wasn’t sure how to phrase this), terrorism stays at its current level which causes more and more nanotech innovation such that terror is basically donezo in the future, so basically outweighs on duration

Curry 16 Taeyjuana Curry PhD, 3-10-2016, [phd in physics@umich] "Nanoparticles---5 Ways These “Little Fighters” Are Making a Big Impact in the War on Terrorism," Sustainable Nano, <http://sustainable-nano.com/2016/03/10/nanoparticles-war-on-terrorism/> RE

The term “terrorism” is becoming quite ubiquitous in our everyday lives. It seems that you can hardly watch a news report, browse the internet, listen to a podcast, or tune into your favorite radio station without being made aware of the most recent terrorist attack that has happened here or abroad. The prevalence of these acts is quite disheartening. However, as a scientist in the field of nanotechnology, I can tell you that there is a bright side, or a silver lining to this particular societal cloud. In essence, “necessity is the mother of invention!” The unfortunate rise in the number of terrorist attacks around the world has resulted in many scientists in the field of nanotechnology devoting effort toward the use of nanoparticles in the fight against terrorism. The Merriam-Webster dictionary gives the simple definition of terrorism as “the use of violent acts to frighten the people in an area as a way of trying to achieve a political goal” and the full definition as “the systematic use of terror especially as a means of coercion.”1 You can find more detailed definitions used by the Department of State and the Federal Bureau of Investigation (FBI).2 For the sake of clarity, in this post I will refer to the simpler definition, with a specific emphasis on toxic chemicals used as form of warfare agents against innocent targets. Nanotechnology, and nanoparticles specifically, are likely not the first thing that comes to mind when most people consider the fight against terrorism. However, nanoparticles have some particularly advantageous properties that can be exploited for this very use: Nanoparticles are very, very, very small and can have many shapes. The ability to change the size and shape of nanoparticles makes them extremely versatile, which means they can be adapted to address many types of threats associated with terrorism (more details on this later). Nanoparticles have a high surface to volume ratio, which means they are very efficient attaching themselves to targets such as toxic chemicals meant to harm innocent people, animals, or crops, etc. Nanoparticles can also be made to be porous (filled with holes). Porous nanoparticles can be filled with sensing and neutralization agents that make them excellent at alerting authorities to a terrorist threat, even when the threat is only present at low levels. Nanoparticles can be packaged in different forms like solids, gels, and aerosols. This makes them potentially useful in a range of contexts for law enforcement, military, and research scenarios. Lastly, many nanoparticle-based technologies that are focused on aiding in the fight against terrorism have the added benefit of easy disposal. For example, some solid nanoparticle-based materials that are designed to neutralize a threat substance can then simply be thrown away without needing any extra steps to make the materials safe. Moreover, in many cases there have been efforts to make all of the byproducts “green” or nontoxic to the environment. Nanoparticle-based applications are particularly suited for two aspects of the fight against terrorism: rapid detection and neutralization of a terrorist threat. Rapid detection is the ability to accurately detect the presence of a terrorist threat, for example a chemical warfare agent, in a short time span. Neutralization is the ability to transform a toxic agent into a nontoxic form. Here are a few exciting and innovative examples from the last five years that illustrate how scientists all over the world are using the advantageous characteristics of nanoparticles to ensure that nanotechnology plays a key role in the fight against terrorism. Rapid Detection of Threat ⇒ In 2013, Scientists from the Institute of Biophysics at the Chinese Academy of Sciences developed a system for the rapid detection of a nerve agent, Sarin. The system is based on iron oxide metal nanoparticles. It can sense the presence of the highly toxic nerve agent in a matter of minutes and the results of the test are easily read out via a color change of the test solution.3 This application is particularly cool because it provides a quick read-out that is easily interpreted. Schematic Schematic of a magnetic nanoparticle-based tool for the detection of toxic chemicals including the nerve agent Sarin and some toxic pesticides. The amount of the toxic chemicals present is indicated by a color change that is easily seen by the naked eye (from clear to blue, far right). (image from Liang et al., 20123) ⇒ MIT Scientists have developed protein coated carbon nanotubes for the detection of very small traces of explosives. Carbon nanotubes are very small, cylindrical tubes made out of carbon that have ultrathin walls. In this project, coating carbon nanotubes with various types of proteins from bee venom made them useful for detecting different types of explosives at the single molecule level (much more sensitive than typical methods).4,5 ⇒ Scientists from Georgia Tech developed a wireless sensor prototype based on carbon nanotubes that can be used to detect the presence of improvised explosive devices or IEDs. This is extra cool because the carbon nanotubes are printed directly on paper using a common inkjet printing technology This sensor is very promising as it is low cost and can be used anywhere.6 Neutralization of Threat ⇒ FAST-ACT®, which stands for First Applied Sorbent Treatment-Against Chemical Threats, is a product offered by Timilon Technology Acquisitions LLC. The company uses NanoActive® metal oxides “for the destruction of toxic and noxious materials, including air and water pollutants, hazardous chemicals, biological organisms, odors and chemical warfare agents.” Specifically, FAST-ACT is non-flammable, non-corrosive, and can be used to significantly reduce both liquid and vapor hazards.7 It comes in many different forms (liquid, vapor, or on mitts) and can be safely used in a variety of environments. This product has been shown to be highly effective in neutralizing the chemical warfare nerve agents VX, Soman, and mustard gas. It is also very versatile as it can be safely used by the military, first responders, and scientists.8 ⇒ Silica nanoparticles filled with special reactive chemicals have been successfully used in the removal of several chemical nerve and blister warfare agents including Sarin. The nanoparticles were able to absorb the toxic chemicals and neutralize them by changing them into nontoxic chemicals in only a few minutes.9 This application is an example of how scientists can take advantage of the porosity of certain kinds of nanoparticles to target them toward specific toxic chemical agents used in terrorist attacks. ⇒ Scientists from the Department of Nanoengineering at the University of California, San Diego developed self-propelled “micro-motors” for use in neutralizing an anthrax threat in natural water. The so called “micro-motors” are made of magnesium microparticles, coated with a titanium oxide shell that has gold nanoparticles embedded in it. As if self-propulsion and anthrax eradication aren’t impressive enough, the environmentally friendly micro-motors convert toxic agents into environmentally safe products, making them an especially “green” solution that can be applied to a chemical or biological warfare agent.10 Nanotechnology is quickly becoming a part of our everyday lives. More specifically, nanoparticles are now included in many consumer products including electronics, cosmetics, and medicine. The fight against terrorism, another familiar topic in many of our lives, has also been influenced by nanotechnology. Nanotechnology can make use of the best qualities of nanoparticles in a variety of ways, especially enabling rapid detection and neutralization of toxic chemical agents in various environments. I’m proud to know that some of the research done on a daily basis in scientific labs across the world is being used to positively impact global society by helping in the fight to keep innocent people safe from certain types of terrorist attacks. GO NANOSCIENCE!!!

### 1AR---AT Prolif

#### 1] Durable fiat solves---their ev doesn’t consider the world of the aff

#### 2] No prolif---too many barriers.

Mueller '18 (John Mueller; John Mueller is Adjunct Professor of Political Science and Woody Hayes Senior Research Scientist at Ohio State University and a Senior Fellow at the Cato Institute. He is the author of Atomic Obsession: Nuclear Alarmism From Hiroshima to Al Qaeda; 10-15-2018; "Nuclear Weapons Don’t Matter"; https://www.cato.org/publications/commentary/nuclear-weapons-dont-matter, Cato Institute, accessed 12-3-2019; JPark)

Great powers are one thing, some might say, but rogue states or terrorist groups are another. If they go nuclear, it's game over — which is why any further proliferation must be prevented by all possible measures, up to and including war. That logic might seem plausible at first, but it **breaks down** on close examination. Not only has the world already survived the acquisition of nuclear weapons by some of the craziest mass murderers in history (Stalin and Mao), but proliferation has **slowed down** rather than sped up over time. Dozens of technologically sophisticated countries have considered obtaining nuclear arsenals, but very few have done so. This is because nuclear weapons turn out to be difficult and expensive to acquire and strategically provocative to possess. They have not even proved to enhance status much, as many expected they would. Pakistan and Russia may garner more attention today than they would without nukes, but would Japan's **prestige** be increased if it became nuclear? Did China's status improve when it went nuclear — or when its economy grew? And would anybody really care (or even notice) if the current British or French nuclear arsenal was doubled or halved? **Alarmists** have misjudged not only the **pace of proliferation** but also its **effects**. Proliferation is incredibly dangerous and necessary to prevent, we are told, because going nuclear would supposedly empower rogue states and lead them to dominate their region. The details of how this domination would happen are rarely discussed, but the general idea seems to be that once a country has nuclear weapons, it can use them to threaten others and get its way, with nonnuclear countries deferring or paying ransom to the local bully out of fear. Except, of course, that in three-quarters of a century, the United States has never been able to get anything **close** to that **obedience** from anybody, even when it had a nuclear monopoly. So why should it be true for, say, Iran or North Korea? It is far **more likely** that a nuclear rogue's threats would cause its rivals to join together against the provocateur — just as countries around the **Persian Gulf** responded to Saddam's invasion of **Kuwait** by closing ranks to oppose, rather than **acquiescing** in, his effort at domination. If the consequences of proliferation have so far proved **largely benign**, however, the same cannot be said for efforts to control it. During the 2008 U.S. presidential campaign, Senator Barack Obama of Illinois repeatedly proclaimed his commitment to "do everything in [his] power to prevent Iran from obtaining a nuclear weapon — everything," and his opponent, the Republican senator from Arizona John McCain, insisted that Iran must be kept from obtaining a nuclear weapon "at all costs." Neither bothered to tally up what "everything" entailed or what the eventual price tag of "all costs" would be.

### ---AT Allied Prolif

#### 1] Fiat solves – states can’t maintain an arsenal – durable fiat applies to all actors in the plan

#### 2] AFF solves – squo nuclear powers facilitate nuclear exchanges and proliferation – the aff revitalizes taboos on nuclear weapons – that’s a link turn from Egeland.

#### 3] no impact if everyone gets rid of nukes – their impact assumes adversarial countries like Russia and china have nukes

#### 4] Troops outweigh

Alexander Lanoszka 19, assistant professor of international relations at the University of Waterloo and an honorary fellow at City, University of London, 6-11-2019, "False Alarm? Donald Trump, Alliances and Nuclear Proliferation," East West, https://www.eastwest.ngo/idea/false-alarm-donald-trump-alliances-and-nuclear-proliferation

Some observers argue the prospects for nuclear proliferation among U.S. allies appear to have heightened in recent years. Superficially, U.S. President Donald Trump may be responsible. During his 2016 presidential campaign, he made statements suggesting he might tolerate efforts by Japan and South Korea to acquire nuclear weapons. His criticisms of NATO and some of its members have fueled debate in Germany on the desirability and feasibility of the “nuclear option.” Looking more broadly, since the 2008 financial crisis, the U.S. has had to grapple with the management of its security ties abroad amid mounting budgetary deficits and growing public weariness of so-called “forever wars.” And yet, over two years into the Trump administration, little nuclear proliferation-related activity seems to be taking place among U.S. allies. In fact, some of the most powerful U.S. allies—Japan and Germany—have largely moved away from nuclear energy. What lies behind this current scenario? Perhaps one answer is that the U.S military deployments that underscore U.S. security commitments remain strong. But how do security guarantees relate to nuclear proliferation? Presidential rhetoric may be important for evaluating the strength of a treaty pledge by the U.S. to defend an ally in the event of attack by a potential adversary like Russia, North Korea or China. However, whether it is more important than other considerations is debatable, since presidential rhetoric may simply be just that: rhetoric. A verbally cited promise to follow through on any pledges recorded in print is simply hard to believe. No country wants to risk the safety of his or her country’s cities for an ally, if they can help it. How can a state, therefore, have any sort of confidence in its alliances? Thankfully, there is a way. The U.S. deploys a wide range of military forces to shore up local defense and deterrence measures to augment the security of its allies and to advance its own national security interests. U.S. forces stationed in South Korea and Japan, for example, are there for regional contingency if North Korea and/or China were to commit an act of aggression—not to serve as potential targets to trigger wider retaliation by Washington, per the logic of trip-wires. They are also there to kill, making it hard for any potential aggressor to go successfully on the attack without incurring unacceptable costs. So long as the U.S. has such forces on its ally’s territory, or in the theater of operations where a potential war would be fought, the security guarantee is sufficiently strong to have the confidence of its beneficiaries. It is when the U.S. has unilaterally reduced its forward deployments that its allies become so alarmed they are tempted to acquire nuclear weapons to ensure their own security. A case in point is South Korea in the 1970s. As it does now, South Korea benefited from a treaty promising that Washington would defend it against external aggression. But when President Richard Nixon came into office in 1969, he spoke of how partners in East Asia and elsewhere would need to bear more of the collective defense burden, especially in light of its failures in Vietnam, rising anti-war sentiment at home and the downturn in the U.S. economy. Yet, the South Korean President at the time—Park Chung-hee—was unfazed by Nixon’s rhetoric. He believed that the United States would reward his country for its contributions in the Vietnam War by retaining its large military presence on the Korean Peninsula. President Park’s optimism was misplaced. In July 1970, Nixon announced that the U.S. would unilaterally withdraw 20,000 of its military personnel from South Korea within a year, cutting the total U.S. military presence on the peninsula by one-third. The balance of power implications were potentially significant. Since more troop reductions were now conceivable, South Korea would become newly vulnerable to North Korea—an adversary that, at the time, was relatively more industrialized, enjoyed Chinese and Soviet patronage, had a stronger conventional military and had engaged in highly provocative but low-level military activities across the Demilitarized Zone against the South since 1966. Against this backdrop, President Park put South Korea on the path towards acquiring nuclear weapons. This project failed partly because South Korea needed outside sources for credit and access to reprocessing and enrichment facilities—a vulnerability that the United States used to its advantage to get its ally to curb its activities and to make nonproliferation commitments. Still, South Korea has had persistent interest in fissile materials since the 1970s and continues to undertake continued pyroprocessing activities. Today, South Korea may not be on an aggressive path to acquiring nuclear weapons, but its apparent desire to seek some advantage demonstrates that security guarantees—once broken—can be very difficult to repair, thus prompting countries to reconsider the nuclear option. The South Korean case illuminates why we are seeing no new efforts to get nuclear weapons, at least by U.S. treaty allies, in the age of Trump. When one looks beyond the rhetoric, actions speak volumes. The Trump administration has reinforced U.S. force posture with additional deployments to Germany. It is seriously considering a permanent military presence in neighboring Poland. Present relations with South Korea have been rocky, but the Trump administration did sign an updated free trade agreement, as well as a temporary agreement, to help cover the costs of 28,500 military personnel stationed there. The U.S. military presence in Japan has remained steady. Indeed, if Trump is serious about containing China, the U.S. military presence will likely increase in East Asia over the long-term. Dramatic, unilateral troop withdrawals under the Trump administration are still possible, but the historical record indicates that such attempts are generally made early in a presidency rather than later. Nixon, for instance, announced his troop withdrawal out of Vietnam within eighteen months of coming into office. Putting all rhetoric aside, if the military foundations of U.S. security guarantees remain strong, nuclear proliferation among allies remains unlikely.

#### 5] Security commitments are collapsing

Lionel P. Fatton 18. Webster University Geneva, Research Institute for the History of Global Arms Transfer. 2018. “‘Japan Is Back’: Autonomy and Balancing amidst an Unstable China–U.S.–Japan Triangle.” Asia & the Pacific Policy Studies, vol. 5, no. 2, pp. 264–278.

The credibility of American security commitments has weakened in recent years in the eyes of Tokyo, and this despite the pivot to Asia policy forged during the presidency of Barack Obama and seemingly embraced by President Donald Trump. The policy aims at guaranteeing the United States' interests and continuous engagement in Asia in the face of a rising China by allocating more resources to the region. Through the use of economic, diplomatic, and military instruments, Washington has devised incentives for China to develop into a peaceful and responsible power while making sure it remains ready for confrontation in case Beijing choses the belligerent path (Till, 2015). In other words, the United States has like Japan adopted a hedging strategy. This has not reassured Tokyo, however. Whatever the future shape of Sino‐American relations, cooperative or conflictual, uncertainty about American commitments is doomed to increase in Japan. If Sino‐American relations enter a confrontational cycle, Japan would become a frontline state in a struggle between the world's most powerful countries. Japan's geostrategic position and its role as the primary American ally in Asia would ensure Washington's sustained commitment to its defence. On the other hand, the United States' growing inability to project military power in East Asia and budget constraints would affect its credibility as Japan's protector. Put simply, Japan would be spared from the risk of being utterly abandoned but would face the prospect of buck‐passing by Washington, the country bearing the bulk of the costs of balancing against and of a potential conflict with China. The United States faces severe budget constraints to implementing the pivot to Asia, and in particular, its military dimension aimed at repositioning 60% of American air and naval forces to the region by 2020. This was reflected by the 2013 government shutdown, which quite symbolically led Barack Obama to cancel a tour in Southeast Asia. Another noticeable illustration occurred in March 2014 when Katrina McFarland, then U.S. Army's Assistant Secretary for Acquisition, Logistics, and Technology, said during a conference in Arlington that “right now, the Pivot is being looked at again, because candidly it can't happen” due to budget issues (Hwang, 2015, p. 158). Japan did not fail to interpret these and other signals as evidences that Washington encounters serious budgetary challenges to keep its words in regard to its ambitious plan toward Asia. The ability of the United States to defend Japan is also being jeopardised by the evolving geostrategic context. China has deployed a wide range of military assets, ballistic and cruise missiles in particular, that put American troops in East Asia at risks. Washington has responded to this growing vulnerability by reducing its military footprint in Northeast Asia and by dispersing American forces across the Asia‐Pacific region (Campbell, 2016). This is illustrated by the planned relocation of thousands of U.S. Marines from Okinawa to Hawaii, Guam, and Australia. The development of long‐range strike and surveillance capabilities could reassure Japan about Washington's ability to fulfil its security commitments despite a regionally scattered force positioning. B‐1 and B‐2 bombers can, for example, operate in East Asia from Guam and even the continental United States while satellites can take over the target acquisition function of forward‐deployed radars (Calder, 2009). The reality is not that simple, however. China has developed a sophisticated anti‐access/area denial [A2/AD] strategy made of missiles, submarines, aircraft, and electronic warfare devices and dedicated to prevent the United States from projecting power in East and Southeast Asia. The Air‐Sea Battle concept formulated by the U.S. Navy and Air Force to overcome the Chinese strategy is unlikely to be sustainable as the balance of military technology tilts in favour of the defence. Stealth technology and electronic countermeasures cannot provide sufficient protection to strike capabilities while assets in outer space are vulnerable to earth‐based weapon systems, as exemplified by China's destruction of an ageing weather satellite with a ballistic missile in 2007. The evolving geostrategic context makes military operations in the defence of Japan increasingly costly for Washington and thus reduces the credibility of American security commitments (Hughes, 2014)

### ---AT Japan Prolif

#### 1] No Japan prolif---operational and political obstacles.

Roehrig ‘17 Terence. Professor of National Security Affairs and the Director of the Asia-Pacific Studies Group @ the U.S. Naval War College. 2017. “Japan, South Korea, and the United States Nuclear Umbrella; Deterrence After the Cold War.” Columbia University Press.

WOULD JAPAN EVER DEVELOP ITS OWN NUCLEAR WEAPONS? The short answer to this question is “not likely,” though scholars disagree over the reasons.99 For years, analysts have spoken of a “nuclear allergy” in Japan resulting from World War II that prevented Japanese leaders from discussing nuclear weapons, much less consider acquiring them. Though constrained from discussing the issue publicly, Japan’s conservative leaders often discussed the issue privately, believing Japan must keep the option open.100 Yet for Japan to make the decision to go nuclear would require a drastic deterioration of its security environment accompanied by a collapse of the Japan-U.S. alliance. In many respects, a Japanese decision to head in this direction is what Campbell and Sunohara call “the ultimate contradiction.” Japan’s “standing as a non-nuclear nation is a virtual bedrock of the nonproliferation regime” yet “at the same time, suspicion and speculation have persisted that, given the right set (really the wrong set) of international and domestic conditions, Japan might seriously consider the nuclear option.”101 Japan clearly possesses the technology and infrastructure for a breakout through its extensive civil nuclear energy program should it desire to do so.102 Estimates of Japan’s necessary breakout time range from a few months to a year or two. The disaster that followed the March 2011 tsunami and nuclear catastrophe at Fukushima-Daiichi nuclear power plant raised the possibility that Japan might permanently shut down its nuclear reactors and scrap its nuclear energy industry entirely, removing its breakout capability. Yet in the end, Japan remains committed to its nuclear energy program and in August 2015 restarted its first nuclear power plant since shutting them all down in 2011. A few months after the disaster, former Defense Minister Shigeru Ishiba stated, “I don’t think Japan needs to possess nuclear weapons, but it’s important to maintain our commercial reactors because it would allow us to produce a nuclear warhead in a short amount of time. It’s a tacit nuclear deterrent.”103 Maintaining a civilian nuclear program even after the tragedy at Fukushima has a clear connection to maintaining some level of nuclear breakout capability and nuclear deterrent. Referring to the LDP’s determination to maintain a nuclear energy program, Narushige Michishita argued, “What they are saying in a tacit manner is that 98 percent of our program is peaceful, but we have the potential for something else.”104 Japan would face some serious operational and political obstacles should it seek nuclear weapons. Japan’s people are concentrated in several densely populated urban areas that makes them very vulnerable to a nuclear exchange. To have an effective deterrent, Japan would need many weapons, and given Japan’s lack of geographical depth, there are few places to deploy these systems, making them vulnerable to a first strike. Acquisition of the necessary weapons systems, especially strategic bombers and ballistic missiles, would violate the constitution and the EDOP.105 Some disagree that nuclear weapons are acceptable as a defensive system used only for retaliation, and there would likely be a highly divisive debate in Japan should any government head in this direction under any but the most dire circumstances. Even in the wake of what many would argue is an increasingly aggressive China, Prime Minister Abe had a difficult time obtaining public support for a constitutional reinterpretation of collective self-defense. Finally, “going nuclear” would also entail leaving the NPT and damaging Tokyo’s reputation as a nonproliferation stalwart. Economic sanctions would likely follow, as well as restrictions on Japan’s nuclear industry.106 For all these reasons, Japan would incur a heavy cost, domestically and internationally, should it move to acquire nuclear weapons. Every time Japanese leaders have examined this possibility, they have acknowledged this reality and chosen instead to rely on the U.S. defense commitment. As one study notes, “In the context of the gulf between Japanese public opinion, which is largely ill-disposed toward nuclear weapons and security hawks at the elite level eager to push back against this ‘nuclear allergy,’ the END [extended nuclear deterrent] offered and continues to offer a neat and practical solution.”107 Thus, Japan will continue to rely on the U.S. alliance and the nuclear umbrella while also slowly increasing its own conventional capabilities and leaving the door open for nuclear acquisition. In the end, Samuels and Schoff provide the most pointed analysis: “Although Japan’s nuclear hedging strategy is likely to continue in the near future, U.S. policy makers (and those throughout the region) should not be sanguine about this strategy continuing indefinitely. Japan’s choices will be determined ultimately by how well potential threats can be managed and by the strength of the U.S. commitment to extended deterrence.”108

#### 2] No escalation – negotiations solve now

**Newsam 1/20** (Newsam. “Abe: Japan Ready to Normalize Relations with North Korea, Open New Era with China.” RSS, 20 Jan. 2020, news.am/eng/news/555409.html. Accessed 1/25/20) //ZL

The Japanese government will seek to establish interstate relations with North Korea, intends to open a new era in cooperation with China and intends to develop dialogue with the European Union and countries in the Asia-Pacific region, said Japanese PM Shinzo Abe, delivering a keynote speech at the opening of the parliament session. According to him, he will strive to establish interstate relations with North Korea, resolving the existing problems, drawing a line under the unhappy past, TASS reported. He noted he is ready meet with the North Korean leader, Kim Jong-un, without preconditions. Japan and China share the responsibility for the peace and prosperity of the region and the world, he said noring that by deepening and expanding ties in all areas, they will open a new era in relations with China. In this connection, Abe expressed hope for the success of the upcoming spring visit of President Xi Jinping to Japan. He recalled that Washington and Tokyo on Sunday celebrated the 60th anniversary of the bilateral security treaty. The Japanese-American alliance, the PM said is now stronger than ever. Based on this powerful foundation, they will strive to build a free and open Indo-Pacific space together with the EU, India, Australia, the Association of Southeast Asian Nations (ASEAN) and other countries with which they share the core values.

### 1AR---AT PGS Shift

#### Arms races in hypersonic missiles are stabilizing—they encourage technological innovation that enable conventional MAD and relieve insecurity among adversaries.

**Venable and Abercrombie 19**—Heather Venable, Assistant Professor of Military and Security Studies at the Air Command and Staff College, Clarence Abercrombie, Captain on Active Duty in the United States Air Force (“Muting the Hype Over Hypersonics: The Offense-Defense Balance in Historical Perspective,” *War on the Rocks*, May 28th, https://warontherocks.com/2019/05/muting-the-hype-over-hypersonics-the-offense-defense-balance-in-historical-perspective/)

Currently, the United States is struggling to adjust to new technological developments as it enters an era of near-peer competition. But it is critical for U.S. policymakers to take the **long view of technological change**. Recalling the frequent shifts in the historical relationship between offense and defense, it becomes evident that the standard cycle of offensive and defensive weapons development will continue and that defensive solutions to the hypersonic challenge will soon be developed. When that happens, **Chinese and Russian acquisition of hypersonic weapons** will actually help to **stabilize relations** — not unlike a conventional form of **m**utually **a**ssured **d**estruction. Such a development would mark a departure from a period when the United States had precision capabilities and others did not, which amplified Russian fear of the United States. Historical perspective helps to **temper the fear of destabilizing innovations** in the hypersonic weapons space by U.S. rivals. During the interwar period, airpower advocates from Giulio Douhet to Billy Mitchell insisted that the bomber could not be stopped. The devastation that bombers could bring to cities would be so horrific that war simply could not last more than a few days. Airpower, they insisted, should be used as part of a “relentless” offensive. The development of radar before the outbreak of World War II, however, helped reset the balance between offense and defense. As legendary airman Claire Chennault insisted even before radar was developed, the bomber would not be “the first exception to the ancient principle that for every weapon there is a new and effective counter weapon.” We can point to numerous other examples of this rebalancing between new offensive and defensive capabilities, such as between armor and anti-tank missiles. More recently, anxiety about the destabilizing effects of drones has receded to some extent with the development of anti-drone technology. Today, experts worry about airpower’s limitations in light of drastic improvements in **defensive capabilities**, especially advanced surface-to-air missiles. Hypersonic weapons, however, offer the possibility of **resetting that balance** just as improvements in bombers did prior to the advent of radar. A recent War on the Rocks article described how hypersonic missiles, “which travel at speeds greater than Mach 5, shorten John Boyd’s famous observe-orient-decide-act loop, making it nearly **impossible** for human minds and teams to even comprehend the information, **let alone defend** against a **short-range attack**.” The article paints a compelling picture of the kind of threat the United States faces as its peer competitors diligently pursue weapons that pose a seemingly intractable problem. Hypersonic weapons have many in the U.S. military on edge. Due to their speed, they significantly reduce reaction time, have sufficient kinetic power to cause **significant destruction** even without a payload, and are **difficult to intercept**. As a result, hypersonics can bypass a country’s defense systems and strike areas within that country with little to no resistance. The U.S. Defense Intelligence Agency told Congress in its Worldwide Threat Assessment that hypersonics will “revolutionize” warfare by enabling targets to be struck faster, harder, and from farther away. Note, however, that such characteristics are far more evolutionary in nature than revolutionary. It is important to acknowledge the limitations of hypersonics, which do, in fact, permit the development of defensive countermeasures. While hypersonic weapons travel at an extremely fast rate of approximately 2 miles per second, the speed of the Tsirkon hypersonic cruise missile, they still **pale in comparison** to the speed of **directed energy weapons** (which travel at the speed of light, 186,282 miles per second). Directed energy weapons such as lasers and high-power microwaves are gaining traction because they address the threat of hypersonics with an unconventional approach. Throughout history, militaries have tried to defeat weapons by creating the next most advanced version of those weapons. If one country created a missile capable of traveling 10 miles, another country would create a missile capable of traveling 20. However, with directed energy weapons, the approach is to defeat the technology that makes these advanced weapons so threatening. Lasers are capable of destroying targets using a focused beam of energy, while high-power microwaves are an invisible wave of electromagnetic energy capable of frying microprocessors. Hypersonic weapons are fast, but they are **not instantaneous**. Thus, when used against moving targets beyond certain distances, the weapons lose effectiveness as the target’s speed increases and its size decreases. Such limitations require most hypersonic weapons to have some form of onboard guidance, which in turn necessitates electronic circuits to do computations and make guidance adjustments. These circuits are highly susceptible to high-power microwave damage. Additionally, the beam width of high-power microwaves is significantly wider than that of a weaponized laser, which requires less time to be used for targeting. Although lasers are extremely effective, when it comes to countering hypersonic weapons, they are limited by line of sight, limited range, and power requirements. For this reason, when talking about defending against hypersonic weapons, high-power microwaves are the more logical choice. Additionally, because hypersonic weapons are so fast, they struggle with maneuvers in the final seconds against small fast-moving targets. This is due to maneuverability limitations at high speeds. Hypersonic weapons, therefore, are most effective for large and slow-moving or stationary targets, such as an aircraft carrier. Areas outfitted with high-power microwaves could provide area denial capabilities for high-value target areas against hypersonic weapons. Using the equations provided in a University of Maryland study of high-power microwave technology, a source power of 9.5 megawatts could deliver the power density required to damage a hypersonic weapon at a target 25 miles away. This would be about 12.5 seconds prior to the missile reaching the transmission site, assuming the hypersonic weapon is traveling directly toward it. This may not seem like a long time, but the slightest change in trajectory in anything traveling at those speeds would result in a drastically different termination point. For example, an angular change of half a degree would result in a miss distance of 1,150 feet. Additionally, depending on the fusing method, high-power microwaves may also be able to prevent the weapon from fusing and, ultimately, deny detonation. China is one of many countries attempting to develop such **directed-energy technology**. Richard Fisher, an expert on Chinese and Asian security at the International Assessment and Strategy Center, stated in testimony before the U.S.-China Economic and Security Review Commission: Some Chinese military experts expect that **energy weapons will become more prevalent** in 10 to 20 years and will **dominate the battlefield** in 30 years. As such, it is imperative that the United States **redouble its focus** to achieve technology breakthroughs needed to **realize decisive energy weapon capabilities** and be ready to cooperate with critical allies to **accelerate co-developments**. The U.S. should also retain the flexibility to deploy energy weapons from diverse platforms, including space platforms, to meet what could be rapidly emerging new Chinese energy weapon threats. Lockheed Martin is now also discussing integrating the technology into UAVs for the Army, but this integration is at a tactical level while high-power microwave technology has strategic uses. Although Boeing initially led the high-power microwave field in 2012 with its development of the Counter-electronics High-powered Advanced Missile Project, or CHAMP, its use and integration has been limited to the B-52. Other countries are advancing the field. China is developing high-power microwaves not only for the purpose of deployable munitions but also for area denial for high-value targets. More integration is necessary if the United States is to remain effective in an evolving battlespace. High-power microwave technology, however, is not without its own weaknesses. Its effective range is based on the power density present at the target, a number of factors that can affect this figure, such as transmitter power, feeder loss, antenna gain, range, path loss, and the effective isotropic radiated power. These factors really boil down to two design elements: environment and range. These limitations can be used to create a versatile weapon that can defeat hypersonic weapons in most cases. As technology moves forward, someone will inevitably determine how to artificially increase the path loss to a point where the microwave drastically loses effectiveness. It is important to acknowledge each technological leap not as a permanent solution but as part of an ongoing cycle, just as has been the case for other weapons, such as the tanks discussed earlier. Many in the Army believed them to be obsolete in the 1970s until innovators stumbled upon a lightweight protective material that provided them with an important offensive advantage once again. Whether it is **hypersonic weapons** or **high-power microwave technology**, no one method or technology can exist for long without a countermeasure. Still, hypersonics and other weapons will continue to **entice nations** with the promise of easy answers that can **reduce the fog and friction of war**. For now, U.S, policymakers should **invest in directed-energy technology** while bearing in mind that it is not a silver bullet. Amid the return to great power conflict, it is understandable that the United States fears the rapidly increasing capabilities of its rising peer competitors. But it is worthwhile to consider whether the U.S. investment in hypersonics needs to be rebalanced more toward developing defensive capabilities. It is also helpful to consider those fears in historical perspective and in light of constant shifts in the technological and military balance. The United States needs offensive and defensive hypersonic capabilities for deterrence. Yet ironically, **China and Russia’s acquisition** of these capabilities can help to **stabilize tensions** because it helps them fear the United States less, and vice versa. **So keep calm and innovate on**.

#### No extinction level nanotech---defies laws of physics

Dyson 03Freeman J. Dyson 03, Professor of Physics Emeritus at the Institute for Advanced Study at Princeton, 2-13-2003 New York Review of Books 50:3 http://www.nybooks.com/articles/16053

It is easy to demonstrate that the details of the story are technically flawed. Consider for example the size of the nanorobots. In a commercial presentation advertising the Xymos medical diagnostic system, Julia says, "We can do all this because the camera is smaller than a red blood cell." The camera is one of her nanorobots. It must be as small as that, since Julia describes it swimming in the human bloodstream inside the capillaries that carry blood through the lungs. The capillaries are only just wide enough for red blood cells to pass through. But **later in the book Jack encounters swarms of nanorobots** chasing him in the open air like a swarm of ants or bees. These nanorobots are flying through the air as fast as he can run. **Fortunately** for Jack and unfortunately for the story, **the laws of physics do not allow very small creatures to fly fast. The viscous drag of air or water becomes stronger as the creature becomes smaller. Flying through air, for a nanorobot the size of a red blood cell, would be like swimming through molasses for a human being**. Roughly speaking, the top speed of a swimmer or flyer is proportional to its length. A generous upper **limit to the speed of a nanorobot flying through air or swimming through water would be a tenth of an inch per second, barely fast enough to chase a snail**. For nanorobots to behave like a swarm of insects, they would have to be as large as insects.

### 1AR---AT NoKo Politics

#### 1] No link, plan doesn’t eliminate noko nukes

#### 2] No link – Kim has absolute control over the government, politics is static

#### 3] No impact to bioweapons – burnout and variation

York ‘14 (Ian, head of the Influenza Molecular Virology and Vaccines team in the Immunology and Pathogenesis Branch of the Influenza Division at the CDC, PhD in Molecular Virology and Immunology from McMaster University, M.Sc. in Veterinary Microbiology and Immunology from the University of Guelph, former Assistant Prof of Microbiology & Molecular Genetics at Michigan State, “Why Don't Diseases Completely Wipe Out Species?” 6/4/2014, http://www.quora.com/Why-dont-diseases-completely-wipe-out-species)

But mostly diseases don't drive species extinct. There are several reasons for that. For one, the most dangerous diseases are those that spread from one individual to another. If the disease is highly lethal, then the population drops, and it becomes less likely that individuals will contact each other during the infectious phase. Highly contagious diseases tend to burn themselves out that way.¶ Probably the main reason is variation. Within the host and the pathogen population there will be a wide range of variants. Some hosts may be naturally resistant. Some pathogens will be less virulent. And either alone or in combination, you end up with infected individuals who survive.¶ We see this in HIV, for example. There is a small fraction of humans who are naturally resistant or altogether immune to HIV, either because of their CCR5 allele or their MHC Class I type. And there are a handful of people who were infected with defective versions of HIV that didn't progress to disease. ¶ We can see indications of this sort of thing happening in the past, because our genomes contain many instances of pathogen resistance genes that have spread through the whole population. Those all started off as rare mutations that conferred a strong selection advantage to the carriers, meaning that the specific infectious diseases were serious threats to the species.

#### 4] Uniqueness overwhelms the link - no risk of regime collapse or war

Tudor and Pearson 15 (Daniel Tudor, MBA from Manchester Business School, BA in politics, philosophy, and economics from Oxford, James Pearson, MA in Oriental Studies from the University of Cambridge , BA in Chinese and Korean from the School of Oriental and African Studies from the University of Cambridge, April 2015, “North Korea Confidential: Private Markets, Fashion Trends, Prison Camps, Dissenters and Defectors,” pp 178-9) gz

Having said all this, the authors remain **doubtful about** the possibility of **regime collapse**. A good number of DPRK-watchers have been predicting collapse and reunification under the Seoul government **for decades**, and have **come away disappointed**. As noted, **political control is** still **intact**, and **any challenge** to it **is met with** extreme **ruthlessness**. Furthermore, the new, rising capitalist class generally seeks to **join the** existing **elite** through marriage and business ties, **rather than undermine it**. And existing elites themselves have the greatest **access to** new **business opportunities**, giving these powerful people a **strong vested interest in** not seeking to undermine **the system**. Even in the wake of the obviously destabilizing execution of Jang Song Thaek, there is **little evidence** that the regime is on the brink. The succession of Kim Jong Un has gone through, propaganda supporting him is everywhere, and a coalition of powerful people around him has control. Of course, it is hard to say which of two identifiable groups— the OGD and the Kim family, which together form the nexus of DPRK power— has the upper hand, or what the state of relations between the two is. But we can say that no other group possesses the organizational capability to mount a challenge. As depressing as it may sound, the situation is theirs to mess up. At the same time, the broader geopolitical environment in which North Korea exists is surprisingly **well-balanced**. Despite the common perception that “crazy” Pyongyang could stage a nuclear attack on South Korea or even the United States, the leadership has absolutely **no incentive to consider** such a **suicidal action**. The DPRK leadership may be many things, but **irrational is not one of them**. Furthermore, the US and South Korea also have obvious **disincentives against** ever **attacking North Korea**— the most important being the DPRK’s nuclear program and Chinese support for the status quo. Beijing may be dissatisfied with Pyongyang these days, but the continued existence of North Korea **remains in the strategic interests of China**. Additionally, those who claim sanctions could push the DPRK to breaking point overlook the fact that **Pyongyang is** awash with luxury goods and **enjoying economic growth**, despite years of restrictions.

#### 5] Korean tensions are inevitable but won’t escalate – they don’t want great power war

Lankov 15 (Andrei Lankov, professor of Korean Studies at Kookmin University, 8-23-15, “Another Korean war is not in the cards,” <http://www.aljazeera.com/indepth/opinion/2015/08/korean-war-cards-150823053936952.html>) gz

Once again, the world media are busily telling their audience that "the heightened tensions in Korea are creating a risk of war". And once again, these panicky reports are met with little - if any - interest by the vast majority of Korea watchers and, for that matter, the South Korean public. This quietness has reasons: First, Koreans - and Korea experts, too - have seen similar developments **many times**. Second, there are valid reasons to be certain that the tensions have **no chance to escalate**. Both sides are seriously afraid of war, and rightly so. At first glance, the recent events look like a textbook case of escalation. First, a landmine exploded in the Demilitarised Zone (DMZ), which divides the two Korean states. South Korean soldiers were maimed, and the South Korean military claimed that the mine had been stealthily installed by the North Koreans. In retaliation, the South's military switched on massive loudspeakers, which had been silent since 2004, and began to broadcast propaganda across the DMZ, targeting the North Korean military personnel. Outraged, the North Koreans shelled the loudspeakers, killing nobody. Then, South Korean cannons shot back. Finally, the exchange of fire was followed by an exchange of bellicose statements and diplomatic gestures, and North Koreans gave an ultimatum - demanding the loudspeakers be switched off. Not so aggressive this time All these events might appear dangerous to foreigners, but this is not the case with Koreans who witness similar incidents occurring every few years. In 2010, North Koreans torpedoed a South Korean warship, the South Korean government retaliated with a ban on nearly all trade with - and aid to - their northern neighbour. Angry exchanges continued for a while, culminating in North Korean artillery shelling a South Korean island, killing some civilians. Even the rhetoric **hasn't been** particularly **aggressive** this time: North Korea declared merely a "semi-state of war". Back in 2013, the North Koreans said their country was already at war, and the actual fighting would start within days, and the evacuation of diplomatic personnel from Pyongyang was officially proposed. Predictably, this proposal was ignored by foreign diplomats who understood that this was just another episode of a never-ending diplomatic/military soap opera. Indeed, it is clear by now that neither side wants war, since neither side has much to gain from it. The combination of geography and politics has long ago made a new Korean War a lose-lose option for both sides. For the North Koreans, there are very little chances to win a war. Among military analysts, including those from countries close to North Korea, there exists a near consensus about the prospects of such a confrontation: the North would certainly lose, and very soon. Its military is armed with antiquated weapons, and it is poorly trained and badly run. Even the five or 10 low-yield nuclear devices the North Korean army possesses will not make much difference to the final outcome - even if somehow delivered to the intended targets (a big "if", given the absence of delivery systems in North Korea). Lose-lose scenario Even though North Korea cannot win a war, it can still inflict damage on the South. Its nuclear devices may not be powerful enough to incapacitate the South Korean military, but they can kill hundreds of thousands of civilians. Even without the use of nuclear weapons, in the first hours of a full-scale confrontation, North Korea can destroy a significant part of Seoul. The vast metropolitan (or Greater Seoul) area, where nearly half of all South Koreans live, is located right on the DMZ, within shooting range of North Korean artillery. Even if the heavily fortified positions of North Korean guns and missile launchers are destroyed soon, the artillery barrage would kill a large number of people and irreversibly damage the vulnerable city. Furthermore, the military advance into the North is not going to be easy nor bloodless. In other words, South Korea would probably win a full-scale war, but it would emerge as a state with a heavily damaged economy. It would also face the nearly impossible burden of developing the conquered North, one of Asia's poorest countries. So, the situation is an impasse, and this has long been understood by both sides. Hence, relations between the two Korean states have been reminiscent of a ballet: there are times when both sides engage in diplomatic and economic cooperation, and there are times when both sides make moves calculated to look tough, but take care to ensure that nothing really dangerous happens.

### 1AR---AT NoKo War

#### Not gonna happen

Hansler et al 19 (Hansler, Jennifer, et al. “Top US Envoy on North Korea: 'We Are Not Going to Invade North Korea'.” CNN, Cable News Network, 1 Feb. 2019, [www.cnn.com/2019/01/31/politics/biegun-trump-north-korea/index.html.)//LK](http://www.cnn.com/2019/01/31/politics/biegun-trump-north-korea/index.html.%29//LK) [Accessed 2/1/20]

Washington (CNN)The State Department's top envoy on North Korea said Thursday that the US is not looking to invade that nation and seemed to strongly signal that the US would be willing to formally end the Korean War. "President Trump is ready to end this war," Steve Biegun said at Stanford. "It is over, it is done. We are not going to invade North Korea. We are not seeking to topple the North Korean regime." "I am absolutely convinced, and more importantly the President of the United States is convinced, that it's time to move past 70 years of war and hostility in the Korean peninsula. There's no reason for this conflict to persist any longer," Biegun added. The North Koreans have pushed for the US to commit to a formal peace treaty to end the decades-old conflict. North Korea's Kim Jong Un and South Korean President Moon Jae-in pledged to bring a formal end to the Korean War during their landmark summit last April. In his remarks at Stanford, Biegun also knocked down the prospect that the US would agree to withdraw troops from South Korea as a concession to Kim -- a move that some were concerned President Donald Trump might make. "We are not involved in any diplomatic discussion -- full stop -- that would suggest this tradeoff. It has never been discussed," Biegun said. Biegun also said that Kim committed to dismantle and destroy all of North Korea's plutonium and uranium enrichment facilities if the United States takes "corresponding measures." "Exactly what these measures are are a matter I plan to discuss with my North Korean counterpart during our next set of meetings," Biegun said. "From our side, we are prepared to discuss many actions that could help build trust between our two countries and advance further progress in parallel on the Singapore summit objectives of transforming relations, establishing a permanent peace regime on the peninsula, and complete denuclearization."

### 1AR---AT Indo Sino

#### 1] Their uniqueness ev means Chinese and Pakistani pressure create an asymmetrical deterrence – incentivizes use it or lose it – that’s Kroenig

#### 2] Either conflict inevitable cause China encroaching now or mediation solves

**Lidarev 1/4** (Lidarev, Ivan. “2019: Reviewing a Passable Year in China-India Relations.” The Diplomat, 4 Jan. 2020, thediplomat.com/2020/01/2019-reviewing-a-passable-year-in-china-india-relations/. Ivan Lidarev is a doctoral candidate at King’s College London who specializes in China-India relations and a former Visiting Fellow at New Delhi’s Observer Research Foundation. His research has been featured in The Diplomat, The National Interest, East Asia Forum and The China Brief, among other publications. Accessed 2/6/2020) //ZL

2019 was neither a good year nor a bad year for China-India relations. It was just passable. China and India managed to safeguard the recent improvement in their relations in the face of various challenges that threatened to disrupt ties. However, the two sides made little substantive progress in resolving their major disagreements or putting their relationship on a sounder long-term basis. While such a state of affairs raises questions about the sustainability of the improvement in China-India relations, the status quo is difficult to overcome. It simply reflects the background factors that have molded China-India relations in recent years. To understand China-India relations in the past year, it is necessary to examine the bilateral and geopolitical background that has shaped them. On a bilateral level, the experience of crisis and partial reconciliation in the previous two years fashioned China-India relations in 2019. In 2017, the [73-day Doklam standoff](https://www.hindustantimes.com/india-news/doklam-standoff-india-says-has-agreed-to-disengagement-of-troops-after-talks-with-china/story-xybEpTjdsyFbobAjrf8yEN.html) between Chinese and Indian soldiers rocked China-India relations amid fears of military conflict. The greatest bilateral crisis in decades, Doklam erupted amid escalating competition between the two giants in Asia and the Himalayan belt, more assertive Indian policy on the “Tibet issue,” an increasing security dilemma partly fueled by closer U.S.-India relations, and the advancement of China’s Belt and Road Initiative (BRI) in South Asia, as well as tensions over the two sides’ territorial dispute. The Doklam crisis served as a warning to both sides that the tensions caused by their competition and by their unresolved border can easily escalate and derail their relationship. The next year, in 2018, the two sides engineered a badly-needed thaw during the [informal summit at Wuhan](https://www.indiatoday.in/india/story/all-that-you-need-to-know-about-pm-modi-xi-s-informal-wuhan-summit-1222279-2018-04-28) between Chinese President Xi Jinping and Indian Prime Minister Narendra Modi. The summit established a mechanism of informal meetings between the leaders of the two sides, helped them understand and partly assuage each other’s concerns on a number of issues, and refocused relations on cooperation. In short, in the shadow of Doklam the Wuhan summit put relations on an upward trajectory. However, crucially, Wuhan did not resolve any of the underlying sources of tension between Beijing and Delhi. On a geostrategic level, the relationship between China and India in 2019 reflected two larger developments on the international stage in recent years. One is the growing competition between China and the United States. This competition has pushed Beijing to improve relations with New Delhi, both to avoid a potential Indian drift into Washington’s camp and to allow China to focus on the American challenge by keeping its southern flank stable. Nevertheless, China has been careful to not make substantial concessions to India for fear that these would reward New Delhi’s tilt toward Washington and increase India’s demands on Beijing. For New Delhi, the U.S.-China competition presents a mixed bag. On one hand, it undeniably gives India some leverage over its more powerful Chinese neighbor. On the other, it complicated Delhi’s fine balancing act between Washington, a key but overbearing partner needed to hedge against China but carefully kept at arm’s length, and Beijing, a rival which India can ill afford to turn into adversary. The other engeostrategic development is the continued, albeit slower, expansion of China’s BRI in South Asia. Inevitably, this expansion increases the tensions between India, which regards the region as its strategic sphere of pre-emince, and China, which seems interested in integrating some or all of South Asia in its orbit to establish an economic and strategic presence in the Indian Ocean. The BRI’s continued expansion into South Asia and toward the Indian Ocean has also pushed China closer to Pakistan, through which the crucial China-Pakistan Economic Corridor passes, at the inevitable expense of its relations with India. Against this bilateral and geostrategic background, three characteristics have marked China-India relations in 2019. First, the two sides have sought to keep the momentum of improving relations that was generated by the Wuhan summit. While the last year has seen this momentum slow, with tensions over issues such as Kashmir and growing disillusionment with the “Wuhan spirit,” China and India have not given up on their improved post-Wuhan relationship, aware that the alternative is the costly and dangerous deterioration of relations. The commitment to improved relations was embodied in the informal [Mamallapuram summit](https://thediplomat.com/2019/10/modi-and-xi-in-mamallapuram-a-new-agenda/), a follow-up to the Wuhan summit, which demonstrated that the informal summit mechanism between the countries’ leaders and their personal relationship will play a central role in managing relations. China and India have also sought to build confidence and expand cooperation by joint international projects. For instance, in June China and India made a tentative attempt to [revive the long-planned Bangladesh-China-India-Myanmar (BCIM) corridor](https://economictimes.indiatimes.com/news/politics-and-nation/kunming-meet-revives-bcim-link-plan/articleshow/69921135.cms?from=mdr), while in November they presided over the second edition of a [joint training program for Afghan diplomats](http://www.xinhuanet.com/english/2019-11/11/c_138546684.htm) agreed during the Wuhan summit. The two sides also made concessions to each other in 2019 to keep the upward trajectory of relations. China took a relatively balanced position during the Indo-Pakistan military crisis that followed the Pulwama attack and might have even [mediated](https://www.scmp.com/news/china/diplomacy/article/2188923/chinese-envoy-islamabad-beijing-tries-mediate-pakistan-india) to de-escalate tensions. Beijing also agreed to stop blocking the UN from listing Masood Azhar as terrorist, a long time Indian complaint, after some hard bargaining and international pressure. For his part, Modi clearly bowed to Chinese sensitivities when he [did not invite](https://economictimes.indiatimes.com/news/politics-and-nation/no-invite-for-taiwan-representative-and-tibets-govt-in-exile/articleshow/69571515.cms?from=mdr) the political head of the Tibetan government-in-exile and a Taiwan representative to his second inauguration in 2019 as he did to the first one in 2014. Moreover, the Indian government consistently sought to sideline the “Tibet issue” in the past year and remained [completely silent](https://theprint.in/opinion/modi-monitor/why-modi-doesnt-mention-the-dalai-lama-anymore-while-he-rages-against-enemy-pakistan/215845/) of the 60th anniversary of the Dalai Lama’s flight to India. Admittedly many of these attempts to keep relations above water are more form than substance. However, as progress on substantive differences has been very small, form matters. It has become a way to build greater confidence, calm nationalist passions, and avoid renewed descent into confrontation. Second, in 2019 China and India worked hard to manage various bilateral points of tensions. Fearful that the many issues on which their interests clash would produce tensions or even a crisis that would disrupt their post-Wuhan thaw, the two sides tried to manage these issues. India’s change of Kashmir’s status in August was the most important point of tension that shook China-India relations in 2019, as Beijing brought the Kashmir issue to the UN Security Council and leaned toward Pakistan’s position as India postponed regular talks on the border dispute. However, both sides ensured that tensions would not go out of hand and moderated their positions prior to the Mamallapuram summit. China suggested that Kashmir is a bilateral China-India issue and gradually toned down its position, while [India insisted](https://scroll.in/latest/938453/china-misread-indias-decisions-on-j-ks-status-says-external-affairs-minister-s-jaishankar) that Kashmir’s status and the formation of an union territory in Ladakh has no impact on the China-India territorial dispute, with which Kashmir is connected. The talks for the territorial dispute were rescheduled for December. The disputed China-India border also caused tensions, maybe related to Kashmir, but these were managed very fast. In September a “[scuffle](https://www.indiatoday.in/india/story/india-china-army-ladakh-face-off-confrontation-1598214-2019-09-12)” between Chinese and Indian soldiers took place in Ladakh but unlike many previous times the incident was immediately resolved after delegation-level talks. Similarly, the two sides have made efforts to manage the issue of India’s large trade deficit with China, which has consistently caused indignation in India. Following the Mamallapuram summit a [new mechanism](https://www.livemint.com/news/india/india-china-to-establish-new-mechanism-to-discuss-trade-11570870230403.html) under the Indian finance minister and Chinese vice premier was set up to address the deficit and promote Indian exports and investment to China. In all these cases tensions affected relations between Delhi and Beijing but the two sides kept them within tolerable limits that did not threaten to upset the applecart of improved relations Get first-read access to major articles yet to be released, as well as links to thought-provoking commentaries and in-depth articles from our Asia-Pacific correspondents. Third, China-India relations in 2019 were also marked by the persistence of deep mistrust between the two sides, mistrust that severely limits cooperation and generates competition. Much of this mistrust is rooted in the inability of the two sides to resolve the numerous contentious issues that divide them. Such issues include competition in the Indo-Pacific and especially in South Asia, Beijing’s entente cordiale with Islamabad, India’s expanding rapprochement with the United States and Japan, the “Tibet issue,” the unresolved territorial dispute, the deeply unequal economic relationship between the two sides, China’s opposition to India’s accession to the Nuclear Suppliers’ Group (NSG), and the development of the BRI around India. Tellingly, none of these issues has seen much progress in the last year. Instead they either produced tensions between the two Asian giants, such as those over Kashmir, or served as a subtext of their foreign policies. For example, New Delhi’s deep unease over China’s gradual construction of a China-centered economic order in Asia and its economic penetration in India played a [major role](https://www.japantimes.co.jp/opinion/2019/12/17/commentary/japan-commentary/rcep-without-india-isnt-japans-liking/#.XgrQhHd2tpx) in Modi’s decision to pull out of the Regional Comprehensive Economic Partnership (RCEP) negotiations in November. This unease also explains India’s continued opposition to the BRI, which was exemplified in New Delhi’s nonattendance at the second BRI meeting in April. India’s concern about China’s rise in Asia in 2019 also pushed New Delhi to pursue further development of the Quad as a hedge against China, as signaled by its agreement to upgrade cooperation in the grouping to [ministerial level](https://economictimes.indiatimes.com/news/defence/quads-1st-ministerial-meeting-significant-elevation-of-level/articleshow/71324576.cms?from=mdr). Similarly, China continued in the last year to undermine India’s position in South Asia. In another episode of its quiet competition with India in the Himalayas, China agreed to build a [railway from Tibet to Nepal’s Kathmandu](https://www.scmp.com/week-asia/politics/article/3039995/china-nepal-railway-debt-trap-godsend-threat-india-or-just-pie), potentially a game changer for its position in the Himalayan country, and made a new push to establish diplomatic relations with Bhutan. In conclusion, 2019 offers good and bad news for China-India relations. The good news is that the improvement in China-India relations started at Wuhan has been secured and reflects the genuine commitment of the two sides to keep their relationship above water. This offers a rudimentary basis for further improving relations. The bad news is that the continued improvement in China-India relations is based more on the fear of confrontation than on any real agreement and mutual accommodation. Hence, it cannot produce any substantive progress on contentious bilateral issues. However, without such progress, the improvement in relations cannot survive on the long run.

#### 3] China isn’t deterred – Agni-5’s trigger more aggression because China thinks India is expansionist

**Thaliyakkattil ‘17** (Thaliyakkattil, Srikanth. Chinese Perceptions on India´s Long Range Missile Development: How Credible Is India´s Deterrence against China? ETH Zurich, 30 May 2017, css.ethz.ch/en/services/digital-library/articles/article.html/975472a2-c8da-4421-96d0-02b56ab26db6/pdf. Dr Srikanth Thaliyakkattil is Visiting Research Fellow at the Institute of South Asian Studies, the National University of Singapore. Accessed 2/6/2020) //ZL

India’s ability to deter China hinges on how China perceives India’s capabilities and intentions behind developing those capabilities. India’s development of nuclear capable long range missiles, especially Agni V is considered as a weapon to deter China. Chinese analysis about how efficient Agni V is follows a pattern of acknowledging its potential and at the same time pointing out several drawbacks and deficiencies which make it dysfunctional in a real combat situation. Chinese analysts believe that India does not have the capability to efficiently move, hide and fire Agni V missiles. Chinese analysts also point out India’s defence industry’s structural weaknesses such as low technological efficiency, labour attrition, over-reliance on foreign countries, especially India’s reliance on Russia for its navigation system as a drag on developing efficient missile forces. Chinese compare Indian capabilities with other established nuclear powers and conclude that India is exaggerating its claims about the readiness of the missiles for deployment, and consider that India’s missile capabilities are not mature enough to be deployed. Apart from acknowledging India’s motivation to deter China through developing long range missiles, Chinese analysts also ascribe India’s ICBM ambitions to India’s pursuit of hegemony in Indian Ocean Region and South Asia, as well as its longstanding desire to become a great power of consequence. Accusing India of great power complex also signals the Chinese thinking that Indian aspirations to become a great power or even regional power may not be acceptable to China. Chinese specialists also refer to the overwhelming superiority China enjoys over India in terms of economy and defence, and how advanced and far ahead China’s missile inventory is and technical capabilities in comparison to India’s. This point is emphasized in most of the Chinese analysis of Indian missile capability in order to show that Indian missile development at its current stage does not pose a threat to China.

## 1AR---CP

#### These are answers to all the common topic-related counterplans.

### 1AR---AT Turkey PIC

#### 1] Perm do both---

#### B61s aren’t arsenals---they’re nuclear sharing---means B61s aren’t part of the aff.

#### Nuclear arsenal refers to readily available nuclear weapons

LANI ‘8 (Los Alamos National Laboratory, https://web.archive.org/web/20111001211340/http://www.lanl.gov/natlsecurity/nuclear/stockpile/)

As the nature of threats to the United States and the world has evolved, our defense policy has changed from one based on specific threats to one that can respond quickly to many kinds of potential threats, including asymmetric threats. One part of our nation's capabilities-based defense is our enduring nuclear stockpile—the country's supply of readily available nuclear weapons. The stockpile, also called the nuclear arsenal, refers to a country's supply of readily available nuclear weapons. The term nuclear weapons refers to the explosive warheads and the bombs and missiles that can deliver them to enemy targets.

Regehr 18 Ernie Regehr, O.C., Senior Fellow in Arctic Security and Defence, “”NATO and Nuclear Disarmament – II: It’s Time to End NATO Nuclear Sharing,” The Simons Foundation's, November 9, 2018, <http://www.thesimonsfoundation.ca/highlights/nato-and-nuclear-disarmament-ii-its-time-end-nato-nuclear-sharing> //KohlW recut //zl

In the coming years, such full-throated defence of nuclear weapons in Europe will be put to the test as all the European host states plan to upgrade their fighter aircraft and thus face the decision of whether to make their next generation fighters dual capable. Italy, Netherlands, and Turkey are opting for the US F-35 for their replacements, but so far, they have not made a clear commitment to making them nuclear capable. Belgium remains undecided on its replacement aircraft, while Germany is likely to choose the Eurofighter15 – and, again, neither has fully committed to including a nuclear capability. Adding a nuclear weapons capability to fighter aircraft would add significant cost, and, much more significantly, would add consequential political costs for governments choosing the dual capability option in countries with populations that largely favor removing nuclear weapons from their territories. A 2015 expert analysis concluded that before the Ukraine crisis there was no clear political path for countries hosting US B61 bombs to get parliamentary approval for new nuclear related investments, and since then, they argue, “it is not clear that this calculation has changed.”16 There is strong majority support for the removal of the US nuclear weapons from four of the countries hosting them, according to a June 2018 survey, 17 (there was no survey in Turkey, the fifth hosting country). The following figures represent percentages of support-for-removal/opposition-to-removal/no-response: Belgium 57/21/22%; Netherlands 56/25/19%; Germany 70/16/14%; Italy 65/18/18%. On the question of acquiring fighter aircraft capable of carrying the US B61 nuclear bomb, most were also opposed, but the results were not as strong or clear (oppose-making-them-dual-capable/support-dual-capable/no-response): Belgium 44/33/23%; Netherlands 43/39/17%; Germany 55/26/19%; Italy 59/23/19%. Challenging forward deployment Besides alienating national populations, critics see other major risks in forward-deployed nuclear weapons – risks of accidents and basic handling blunders, and susceptibility to terrorist attacks. Forward deployment also invites pre-emptive attacks, inasmuch as any move in a crisis to get the B61 bombs ready for use would be readily visible to an adversary, making the demonstrably alerted aircraft tempting targets for pre-emptive attack.18 Furthermore, the European based nuclear bombs have really proven to be of questionable deterrent value among those NATO allies most anxious about Russian intentions toward them. Baltic and other East European NATO member states tend to support forward basing, but the presence of those forward-deployed systems seems to give them little comfort, as they demand instead the presence, close at hand, of NATO conventional forces (like the trip-wire force Canada is leading in Latvia). So, the case for removing B61 bombs from Europe remains strong. The 2012 NATO Deterrence and Defence Posture Review was more concrete in proposing that the alliance promote conditions for “further reductions on non-strategic nuclear weapons assigned to NATO” (para 11). It committed to exploring arrangements to that end (para 12)19 and called for reciprocal reductions in Russia’s non-strategic weapons stockpile (para 26). Two former US security and foreign policy officials, writing in Foreign Affairs in 2016, admittedly a very long time ago in American political years, called for an American freeze on B61 modernization and for the phased withdrawal of all US nuclear weapons from Europe.20 They argued that there is no longer any military rationale for US nuclear weapons in Europe and that in 2008 the US European Command ended its support for maintaining US nuclear weapons in Europe. And they did not propose any linkage between reductions in US tactical nuclear weapons in Europe and Russia’s roughly 2,000 tactical nuclear weapons – Russia sees its tactical nuclear weapons as countering NATO’s superiority in conventional military capabilities, not in countering US tactical nuclear weapons. Removing US nuclear weapons from Europe would be a limited but significant development – limited because, even with all B61 bombs removed from forward deployment, nuclear sharing would not necessarily end21 and, furthermore, three NATO members would still be nuclear weapon states, two of them continuing to maintain nuclear weapons in Europe. But it would send an important de-escalatory signal to Russia, and it would help to clear a path toward renewed East/West dialogue – a clear prerequisite for further strategic arms reductions. NATO disarmament options NATO is a nuclear alliance, but it has no nuclear weapons of its own, and that in turn means it is not a party to any arms control or disarmament agreement. NATO nevertheless is certainly involved in seeking to coordinate common positions among Alliance member countries in some multilateral negotiations (e.g. the 2017 Treaty on the Prohibition of Nuclear Weapons). And while individual NATO member states are obviously responsible for their own arms control policies, there are collective disarmament initiatives available to NATO: 1) The most obvious would be for the North Atlantic Council to accept, as it seemed prepared to do in 2010, the removal of American nuclear weapons from Europe and have them returned to the US – which would have the added virtue of finally bringing the US and the European states hosting its weapons into compliance with Articles I and II of the NPT.

#### 2] Turn---B61s cause terrorism and worsen diplomatic efforts.

Regehr 18 Ernie Regehr, O.C., Senior Fellow in Arctic Security and Defence, “”NATO and Nuclear Disarmament – II: It’s Time to End NATO Nuclear Sharing,” The Simons Foundation's, November 9, 2018, <http://www.thesimonsfoundation.ca/highlights/nato-and-nuclear-disarmament-ii-its-time-end-nato-nuclear-sharing> //KohlW

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### 1AR---AT Nuke the Spills

#### 1] Circumvention – governmental disjunct means that there’s always the risk of an ICBM being launched especially amidst war – they’ll just say they were “trying” to nuke a spill.

#### 2] Can’t solve accidental launch –

#### 3] Perm – do the aff and give control of anti-spill nukes to the UN – no reason why states need to have them. Intrinsicness perms are justified against PICs – anything else gives the aff 0 leverage and skews strategy.

#### 4] Terrible idea

**Staff ’10** (Staff, The Week. Nuke the Oil Spill? The Week, 3 June 2010, theweek.com/articles/493877/nuke-oil-spill.) //ZL

So why don't we try it? There are a few reasons to be cautious. Firstly, the Soviet Union's well explosions were all conducted inland. Creating an underwater explosion to seal off the well would be highly experimental technology, and would not be guaranteed to work. Secondly, the fall-out from a nuclear explosion could create fresh environmental hazards. And thirdly, detonating a nuclear bomb would potentially undermine international anti-nuclear treaties by establishing a new and legitimate "peaceful" use for nukes. What kind of "fresh environmental hazards" could a nuclear explosion create? Although the explosion would happen deep underground, radioactive gases could still seep into the Gulf. That said, "it seems a reasonable conjecture that the dissipation of a limited amount of radioactive material across the vast Gulf is preferable to the blanketing of thousands of miles of American coastline in ribbons of tar," [says Daniel Foster in the National Review](http://article.nationalreview.com/435325/nuke-it/daniel-foster?page=2). But the worst case scenario, [says Andrew Leonard at Salon](http://www.salon.com/technology/how_the_world_works/2010/06/01/oil_spill_nuclear_option), would be a "chain reaction" leading to a massive release of frozen natural gas in the seabed — potentially wiping out most of the life on planet Earth.

#### 5] Environment resilient – assumes their 2010 example

Kareiva et al 12 – Chief Scientist and Vice President, The Nature Conservancy (Peter, Michelle Marvier **--**professor and department chair of Environment Studies and Sciences at Santa Clara University, Robert Lalasz **--** director of science communications for The Nature Conservancy, Winter, “Conservation in the Anthropocene,” http://thebreakthrough.org/index.php/journal/past-issues/issue-2/conservation-in-the-anthropocene/)

2. As conservation became a global enterprise in the 1970s and 1980s, the movement's justification for saving nature shifted from spiritual and aesthetic values to focus on biodiversity. Nature was described as primeval, fragile, and at risk of collapse from too much human use and abuse. And indeed, there are consequences when humans convert landscapes for mining, logging, intensive agriculture, and urban development and when key species or ecosystems are lost.¶ But ecologists and conservationists have grossly overstated the fragility of nature, frequently arguing that once an ecosystem is altered, it is gone forever. Some ecologists suggest that if a single species is lost, a whole ecosystem will be in danger of collapse, and that if too much biodiversity is lost, spaceship Earth will start to come apart. Everything, from the expansion of agriculture to rainforest destruction to changing waterways, has been painted as a threat to the delicate inner-workings of our planetary ecosystem.¶ The fragility trope dates back, at least, to Rachel Carson, who wrote plaintively in Silent Spring of the delicate web of life and warned that perturbing the intricate balance of nature could have disastrous consequences.22 Al Gore made a similar argument in his 1992 book, Earth in the Balance.23 And the 2005 Millennium Ecosystem Assessment warned darkly that, while the expansion of agriculture and other forms of development have been overwhelmingly positive for the world's poor, ecosystem degradation was simultaneously putting systems in jeopardy of collapse.24¶ The trouble for conservation is that the data simply do not support the idea of a fragile nature at risk of collapse. Ecologists now know that the disappearance of one species does not necessarily lead to the extinction of any others, much less all others in the same ecosystem. In many circumstances, the demise of formerly abundant species can be inconsequential to ecosystem function. The American chestnut, once a dominant tree in eastern North America, has been extinguished by a foreign disease, yet the forest ecosystem is surprisingly unaffected. The passenger pigeon, once so abundant that its flocks darkened the sky, went extinct, along with countless other species from the Steller's sea cow to the dodo, with no catastrophic or even measurable effects.¶ These stories of resilience are not isolated examples -- a thorough review of the scientific literature identified 240 studies of ecosystems following major disturbances such as deforestation, mining, oil spills, and other types of pollution. The abundance of plant and animal species as well as other measures of ecosystem function recovered, at least partially, in 173 (72 percent) of these studies.25¶ While global forest cover is continuing to decline, it is rising in the Northern Hemisphere, where "nature" is returning to former agricultural lands.26 Something similar is likely to occur in the Southern Hemisphere, after poor countries achieve a similar level of economic development. A 2010 report concluded that rainforests that have grown back over abandoned agricultural land had 40 to 70 percent of the species of the original forests.27 Even Indonesian orangutans, which were widely thought to be able to survive only in pristine forests, have been found in surprising numbers in oil palm plantations and degraded lands.28¶ Nature is so resilient that it can recover rapidly from even the most powerful human disturbances. Around the Chernobyl nuclear facility, which melted down in 1986, wildlife is thriving, despite the high levels of radiation.29 In the Bikini Atoll, the site of multiple nuclear bomb tests, including the 1954 hydrogen bomb test that boiled the water in the area, the number of coral species has actually increased relative to before the explosions.30 More recently, the massive 2010 oil spill in the Gulf of Mexico was degraded and consumed by bacteria at a remarkably fast rate.31¶ Today, coyotes roam downtown Chicago, and peregrine falcons astonish San Franciscans as they sweep down skyscraper canyons to pick off pigeons for their next meal. As we destroy habitats, we create new ones: in the southwestern United States a rare and federally listed salamander species seems specialized to live in cattle tanks -- to date, it has been found in no other habitat.32 Books have been written about the collapse of cod in the Georges Bank, yet recent trawl data show the biomass of cod has recovered to precollapse levels.33 It's doubtful that books will be written about this cod recovery since it does not play well to an audience somehow addicted to stories of collapse and environmental apocalypse.¶ Even that classic symbol of fragility -- the polar bear, seemingly stranded on a melting ice block -- may have a good chance of surviving global warming if the changing environment continues to increase the populations and northern ranges of harbor seals and harp seals. Polar bears evolved from brown bears 200,000 years ago during a cooling period in Earth's history, developing a highly specialized carnivorous diet focused on seals. Thus, the fate of polar bears depends on two opposing trends -- the decline of sea ice and the potential increase of energy-rich prey. The history of life on Earth is of species evolving to take advantage of new environments only to be at risk when the environment changes again.¶ The wilderness ideal presupposes that there are parts of the world untouched by humankind, but today it is impossible to find a place on Earth that is unmarked by human activity. The truth is humans have been impacting their natural environment for centuries. The wilderness so beloved by conservationists -- places "untrammeled by man"34 -- never existed, at least not in the last thousand years, and arguably even longer.

### 1AR---AT Consult ICJ

#### 1] Consultation already happened---the previous precedent cited by their card applied to the U.S.

Burroughs ’16 (Burroughs, John. “Arms Control Today.” Looking Back: The 1996 Advisory Opinion of the International Court of Justice, Arms Control Association, 2016, www.armscontrol.org/ACT/2016\_07/Features/Looking-Back-The-1996-Advisory-Opinion-of-the-International-Court-of-Justice.) //IB

Several nuclear-weapon states chose to defend the lawfulness of using nuclear weapons in extended arguments to the court. Russia, the United Kingdom, and the United States argued that although nuclear arms, like other weapons, are subject to the law of armed conflict, whether their use would be lawful or unlawful would depend on the circumstances. France contended that absent a specific prohibition, the weapons may be employed in the exercise of the right of self-defense. States not reliant on nuclear weapons, plus Australia, a country closely aligned with a nuclear-armed state, argued that the effects of nuclear explosions are inherently uncontrollable and indiscriminate and that the use of such weapons is therefore unlawful in all circumstances.3

#### 2] Permutation do both. It’s not mutually exclusive --- consultation has already happened AND the treaty is just about a commitment which means the CP and the AFF aren’t mutually exclusive.

#### 3] Consult CP is a voting issue –

#### ---A] Unpredictable---Infinite number of actors that can be consulted. Creates a race to the bottom where negs are always trying to find the most obscure actor to consult. Predictability is key to fairness.

#### ---B] Timeframe CP’s Bad---Forces us to debate not IF the plan should pass but WHEN and under WHAT conditions, shifts focus and purpose of debate which is key to education.

#### 4] The CP is a double turn! The treaty they sign just has to do with a commitment but not an actual pursuit of a ban which means states will just circumvent which proves no solvency. The aff advantage then auto-outweighs.

#### 5] Multiple alt causes swamp the CP

Ogbodo ‘12 (Law Prof-University of Benin, “An Overview of the Challenges Facing the International Court of Justice in the 21st Century, 18 Ann. Surv. Int'l & Comp. L. 93, Spring, Lexis)

V. CONCLUSIONS AND RECOMMENDATIONS The ICJ continues to command the pre-eminent position as the "principal judicial organ" of the United Nations, but **to renew the influence and efficacy of the Court, vital reforms concerning the problems outlined above must be undertaken**. With membership consisting of almost all the countries of the world, the sphere of influence of the ICJ is wide and encompassing. n76 Such a court deserves to be most equipped to handle the increasingly evolving judicial disputes arising in the 21st century. As the world population continues to increase exponentially, n77 so do issues arising from an ever-changing world. Issues concerning environmental protection, terrorism, drug trafficking, human trafficking, globalization, etc., are global in nature and deserve attention from an influential international court. Although the Court has managed to do reasonably well in the last six decades, there are still areas for improvement and efficiency in order to ensure maximum performance. This article proffers recommendations in the following subsections: (A) **the removal of judges from the permanent member states**; (B) **the acceptance of the compulsory jurisdiction of the Court**; (C) **the abolishment of Article 31** of the ICJ statute, **and**; (D) **an overhaul of the system of the election and re-election of judges.** A.The Removal of Judges From the Permanent Member States **The UN Security Council permanent members' place on the International Court of Justice conveys a poor impression of the Court**. As it were, the [\*110] actions of the five permanent members on the Security Council have been largely attributed to the disordered discharge of the onerous responsibilities of the Council. It is common knowledge that since the Cold War era, n78 the effectiveness of the Security Council had been hampered by the tendency of the 'big five' to defend ideological interests in the Council. Even in the post-Cold War era of the 21st century, n79 such ideological bias still persists. n80 The presence of the judges from those permanent member states on the ICJ does not add any shine to the judicial image of the Court. Rather, it is merely another extension of the dominance of the five permanent members of the Security Council. Moreover, the **fact that the decisions of the ICJ are primarily enforced by the Security Council n81 generates a conflict of interest that warrants** a **separation** between the ICJ decisions and the Security Council. The likelihood that the enforcement of the ICJ decisions by the Security Council will be **subject to the same political shenanigans** as in the Council is likely. A classic case is the use of the veto power by the United States in 1986 to frustrate the resolution of the Security Council for full compliance with the ICJ's judgment in the case of Nicaragua v. United States. n82 A situation where four out of five permanent members of the Security Council and the ICJ have rejected the Court's compulsory jurisdiction while simultaneously acting as chief enforcers of its decisions, is not only hypocritical but morally wrong. In any case, **what is the** [\*111] **enforcement option if one of the 'big five' refuses to perform its obligation under a judgment of the ICJ** in light of Article 94(2) of the UN Charter? For example, after the Court had made an interim order for restraint and was still deliberating on the final judgment in the Case Concerning United States Diplomatic and Consular Staff in Tehran, the US government made a futile attempt to rescue US citizens held as hostages in Iran. n83 The court appropriately expressed its displeasure at the action when it tersely condemned the action as one "of a kind calculated to undermine respect for the judicial process in international relations." n84 This recommendation is in tandem with the practice at the national level where there is a clear distinction of roles between the judiciary and the chief enforcer of judicial decisions, i.e. the executive.

#### 6] Ad hoc judges pound signal

Ogbodo ‘12 (Law Prof-University of Benin, “An Overview of the Challenges Facing the International Court of Justice in the 21st Century, 18 Ann. Surv. Int'l & Comp. L. 93, Spring, Lexis)

Article 31 of the ICJ Statute **corrupts the integrity of the Court** by allowing a party before it to nominate an ad hoc judge if none of the ICJ judges is a nationality of the party. n69 In other words, every party before the ICJ is entitled to either a judge of the same nationality on the Court or an ad hoc judge. n70 On the face of it, this practice may be geared towards ensuring fairness and democracy in the operation of the Court. n71 However, a critical examination of this practice--as well as the outcome--portrays an **abuse of the judicial process at the highest level**. n72 The records indicate that **ad hoc judges typically vote for their country of nationality, irrespective of the majority decision of the Court**. n73 Guaranteeing a contentious party the right to a representative judge does not augur well for the Court's **image of impartiality**. n74 **The impression created by this practice** is that a party can only be guaranteed a fair and impartial justice before the Court if, and only if, the party is represented by one of the judges - either one of the elected judges or an ad hoc judge. Moreover, the mere fact that a party before the court must have a representative judge **does not only** negate the impartial appearance **of the Court, but speaks volumes about its ability to** [\*109] **dispense States-blind justice** to the parties before it. n75 This practice contravenes the claim that a member of the Court is not a delegate of the government of her/his own country. Since an ad hoc judge is an appointee of a state party before the Court, the likelihood of future appointment will definitely sway the judge to be sympathetic to the state party which typically is his home state.

### 1AR---AT Virtual Arsenals

#### 1] Virtual nuclear arsenals lead to instability.

**Perkovich and Acton 09** (George Perkovich and James M. Acton; Perkovich is a vice president for studies at the Carnegie Endowment for International Peace and coauthor with James Acton of Abolishing Nuclear Weapons: A Debate, from which this op-ed is excerpted. Perkovich’s research focuses on nuclear strategy and nonproliferation, with a focus on South Asia and Iran, and on the problem of justice in the international political economy. He is the author of the award-winning book India’s Nuclear Bomb. James Acton holds the Jessica T. Mathews Chair and is co-director of the Nuclear Policy Program at the Carnegie Endowment for International Peace. A physicist by training, Acton’s current research focuses on the escalation risks of advanced conventional weapons. His work on this subject includes the Carnegie edited volume, Entanglement: Chinese and Russian Perspectives on Non-nuclear Weapons and Nuclear Risks, and a forthcoming article in the journal International Security. Acton’s publications span the field of nuclear policy.; 2009; “Abolishing Nuclear Weapons a debate”; <https://carnegieendowment.org/files/abolishing_nuclear_weapons_debate.pdf>; Carnegie Endowment for International Peace; accessed 12-11-2019; JHsu)

Virtual nuclear arsenals are, nonetheless, a controversial idea. There are feasibility questions: given that weapons establishments are worried even today about the loss of expertise and the difficulty of recruiting and retaining skilled staff, for how long would they be in a position to deploy the human, financial and technical resources necessary to maintain effective virtual nuclear arsenals in a denuclearising world? Might virtual arsenals be vulnerable to attack, including from the conventional arsenals of an advanced military power? For Schell’s concept of weaponless deterrence to work, it must be effectively impossible for one state to destroy another’s nuclear-weapons complex. Schell envisages that, in the event of rearmament, nuclear-weapons-production facilities could be dispersed to reduce their vulnerability. However, he also argues at other points that intrusive inspections would be required to ensure that these facilities were not being used to produce nuclear weapons. Such inspections would necessarily reveal the facilities’ location, potentially making them vulnerable to destruction by an enemy before they could be dispersed. Furthermore, there are reasons to worry that virtual nuclear arsenals would foster instability. Schell sees virtual arsenals as a way of preventing the use of nuclear weapons by giving states some degree of genuinely flexible response to major threats. The problem with giving states this option, however, is that they might use it. For instance, during a crisis, a virtual nuclear-weapons state might try to signal its resolve by beginning to reconstitute its nuclear arsenal, which might then provoke a capable adversary, or a belligerent state’s security patron, to race to balance it. The potential crisis instability of virtual arsenals has led defence expert Michael Quinlan, for example, to conclude that as a long-term posture, having a few states with modest nuclear arsenals of low political–military salience would give more stable global security than would the existence of only virtual arsenals. Other criticisms are political. The nuclear potency afforded to disarming states by reconstitution capabilities could undermine the principle of global nuclear equity championed by the many non-nuclear-weapons states dissatisfied with the current nuclear order. Moreover, for many 122 | George Perkovich and James M. Acton states, nuclear disarmament is not only about equity in an abstract sense, it is also a practical means of reducing the relative power of the US to intervene unilaterally or in small coalitions of its allies and friends around the world. For others, an objective of disarmament is to lessen Russian and Chinese regional assertiveness by removing the emboldening power of their nuclear weapons. In one sense, virtual arsenals would be consistent with the formal abolition of nuclear weapons, and states would no longer be able to use such weapons at very short notice. However, given that the whole purpose of the substitution of virtual nuclear weapons for real ones is to maintain some of the latter’s deterrent value, a ‘virtual’ arrangement would probably not be seen as equitable. Furthermore, because the nuclear-armed states could reconstitute their arsenals in days or weeks, disarmament on these terms would hardly be irreversible.

#### 2] Can’t solve the aff---virtual nuclear arsenals upsets balance and encourages preemptive strikes.

**Smetana 15** (Dr. Michal Smetana; Dr. Michal Smetana is currently a Visiting Scholar at the Center for International Security and Cooperation (CISAC), Stanford University, as well as Research Associate and Assistant Professor at the Faculty of Social Sciences, Charles University, and Coordinator of the newly established Peace Research Center Prague. He holds a PhD in International Relations from Charles University in Prague, and he was previously a Visiting Research Fellow at the Stockholm International Peace Research Institute (SIPRI) and Peace Research Institute Frankfurt (PRIF). His main research interests lie at the intersection of security studies, international relations, and political psychology, with a specific focus on issues related to nuclear weapons in world politics, arms control and disarmament, proliferation of weapons of mass destruction, deterrence theory, and norms and deviance in international affairs; May 2 015;<https://www.researchgate.net/publication/275892600_Nuclear_Infrastructure_as_a_Double-Edged_Sword_Implications_of_Strategic_Hedging_for_the_Disarmament_Regime_ISA_2015_Conference_Paper>”; The Research Gate; accessed 12-11-2019; JHsu)

As noted earlier in the paper, the maintenance of a responsive nuclear infrastructure beyond abolition point indicates that nuclear weapons would remain present in international politics, albeit in a virtual or latent state. There is a number of authors who challenged Schell (1984) and Mazarr (1995) and their case for the establishment of a virtual/latent deterrence order through national reconstitution capabilities. The counterarguments have been so far elaborated primarily on the grounds of strategic logic which uncovers the escalation tendencies embedded in such system. In a disarmed world, a small number of clandestinely produced nuclear weapons would upset the strategic balance more significantly than in a world where major powers possess at least hundreds of such weapons (Sagan 2009, p.166). In order to stop the reconstitution race taking place in response to the nuclear breakout, the state with at least a small nuclear arsenal would be strongly tempted to exercise the option to engage in a preventive strike in order to hinder the adversary’s arsenal build-up (cf. Kahn 1960, pp.230– 235; Schelling 2009). A temptation to strike first will be further enhanced by the fact that the maintenance of reconstitution capability would require the survival of a very complex production system (Ford 2010), as opposed to the survival of a small number of retaliationcapable weapons in hardened silos or in submarines in a world with physically assembled weapons. Through this logic, the nuclear threat would be at least tacitly present in every serious conflict situation between states with ready-state nuclear infrastructures. In Thomas Schelling’s words, “[e]very crisis would be a nuclear crisis, any war could become a nuclear war” (Schelling 2009, p. 127). There is a good reason to believe that it would be so even 9 more in a nuclear weapon-free era than in today’s world of relative “nuclear quiet” (Schelling 2009). In principle, the threat of nuclear reconstitution is inherently much more credible and politically more acceptable to carry out than the threat of nuclear use. The threshold to engage in such activities would be therefore comparably much lower. Consequentially, the escalation dynamics would be pushing those who are ahead in the reconstitution race to take advantage of the quickly closing window of opportunity and strike critical components of their opponents’ infrastructures before the threat of the balancing nuclear arsenal materializes (see Waltz 1997, p.157). The famous “use it or lose it” thinking that the Cold War strategists were so worried about will be even more prominent in the case of incomparably smaller, hastily developed nuclear arsenals. As relatively fast reconstitution becomes a part of security strategies of all states with effective nuclear infrastructure in place, the decision to take repercussions and elaborate plans for the rapid nuclear build-up and eventual use of nuclear weapons will be seen as necessary and indeed prudent (Lodgaard 2011, pp.179–180). 7 At the very least, a “responsible” government will be expecting that other “responsible” governments will take these decisions; with this image in mind, the government will ensure that it does not lag behind others in case the reconstitution race takes place. During the crisis or even a conventional war---something that a nuclear weapon-free world surely will not be able to eliminate---the states will not only be tempted to take steps to rebuild their arsenal to protect their vital interests; but they will also assume that others have been already taking these steps and therefore it would be far too risky not to do the same. It should be noted that the dynamics of reconstitution races does not necessarily involve only former nucleararmed states. Unless the issue of dual-use nature of nuclear technology is effectively addressed in a nuclear-weapon free world, there is a serious risk of “virtual” (Mazarr 1997b) or “wildfire” (Roberts 1997) proliferation of reconstitution capabilities, potentially leading to a horizontal hedging race (Lodgaard 2009, p.142). The result would be an unstable, escalation-prone international system where nuclear war would be an outcome of 7 Many scholars already pointed to the fact that nuclear laboratories as “arsenal keepers” have their own parochial interests in the maintenance as well as the further expansion and perfection of strategic hedge in the form of robust reconstitution capabilities. As such, they are an independent actors following bureaucratic logic that may further contribute to the destabilizing dynamics in the world where nuclear infrastructures are retained. For the debate, see Reppy (2010, pp.45–46); Müller (2009, p.175); Perkovich & Acton (2009, p.118); Lodgaard (2009, p.142) and Lodgaard (2011, pp.179–180). 10 international crises with higher probability than today (see Waltz 1997; Glaser 1998; Quinlan 2007; Schelling 2009 or Müller 2009 for further conceptual elaboration of this argument).

#### 3] Perm do the counterplan---elimination is virtual

Goodby ‘10 [JAMES E. GOODBY, Annenberg Distinguished Visiting Fellow at the Hoover Institution (Stanford), US Foreign Service Career Minister, appointed to five ambassadorial-rank positions by Presidents Carter, Reagan, and Clinton, including ambassador to Finland. Professor at Georgetown, Syracuse, and Carnegie Mellon Universities and the Distinguished Service Professor Emeritus at Carnegie Mellon. “A world without nuclear weapons: fantasy or necessity?” SIPRI Yearbook 2010: Armaments, Disarmament and International Security. <https://www.sipri.org/sites/default/files/SIPRIYB201001.pdf>] CT

Nuclear deterrence after zero. Deterrence in its original meaning existed long before nuclear weapons were invented. It has always relied on a variety of diplomatic, economic, and military skills and capabilities. These tools will continue to exist after nuclear weapons are eliminated. It is arguable that the imponderables, the non-quantifiable elements of the psychological condition that is called deterrence, are more potent than the physical presence of weapons, including nuclear weapons. Nuclear deterrence will not disappear even if nuclear weapons are eliminated—a point which is too often overlooked. Nuclear deterrence will be manifested in a new form: the ability to reconstitute small nuclear arsenals. A quarter of a century ago Jonathan Schell, and later Michael Mazarr, pointed out that nuclear deterrence based on ‘virtual’ nuclear arsenals will exist even if nuclear weapons are eliminated.14 Banning the existence of a ready-to-use arsenal does not eliminate the capability to build one. That capability would act to deter large-scale conventional war. This is not just a hypothetical model of nuclear deterrence. In 2008 the US secretaries of Defense and Energy issued a report in which they suggested that a ‘responsive nuclear infrastructure’ would make it possible, over time, for the USA to rely less on non-deployed nuclear warheads.15 A responsive nuclear infrastructure means functioning nuclear laboratories and some capacity to produce nuclear weapons, if needed, in a timely way. This may be what nuclear deterrence will look like in the future. For the purists, it is not ideal, but it is a big improvement over what exists today. Thus the question ‘What takes the place of nuclear deterrence?’ does not arise in the way the question is usually posed. The current two-tier system created by the NPT will be vastly changed but power imbalances of various types will remain, as they have throughout history. One example of this is that those countries that have built nuclear weapons will have advantages over those that have not, but inevitably disparities in nuclear capabilities will decrease over time. Could conditions of stable deterrence be developed under such conditions? Would a world arms race take the form of a reconstitution race? New forms of arms control will have to be invented to deal with this risk. In order to minimize the risk of instability, agreement on five key questions will be necessary. 1. What are the elements of a responsive nuclear infrastructure, that is, one with a capacity for limited and timely reconstitution of a deterrent, and how might that be phased out over time? 2. What activities, facilities or weapon-related items should be limited or prohibited? 3. What can be done to assure early and reliable warning of a breakout attempt to develop nuclear weapons? 4. Can effective and plausible enforcement measures be devised and put in place? 5. How closely could a civil nuclear programme resemble a responsive nuclear infrastructure in the case of states that had not previously built nuclear weapons? Extended deterrence in a world without nuclear weapons The idea of eliminating nuclear weapons is frequently criticized on the grounds that without the protection of the US ‘nuclear umbrella’ some states that count on it for their security will find it necessary to acquire nuclear weapons of their own. Japan is the country usually mentioned in this context but other US allies are sometimes cited as well. There are at least three problems with this theory. As pointed out above, nuclear deterrence will endure even if nuclear weapons are eliminated; second, deterrence and reassurance can and do exist in forms other than nuclear weapons; and third, there will be no ‘nuclear deterrence gap’ en route to zero: US nuclear weapons would continue to exist so long as the nuclear weapons of other states also existed. These factors raise serious issues that will need to be examined and discussed between allies. One such issue is clarity regarding the maintenance of a ‘virtual’ nuclear arsenal. In a world without nuclear weapons, a robust nuclear infrastructure, civil as well as military, can give many countries the capacity to build, or reconstitute, a nuclear weapon arsenal. That capacity would be circumscribed by several factors: first, previous experience, or the lack of it, in building nuclear weapons; second, prohibitions on certain activities so that rapid breakout would not be possible; third, a deterrent against breakout in the form of a responsive nuclear infrastructure possessed by another state; and fourth, credible means of enforcement. Shultz, Kissinger, Perry and Nunn in another article in January 2010 spoke forcefully about the need for a robust US nuclear infrastructure and stated unequivocally that it could be maintained given adequate support.16 This is consistent with their earlier articles appealing for an end to the threat posed by nuclear weapons. The Obama Administration proposed a significant increase in funding for nuclear infrastructure. If allies of the United States believed that reconstitutable US nuclear forces were an essential part of the US extended deterrent, they would want reassurance that reconstitution is possible in a timely way.

### 1AR---AT Treaties

#### Diplomacy fails---only the aff guarantees removal.

Squassoni '17 (Sharon Squassoni; Sharon Squassoni is the director of the Proliferation Prevention Program at the Center for Strategic and International Studies, and a member of the Bulletin of the Atomic Scientists' Science and Security Board. Previously, she advised Congress as a senior specialist in weapons of mass destruction at the Congressional Research Service and worked in nuclear nonproliferation and policy planning for the State Department and the Arms Control and Disarmament Agency., ; 8-17-2017; "This Is How the World Could Get Rid of Nuclear Weapons COMPLETELY"; https://www.teenvogue.com/story/how-to-get-rid-of-nuclear-weapons, Teen Vogue, accessed 12-1-2019; JPark)

After all, countries have agreed to get rid of other classes of weapons, like biological and chemical weapons. The global community managed to outlaw them decades ago. Under the Chemical Weapons Treaty, vast stockpiles of weapons and chemical agents have been destroyed. The U.S. has destroyed about 90% of its 30,000 tons of nerve and blister agents in nine facilities around the United States, at a cost of $25 billion. The remaining agents will take $10 billion more to destroy in the next five years. In the case of nuclear weapons, the nine states that have them — United States, Russia, China, United Kingdom, France, India, Pakistan, Israel, and North Korea — would have to agree to **destroy** their **stockpiles**. They would need to **confirm** that the weapons were actually destroyed, and that no country or group had the capability to make them any longer. This would likely require very intrusive inspections of sites where bomb material is produced, and where bombs are assembled, tested, and deployed to make sure there are none left. Just last month, more than 120 states at the United Nations approved the text of a treaty banning nuclear weapons. The chances are good that the treaty will win enough signatures by the end of the year to become international law, but **none** of the states with nuclear weapons **supports the treaty**. In fact, none of them even attended the meetings. The U.S. ambassador to the United Nations, Nikki Haley, went so far as to declare that the United States will never, ever join the treaty. So what are the odds of the world ever getting rid of nuclear weapons? Not good. But there are **precedents** for countries getting rid of nuclear weapons: South Africa destroyed its stockpile of six nuclear weapons, and other countries — Argentina, Brazil, Iraq, Libya, South Korea, Taiwan — halted nuclear weapons programs before they actually developed weapons. The United States was the first to make and the only to use the atomic bomb during World War II, utilizing the weapon on the cities of Hiroshima and Nagasaki in August 1945. The devastation in Japan caused many governments and advocacy groups to call immediately to ban the bomb. But the power unleashed through splitting atoms, known as fission, is so great that some countries see the atom bomb as the ultimate weapon. The U.S. monopoly on nuclear weapons didn’t last long. Soon after, Russia, the United Kingdom, France, and China developed nuclear weapons. Some countries, like Israel, sought nuclear weapons to guarantee their survival against stronger enemies. Other countries like India and Pakistan developed nuclear weapons because their adversaries did. Countries like Japan, South Korea, and Germany rely on their allies’ nuclear weapons so they don’t have to develop them themselves. Security is not the only reason countries have developed nuclear weapons. **Prestige** is a big motivator; after almost 75 years, they are still a technological honor badge. It is no accident that the permanent five members of the U.N. Security Council are the first five states to develop nuclear weapons. It will take tremendous **effort** and **political will** to shape an alternative security landscape that is not centered on nuclear weapons. Changing the status quo requires challenging the underlying logic of nuclear weapons: the greater the destructive power of the weapons, the more security they provide. North Korea’s Kim Jong Un certainly believes this, or else he wouldn’t be spending billions of dollars to test ballistic missiles and nuclear weapons. It would seem the United States believes this too, which makes it hard for the United States to convince North Korea to disarm.

### 1AR---AT First Strike

#### 1] Can’t solve the aff---even a first strike would cause extinction

Ramanathan & Mehta 19---\* a research analyst with the Takshashila Institution AND \*\* Programme Associate with the Strategic Studies Programme (Aditya and Shibani, “Nuclear First Use: A Critique,” *Takshashila Institution*, 06/21/2019, Accessed Online at: https://takshashila.org.in/wp-content/uploads/2019/06/TDD-Global-Nuclear-First-Use-GPM-AR-KK-2019-03.pdf, Accessed Online on 07/25/19, lasa-SI)

Climate Devastation: Even if a disarming strike was to somehow completely achieve its objectives, success could be as deadly as deadly failure. The extreme temperatures of nuclear explosions cause long-lasting and widespread fires around the blast areas. In the early 1980s, some scientists pointed out that once the black soot from these fires rises into the upper atmosphere, it blocks solar radiation, causing a “nuclear winter” resulting in catastrophic crop failures and mass starvation.14 Recent studies have estimated that even a “limited” nuclear war between India and Pakistan involving fission bombs could deplete the ozone layer and have a devastating impact on global climate.15 Indeed, the irony is that the climatic impact of limited nuclear use could far exceed the damage caused by the initial blasts and pose an existential threat to states and societies. While some of these estimates of climatic impact are still being debated16 , it is clear that any attempt at a large-scale disarming strikes using nuclear weapons risks plunging the planet into a climate disaster. A smaller-scale nuclear war between India and Pakistan would pose an existential threat to both countries. A larger nuclear war would threaten humanity itself. These realities make bolt-from-blue strikes much less likely and in turn, reduce the imperative for pre-emptive strikes.

#### 2] Strikes fail---any remaining nukes reignites conflict.

\*\*\*If they read general first strike, not a PIC out of US.

Gerson ‘10 (Michael S. Gerson is a research analyst at the Center for Naval Analyses, Fall 2010, “No First Use: The Next Step for U.S. Nuclear Policy,” International Security, Vol. 35, No. 2, p. 7-47)(Shiv)

A nuclear first strike is fraught with risk and uncertainty. Could a U.S. president, the only person with the power to authorize nuclear use and a political official concerned with re-election, his or her political party, and their historical legacy, ever be entirely confident that the mission would be a complete success? What if the strike failed to destroy all of the weapons, or what if weapons were hidden in unknown areas, and the remaining weapons were used in retaliation? A successful first strike would require near-perfect intelligence, surveillance, and reconnaissance (ISR) to detect, identify, and track all of the adversary’s nuclear forces; recent events surrounding U.S. assessments of Iraq’s suspected WMD capabilities forcefully demonstrate the challenges of reliable, accurate, and unbiased information.59 Intelligence regarding where an adversary’s nuclear weapons are located and if the state is actually planning to attack could be wrong or incomplete, and an attempted first strike based on inaccurate or incomplete information could have far-reaching negative consequences. The United States could never be absolutely confident in its ability to fully neutralize the nuclear threat in a disarming first strike, and the possibility that [End Page 26] even just one or two nuclear weapons survive and are used in retaliation against the U.S. homeland or U.S. allies should be enough to induce extreme caution.60 The uncertainty of complete success, coupled with the possibility that an unsuccessful strike could bring costs that would outweigh the potential gains by way of nuclear retaliation, should cast serious doubt on first-strike options. Even if a surviving nuclear warhead were unable to reach the U.S. homeland, nuclear weapons could be used on an ally as a way of punishing the United States, and no president should want to risk being responsible for a nuclear detonation on another country in retaliation for U.S. actions.61 In the end, if an attempted disarming first strike leaves some of the adversary’s weapons intact, the United States may have started the nuclear war that it had hoped to prevent.

3] Their theory is morally reprehensible---it justifies the loss of lives, but if there is a risk that lives would not be lost in a disarmament, you auto err aff

### ---Iran Specific

#### First strike draws in China and Russia—regional allies, BRI, and oil guarantee nuclear war—extinction.

Lin 1/4 Christina Lin, January 4, 2020, Asia Times, “China might take Iran’s side in a war with US”, <https://www.asiatimes.com/2020/01/article/could-china-take-irans-side-in-a-war-with-us/> // cca

After the US assassination of Iran’s General Qasem Soleimani on Friday, Germany’s Spiegel Online observed that this is akin to a declaration of war on Iran. Now the US Congress is scrambling for a debate on a formal declaration of war, although it will unlikely block the Trump White House’s march toward the battlefield. Last March, President Donald Trump reviewed the Pentagon’s plan to send 120,000 US troops to counter Iran, and the current military buildup of deploying 3,500 more US troops to the region may be part of that plan. Also, in 2017, a think-tank that enjoys close ties with Secretary of State Mike Pompeo and the Trump White House, sent a seven-page memo outlining plans for regime change in Iran, and the current scenario seems to be taken out of this playbook. The next question is, how will regional powers react to a US-Iran war? China and Russia already seem to have answered that question via their war games in the Gulf of Oman last week, and the signal to the US is that Iran is not isolated and has powerful allies. Indeed, last year retired US Army Colonel Douglas Macgregor already warned that a war with Iran could draw in China and Russia. Currently, China’s reaction is to urge both Iran and the US to maintain calm and de-escalate tensions, and closely monitor the situation. Beijing does not want war and needs Mideast stability to pursue the Belt and Road Initiative Eurasian integration plan. It has large stakes in Iran’s stability: It is the largest buyer of Iranian oil, China is Iran’s largest trading partner, and Iran is a key geographic node for the BRI. Up to now, China has tried to balance its relationship with Saudi Arabia and Iran in the Middle East and set up a firewall between the two, although Iran is more significant in China’s strategic calculus given the fact Saudi Arabia and other Arab Gulf countries are still under the US security umbrella and host US military bases. China is also against further Western-sponsored regime change in the region, and Iran is an important partner in counterbalancing US hegemony and the drive toward a multipolar world. ‘It’s about China’ Should a US-Iran war break out and the Iranian government is overthrown, it would be devastating for China’s regional interests. As Robert Kaplan wrote in a New York Times article titled “This isn’t about Iran. It’s about China,” the current US-Iran standoff is about something much vaster. Geography matters in geopolitics and the Gulf of Oman separates not only Oman and Iran but also Oman and Pakistan, where China has completed a state-of-the-art port at Gwadar. It is a hinge uniting the Middle East, the South Asian subcontinent and East Asia in China’s BRI. China is also a net importer of oil and obtains half its supply from the Persian Gulf. Yet the US Navy maintains control of the sea lines of communications. As such, China is worried about, first, US restriction of China’s oil imports over a clash across the Taiwan Strait or in the South China Sea and, second, events abroad that might lead to price volatility hurting the Chinese economy. Most important, China needs Iran in the “east flank” of the Persian Gulf to prevent a full blockade by the US Navy. This insurance plan against a remote contingency was spelled out in a 2000 article published by the prestigious Chinese Society for Strategy and Management (CSSM) in its influential Strategy and Management Journal. The article’s author Tang Shiping, an associate research fellow at the Chinese Academy of Social Sciences (CASS), argued that the US already controls the west bank of the oil-rich Persian Gulf via its pro-American proxies (Saudi Arabia and smaller Gulf states), in effect rendering it an “internal sea” for the US, and challenges to that position are likely to fail. Yet if China and Russia expand relations with Iran, they could maintain a “minimum balance” to thwart US moves. Since securing oil imports from the Gulf requires both US-controlled west bank and the China-and-Russia-supported Iranian east bank, this axis would prevent the US from implementing oil embargoes against other countries, and Washington would not shut off China’s Gulf oil supplies, since China, Russia and Iran control the Gulf’s “east bank.” A great power conflict? In the past, China’s Mideast posture was a balancing act of engaging Iran while simultaneously not alienating the US. However, what has changed now is the rapid deterioration of Sino-US relations and decoupling over the past year in a new Cold War. With US hostility and “maximum pressure” toward Beijing, Moscow and Tehran (all under US sanctions), Washington is driving all three to coalesce, as evidenced in the recent joint military exercise in the Gulf of Oman and the Indian Ocean. Thus as Colonel Douglas Macgregor and Dr Lydia Wilson of Oxford University caution, should the US attack Iran in a full-scale war, it could herald the additional entry of two nuclear powers to the theater, and transform the bilateral war into one of great-power conflict.

### ---IndoPak Specific

#### 1] Neither side would win but there would be extinction---Indian capabilities are unsustainable and fail­---AND, Pakistani actions after an Indian first strike exacerbate the risk of loose nukes

Clary & Narang 19 (Christopher, assistant professor of political science at the University at Albany, State University of New York, Vipin, associate professor of political science at the Massachusetts Institute of Technology, member of MIT’s Security Studies Program, International Security, Vol. 43, No. 3, “India’s Counterforce Temptations: Strategic Dilemmas, Doctrine, and Capabilities,” <https://www.mitpressjournals.org/doi/full/10.1162/isec_a_00340?class=ref+nowrap+full&mobileUi=0>, 2/15/2019, 10/16/2019) DG

At a minimum, India is taking steps that could be interpreted as demonstrating interest in nuclear and nonnuclear counterforce capabilities. This perceived evolution—whether intentional or unplanned—is risky, and any shift toward counterforce options is unlikely to achieve lasting nuclear superiority over Pakistan for several reasons. First, India would have to make substantial investments in delivery vehicle and intelligence, surveillance, and reconnaissance capabilities. Even then, it would have only a modest chance of eliminating Pakistan’s current strategic nuclear force. Moreover, the cost would be substantial for a country with a developing economy and weak defense industry. Even so, India has taken steps beyond those that most observers would expect for a state nominally committed to credible minimum deterrence, and it has shown a willingness to incur real costs to achieve many of the capabilities discussed above. Second, Pakistan has not, and will not, sit idly by if it believes that India seeks to develop options that may threaten the survivability of its strategic nuclear forces; it will adjust its behavior in both crises and peacetime. Even nascent discussions of counterforce options risk creating first-strike instability in a crisis, because nuclear states have an incentive to use their weapons first if they believe that their nuclear adversary has a counterforce doctrine. Pakistan cannot allow India to go first, because it risks being completely disarmed. India cannot allow Pakistan to go first and reduce its ability to disarm Pakistan. Therefore, as soon as one side believed there was even the possibility of nuclear use, it would have an incentive to go first and go massively. Every crisis between India and Pakistan could potentially carry the risk of becoming a nuclear crisis very early, with the mere possibility of counterforce making preemption a potentially self-fulfilling prophecy.102 This destabilizing crisis dynamic was obviated so long as Pakistan perceived a former Indian NFU and countervalue strategy, which minimized its use-them-or-lose-them fears. In addition to first-strike instability in a crisis, an Indian counterforce strategy would spark an interminable arms race in peacetime, as Pakistan sprinted to maintain survivability and India built up to sustain its ability to threaten it. Even India’s suggestive statements to date are likely enough to reinforce Pakistani fears that India has an interest in fully disarming it.103 As Peter Feaver stressed two decades ago, even if a disarming first strike is unlikely, that does not rule out the possibility.104 Raising the peacetime costs of maintaining Pakistan’s nuclear deterrent could be an important motivation for Indian planners who might be attracted to the idea of encouraging its smaller, poorer neighbor to expend greater financial resources to maintain its survivable nuclear forces. At the margin, this could trigger a greater diversion of resources away from conventional warfighting capabilities. It could also further heighten civil-military tensions in Pakistan given the already oversized role of the military in the country’s economy. Indian planners might hope that, at some point, Pakistani civilians and leaders abandon the strategic competition with India. Nevertheless, India would have difficulty disarming the current Pakistani force, let alone one that rapidly expands and disperses to account for counterforce fears. Pakistan has already built much of the infrastructure necessary to engage in an arms race, decreasing the marginal expenditures necessary to participate in even an intense prospective arms competition. Pakistan has four operational plutonium production reactors and multiple uranium centrifuge enrichment facilities. Credible nongovernmental organizations estimate that Pakistan has 140–150 nuclear warheads, slightly more than India is thought to possess.105 Some portion of the Pakistani nuclear force is likely devoted to battlefield nuclear use, however.106 Although such warheads are not irrelevant for India’s counterforce concerns, they could not easily strike major Indian cities even if deployed to the forward edge of the battle area. If India believed that Pakistani nuclear use was imminent, its civilian leaders might prioritize targeting Pakistan’s strategic systems, relegating tactical systems to a subsequent mopping-up phase when conventional capabilities could focus on their capture or destruction. Comparable nongovernmental estimates of the size of India’s nuclear arsenal suggest that India likely has parity or a small advantage in terms of the number of warheads that it can use for strategic (vs. battlefield) purposes. Pakistani fissile material production, though, continues. Pakistan has constructed three plutonium production reactors since 2000 and appears to have built a new uranium enrichment facility as recently as 2015. By 2025, even conservative estimates conclude that Pakistan might possess as many as 250 warheads, though a nontrivial portion of these likely would be apportioned for so-called tactical missions.107 The net result of a counterforce exchange would depend not just on the relative number of Indian and Pakistani strategic nuclear weapons, but also on how many weapons Pakistan colocates at different alert states—or, on how many nuclear weapons are distributed across how many storage or deployment locations. While Pakistan will face increasingly strong incentives to widely disperse its warheads if India explores counterforce options, some level of colocation is almost inevitable—especially for the air-based and (probably future) sea-based legs of Pakistan’s nuclear triad, and the degree of colocation is almost certainly greater earlier in a crisis before forces can be deployed into the field. Even for the mobile, ground-based systems, countries have frequently deployed multiple missiles per launcher (e.g., the Soviet Union deployed four missiles per SCUD-B mobile launcher), so destroying a single launcher can effectively prevent several warheads from being fired.108 Also, Pakistan tested a MIRVed medium-range ballistic missile, the Ababeel, in January 2017, expressly stating that the goal of developing a MIRVed platform was to defeat any potential Indian missile defenses.109 On the one hand, ballistic missile defenses encourage MIRVing, because a salvo of multiple warheads can quickly overwhelm and penetrate the ballistic missile defense interceptors. On the other hand, MIRVing may undermine the survivability of Pakistan’s strategic nuclear weapons, because one Indian warhead can now destroy several Pakistani warheads if it successfully destroys the missile on which they are placed (e.g., a four-for-one payoff). Consequently, South Asia is already experiencing a counterforce feedback loop where India’s pursuit of ballistic missile defenses is encouraging Pakistan to develop countermeasures such as MIRVs to ensure survivability and penetrability, which then increases the incentives Indian planners have to find and destroy MIRVed missiles. Evidence that warheads might be colocated with delivery systems, especially early in a crisis, is also supported by Pakistan’s development of remote, hardened storage sites as a survivability measure, including large underground facilities. Destroying the entrances to such a facility—or causing collapse of the facility—would potentially neutralize any warheads or launch vehicles stored there. Such facilities, however, could contain an unknown number of warheads or launch vehicles (or possibly even none), potentially turning them into a warhead sponge. This would force India to commit many warheads—far more than it presently has relative to Pakistan—to destroying potentially empty sites on the small chance that they may in fact be large nuclear storage facilities. Multiple analysts claim to have located potential underground nuclear weapons warhead facilities from commercially available satellite images. The process of excavating such sites likely makes it extraordinarily difficult to hide their development. If India did not have precise intelligence as to their layout underground, it might be forced to target each entrance separately, which would again inflate the number of warheads it would need to complete a successful counterforce strike. The payoff, though, could be enormous, because such facilities appear to be large enough to hold dozens of TEL vehicles.110 In addition to going underground to protect and hide its nuclear weapons, Pakistan is going underwater. Consideration of counterforce options would almost certainly accelerate Pakistan’s shift to sea-based forces on the assumption that those systems are more survivable. This carries risks of accidents or unauthorized use if the Pakistan Navy is forced to manage sea-based nuclear weapons before it is ready.111 The same month that it tested the MIRVed Ababeel, Pakistan tested the Babur-3 sea-launched cruise missile, with a publicized 450-kilometer range, which the Pakistan military pointedly stressed was “capable of delivering various types of payloads.”112 Pakistan currently possesses five submarines that could carry cruise missiles, and reports suggest that it is acquiring up to eight Type 041 Yuan-class submarines from China, which presumably would also be capable of performing that mission.113 The short range of the Babur-3 precludes Pakistan from a bastion-model of submarine basing—deploying the submarine in the sanctuary of territorial waters— because no major Indian city is within range from Pakistani waters. Although the sea-based arsenal’s survivability might in theory discourage ªrst strikes, in practice it is less clear. Because any given submarine may carry only a handful of nuclear-tipped cruise missiles, and only a fraction of the submarine force would be on patrol during peacetime, India might have stronger incentives to strike early at Pakistan’s submarine fleet in the event of conflict, before these submarines could be flushed out of port. The dual-use role of Pakistani submarines would make them legitimate targets for Indian conventional air and cruise missile attacks on Pakistani ports; and in the 1971 war, India showed an interest and capability in undertaking such attacks. Here too, then, there is an emerging counterforce feedback loop: fear of disarming strikes incentivizes Pakistani sea-based capabilities, but those same capabilities become highpriority targets, vulnerable to first strikes early in a conflict.114 In addition, Pakistan could disperse its airborne weapons and nuclearcapable aircraft early in a crisis, complicating India’s intelligence and targeting task. Such nuclear-capable aircraft (F-16s and Mirage 5s) routinely operate from just four Pakistani airfields.115 In a crisis, though, they almost certainly would be dispersed. The Pakistan Air Force has practiced dispersal to, and use of, satellite airfields for decades, and it has dispersed combat aircraft occasionally during periods of heightened tensions, including as recently as 2017.116 Pakistan does not appear to have constructed specially hardened shelters or additional security fencing at potential dispersal bases, but this may merely be a prudent effort at avoiding telltale visual signatures.117 Pakistan’s groundattack aircraft require runways of 7,500 feet for safe takeoff and landing, and Pakistan has at least thirty-five runways of such length overall.118 The Mirage 5 might be able to take off in as little as 5,250 feet, allowing it to operate from as many as forty-three additional airports or air bases in Pakistan.119 Some of these airªelds, such as Mushaf air base at Sargodha, are quite large, permitting aircraft distribution within the base at locations more than 1 mile apart. Even if Pakistan does not store nuclear delivery aircraft in hardened shelters, simply distributing some aircraft along the perimeter of a facility can dramatically increase survivability. A past U.S. study found that distributing bomber aircraft to the perimeter of bases reduced aircraft attrition from 80 percent to 22 percent after the detonation of a 40-kiloton warhead.120 In general, to evade potential Indian ISR, Pakistan would want to reposition its nuclear assets continuously and rapidly, so that India could not completely disarm them in peacetime or early in a crisis. In a country that is facing a significant terrorism threat and that is host to radical violent actors who may want to steal nuclear weapons, this deployment procedure can carry serious risks of loss and theft.121 If Pakistan adopted passive measures for nuclear delivery aircraft such as those discussed above at home and at forward operating bases, India would be forced to make difficult choices. It may not have any warheads in its arsenal of sufficient yield to assure a high likelihood of destruction of all of Pakistan’s delivery aircraft on a large air base, given continued doubts about the success of its 1998 thermonuclear weapons test. Even if it did, using large boosted fission devices would generate widespread civilian casualties. Alex Wellerstein’s NUKEMAP program estimates that a 10-kiloton device might generate fewer than 35,000 dead if dropped at the center of Mushaf air base, whereas a sufficiently large device to destroy aircraft along the perimeter would kill nearly 400,000.122 Alternatively, India could opt to have the warhead detonate closer to the surface, which would create a large crater, likely rendering the runways unusable even if aircraft survived. (Even a 1-megaton device detonated in an airburst produces “no appreciable” crater, authoritative U.S. government studies conclude.123) This would also generate radioactive fallout, with unpredictable long-term effects. Although the effect on Indian citizens from fallout might be minimal at a location such as Sargodha far away from the Indian border, targeting many of Pakistan’s other nuclear locations would create a high likelihood that substantial fallout would contaminate Indian territory. As another option, India could target every large Pakistani air base with multiple warheads. This would further inºate the target set for a counterforce campaign. Attacking the eleven airfields designated as flying bases by the Pakistan Air Force with two weapons each would require twenty-two weapons. Targeting Pakistan’s potential dispersal locations (airfields with paved runways longer than 7,500 feet) with just one warhead would add twenty-four targets to the list. If the Mirage 5 can operate with even shorter takeoff distances, as some public estimates suggest, an additional forty-three airfields might host bomb-carrying aircraft. Even this target list assumes that Pakistan will not be operating aircraft from motorways, though the Pakistan Air Force practices precisely this operation during its Highmark exercise series.124 Therefore, to destroy Pakistan’s air-breathing leg with confidence if the Pakistan Air Force were on a crisis-footing, India might require nearly 100 warheads or precise information about the location of virtually all of Pakistan’s hundred-plus potential delivery aircraft.125 In practice, perhaps, particularly after a prolonged air campaign, India might feel confident that, as long as it could locate the vast majority of Pakistan’s aircraft, it would be able to rely on its air defenses to protect its major population centers from the handful of Pakistani aircraft that might remain following a counterforce strike. Such reliance, however, would necessarily entail substantial risk, because if even one Pakistani aircraft penetrated those defenses to deliver a nuclear payload, an Indian city could face destruction. Furthermore, Pakistan could also intersperse decoy vehicles among its transporter-erector-launcher vehicles. A 2001 RAND analysis concluded by emphasizing “that the TEL is a pretty unsatisfying target. After all, it is little more than a dressed-up tractor-trailer rig.”126 As a consequence, building more of them, or vehicles that look like them, is relatively inexpensive. Famously in the 1991 Gulf War, the United States and coalition air forces likely failed to destroy a single SCUD missile launcher despite conducting nearly 1,500 air strikes targeting them. At the time, coalition aircrews believed that they had destroyed approximately eighty mobile launchers, which highlights the wide gap between believing one can successfully disarm one’s opponent and actually doing so. In retrospect, it seems clear that the aircrews were likely reporting the destruction of decoys or ground vehicles such as fuel tanker trucks that had visual, radar, or infrared signatures difficult to distinguish from TELs.127 Although India likely has more persistent ISR capabilities today than the United States did in Iraq in 1991, the gap between contemporary Indian and historic U.S. capabilities is not enormous. The advent of long-endurance UAVs is comparatively new, but the United States operated manned U-2 spy planes with electro-optical sensors and synthetic aperture radar alongside a wide array of imaging and signals intelligence satellites in 1991.128 According to the Gulf War Air Power Survey Summary Report, the great SCUD hunt was certainly disadvantaged by a lack of intelligence preparation of the battlefield: “The presurveyed launch sites and hiding places used by the mobile launchers were not identified” prior to the onset of the air campaign.129 India, in contrast, likely has considered the location of such sites as one of its highest intelligence priorities for decades. Pakistan could greatly complicate these tracking efforts, however, by developing a large number of inexpensive decoys, putting pressure on India’s intelligence and surveillance capabilities, as well as inflating the number of targets India would have to neutralize. In sum, Pakistan will not remain idle if India shifts to a counterforce strategy. Indeed, fears that India is already moving in this direction have likely already set Islamabad’s nuclear planners off to the races. Building up its nuclear forces, building out its delivery platforms and decoys to generate greater diversity and survivability, and moving them around to complicate Indian targeting even during peacetime are all likely responses—in a state beset by a large number of militants who have already shown an appetite for targeting vulnerable nuclear facilities and assets. Moreover, India’s evolving nuclear posture may generate many of the risks of a counterforce strategy with few of the benefits. Although India has made considerable strides in acquiring the capabilities it would need to successfully execute a disarming strike, these appear insufficient to destroy the growing Pakistani arsenal in the near to medium term, and India’s missile defenses are not yet capable of reliably intercepting residual Pakistani nuclear forces. Looking ahead, Pakistan can likely build up its nuclear forces and alter its various deployment procedures faster than India can plausibly obtain and maintain a credible counterforce option, all while incentivizing Pakistan to use nuclear weapons early and massively in

#### 2] The aff augments strategy away from Pakistan and reduces focus on nuclear arsenals

**Dorschner 16** (Jon P. Dorschner earned a PhD. in South Asian studies from the University of Arizona. He currently teaches South Asian Studies and International Relations at his alma mater. American Diplomacy, May 2016. http://americandiplomacy.web.unc.edu/2016/05/are-south-asian-arms-sales-in-the-u-s-national-interest-the-foreign-policy-implications/)tjf

In 1989 I wrote an article urging the United States to stop selling weapons in South Asia.1 It took a liberal stance, arguing that such a step would enable the U.S. to occupy the moral high ground. The U.S. should not sell expensive weapons systems to some of the poorest countries on earth. The U.S. sells weapons to both India and Pakistan, which they then use in senseless wars against each other. The U.S. reduces its credibility as an honest broker by selling weapons to both protagonists, and cannot honestly mediate the Indo/Pakistan conflict. In his latest book Indian security analyst Bharat Karnad2 approaches this issue from a very different perspective. Karnad is a hardcore realist. He wants India to assume its rightful place among the world’s “great powers” and become a formidable military power. However, he sees Indian dependence on weapons systems imported from the United States and other developed nations as a drag on Indian potential. He calls for India to eschew imports and embark on a radical indigenization program to replace imported arms with those made by an expanded Indian arms industry that includes both the public and private sectors. At first glance it appear there is considerable light between the liberal take and Karnad’s realist stance. In actuality, there is considerable overlap. Arms imports drain the Indian national exchequer. They consume valuable resources better spent on economic development and poverty alleviation. India’s number one problem is poverty. Unless and until India makes sufficient inroads into its excruciatingly high poverty rate, it will never become a world power. Karnad correctly asserts that India could produce practically everything needed by its armed forces if it took the necessary steps to mobilize its potential. Such a development would have a profound positive impact on India’s economic development. Instead of spending valuable hard currency abroad, India would use its funds to put its own people to work. Indigenous weapons systems would be considerably cheaper than imported ones, freeing up funding for investment in Indian infrastructure and social programs. India could change from an arms importer to an arms exporter, further boosting the Indian economy. As a realist, Karnad insists all foreign policy decisions must benefit India’s national interest. The same holds true for American foreign policy decisions. The overwhelming majority of American policy makers shares Karnad’s realist orientation and utilizes the same national interest test when making decisions for the United States. There are plenty of liberal arguments for the United States to get out of the arms business in South Asia. By selling high-ticket weapons systems, the United States is an accomplice to South Asian policy makers who place weapons purchases above poverty reduction. Taking a moral stance against such policies increases American soft power by increasing American credibility. Imagine if the U.S. announced that instead of competing for billions of dollars in weapons contracts, it would market alternative energy systems to India, or work with the Indian public health sector to help improve the country’s medical infrastructure. American companies would reap enormous economic benefits from such projects. While the American arms industry is a powerful player in the American economy, it is only one sector. Must arms sales drive U.S. policy even when they do not benefit U.S. national interest? But realist arguments can be used to advocate the same policy. Karnad and American realists share the same security concerns. They are worried about the balance of power in Asia. They see a rising China as a potential security threat, and believe China is seeking to become the Asian hegemon. Both Indian and American policy makers do not want to see this happen. They are determined to ensure India’s future security and prevent Chinese hegemony in Asia. India must devise and implement a military policy aimed at ensuring its security from its principal threat. The principal threat is China, not Pakistan. While India and Pakistan have fought repeated military conflicts, no one seriously argues that Pakistan poses an existential threat to India. To the contrary, realists agree that it is in the national interest of both India and Pakistan to end their military confrontation and begin cooperation to ensure economic development of the region. South Asia’s inability to establish a credible free trade zone holds all South Asian countries back and prevents economic development. All the ingredients have long been in place for a rapprochement between India and Pakistan based not on mutual affection but mutual interests. Realists are the first to argue that sentimentality plays no role in foreign policy formulation. States cooperate not out of affection but national interest. Eventually, Indian and Pakistani policymakers will agree on this fact and find the courage to take the necessary steps to make this happen. The terrorist threat in Pakistan may prove to be the necessary catalyst. There is a growing realization in the Pakistani military that it needs peace with India to free up military resources to tackle the existential threat posed by Islamic militancy. Pakistan has diverted military forces from the Indian border to counter-terrorist operations. This has not reduced Pakistani security. While India hopes to “manage” its relationship with China through diplomatic engagement, the Chinese threat will always be present and will only grow as China increases its military and economic power and becomes more assertive. The China/India border is not properly demarcated and protracted India/China border talks have made no progress. China continues to claim large tracts of Indian territory. To meet this security challenge, India must extricate itself from the India/Pakistan dispute and recalibrate its military. Ending its reliance on arms imports will make India stronger and its military more credible. It will provide India with the infrastructure to defend itself in a protracted conflict without worrying about potential arms embargos by foreign arms suppliers. American policy makers should realize that the indigenization of the Indian arms procurement process in in the national interest of both countries. A stronger and more credible Indian military provides India with more options. This is because it can defend itself without relying on foreign patrons. This client/patron relationship has long been a source of humiliation for India that has prevented genuine close relations. Its removal would make it easier for the United States and India to cooperate on a more equal basis to help provide security in Asia. This would have a big impact on **nuclear weapons in South Asia**. India’s growing superiority in conventional military capability compels Pakistan to rely more and more on nuclear weapons. If India took concrete steps to convince Pakistan it has no designs on Pakistani sovereignty, it would remove Pakistan’s sense of insecurity and allow the two countries could begin to stand back from the brink. An India militarily self-sufficient in conventional military hardware is more capable of providing its own security and less reliant on nuclear weapons, making it easier for India and Pakistan to negotiate credible limits on their nuclear arsenals. Nuclear weapons programs are incredibly expensive and serious economic drains. As both countries build more nuclear weapons and integrate them into their defense plans, the danger of nuclear war (either intentional or accidental) increases exponentially. Pakistan cannot continue to keep spending valuable resources on a massive nuclear arsenal aimed only at intimidating India

### 1AR---AT Pakistani TNWs

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#### 1] Either accidental TNW launch causes so small of an impact that conventional weapons work just as well – artillery and battery, or it’s huge, which triggers massive escalation

#### 2] Creates instability – we read yellow

Ahmed ‘16 (Mansoor, 2015–2016 Stanton Nuclear Security Junior Faculty Fellow at the Belfer Center for Science and International Affairs at the Harvard Kennedy School of Government. "Pakistan’s Tactical Nuclear Weapons and Their Impact on Stability," Carnegie Endowment for International Peace, <https://carnegieendowment.org/2016/06/30/pakistan-s-tactical-nuclear-weapons-and-their-impact-on-stability-pub-63911>. Accessed 2/6/2020) //ZL

HOW TACTICAL NUCLEAR WEAPONS IMPACT STRATEGIC STABILITY The operational complexities of TNW deployment are deepened by doctrinal and force posture developments across the border in India. Understanding Pakistan’s predicament, therefore, requires first drawing doctrinal inferences from India’s developments. India is, in some measure, also modernizing its forces with the goal of transforming nuclear strategy into a counterforce strategy designed to preempt Pakistan’s tactical first use. Once India’s force modernization—primarily the introduction of 4.5-generation combat aircraft, such as the Su-30MKI and Rafale, and upgraded Mirage-2000, MiG-29s, and Jaguars for interdiction, close air support and air superiority, coupled with superior ISR, cyber, and space capabilities—the Indian Air Force (IAF) will seek to carry out preemptive and preventive strike missions against Nasr and other SRBM batteries in conjunction with unmanned combat aerial vehicles armed with precision guided munitions.79 India is seeking a quantum leap in its ISR capabilities with the acquisition of intelligence, surveillance, target acquisition, and reconnaissance (ISTAR) aircraft from the United States.80 It is also establishing an independent navigational satellite network in space, recently launching the fourth of seven planned satellites.81 Pakistan is also ramping up its ISR and satellite navigation capabilities under their 2040 space program,82 and meanwhile has adopted the Chinese BeiDou-2 satellite-navigation system for both commercial and military use in order to reduce the ISR asymmetry that currently exists between Pakistan and India.83 As the BDS-II covers all of India, it will enable Pakistan to achieve greater accuracy in counterforce targeting.84 In 2012, the chairman of Pakistan’s Space and Upper Atmosphere Research Commission confirmed that Pakistan was “in the process of acquiring the global navigation satellite system (GNSS) in collaboration with China,” which would give a boost to its satellite communication technology. He added that the BeiDou satellite system also had tremendous peaceful applications. In addition, he thanked China for “choosing Pakistan for the first-ever BeiDou (technology) application and demonstration outside China.”85 China and Pakistan also signed an agreement in April 2016 to launch the Pakistan Remote Sensing Satellite, which will have applications for national security and socioeconomic development.86 ISR and cyber asymmetries are particularly destabilizing as these can prompt India to attempt to degrade C2 and ISR networks in Pakistan,87 Further, since the introduction of missile defenses, coupled with canisterized, nuclear-capable, and potentially MIRVed (meaning the payload is a multiple independently targetable reentry vehicle) ballistic missiles like the Agni-V, ISR asymmetries incentivize escalatory behavior even more.88 Such is the consistent pattern of Indian signaling—centered on aspiring to achieve air dominance against the Pakistan Air Force in the first 72 hours—designed to demonstrate the intention of preemptively striking Nasr batteries if and when they are deployed.89 U.S. National Security Council official Peter Lavoy has said that, “India may be able to identify and target Pakistan’s strategic assets with its enhanced intelligence, surveillance, and reconnaissance capabilities and it may be able to reach and destroy Pakistani strategic assets using its improved precision-strike aircraft and missile capabilities.”90 However, given that the Nasrand other land-based short-range ballistic and cruise missile systems are road-mobile, it would not be realistically possible for the IAF to locate and destroy all systems. This same principle was aptly demonstrated during the first Gulf War, when the United States Air Force was unable to destroy all Iraqi mobile Scud launchers, even though the coalition air forces enjoyed complete command of the air and had unrivalled ISR, satellite, and targeting capabilities at their disposal. Even if India cannot completely eliminate road-mobile missiles, though, ISR and air force capability will certainly make it difficult for Pakistani planners to ensure effective camouflage of deployed TNW or Nasr batteries without adequate ground and field security.91 Thoughts of preemptive strikes against mobile Pakistani battlefield nuclear weapons are a reflection of India’s growing confidence in its (potentially dual-use) counterforce targeting capacity, underwritten by its heavy-lift and ISR capabilities. These capabilities include the new 150-kilometer (or 93-mile) Prahaar battlefield tactical ballistic missile—which was first tested in 2011 within three months of the Nasr’s maiden flight test92—and 1,000 kilometer (or 621-mile) Nirbhay LACM, plus integration of the 290-kilometer (or 180-mile) Brahmos supersonic cruise missile with the Su-30MKI fighter.93 India is also working on a 300-kilometer (or 186-mile) hypersonic Brahmos-II, which will be integrated with its Su-30 fleet.94 The development and integration of the Brahmos and Nirbhay cruise missiles, mandated by the Indian Strategic Forces Command, indicates that such systems would likely be employed against Pakistani battlefield nuclear forces.95 These missile targeting plans would likely be supplemented by special forces dropped behind Pakistani lines by India’s fifteen new heavy-lift Chinook helicopters, supported by 22 new Apache attack helicopters, and close air support provided by the IAF.96 India appears to be reorganizing and modernizing its conventional and dual-use counterforce capabilities to fit the parameters of the “Operational Maneuver Groups” and “vertical envelopment” concepts used by the Soviet Union in the early 1980s.97 The Ambala-based II Corps elements recently tested these concepts during exercises in the Rajasthan desert: “The exercise aims at rapid mobilization. . . . and making speedy multiple offensives deep into enemy territory before the enemy has a chance to mobilize its own resources for a counter attack or for offering a heavy resistance.” The strike corps practiced “mechanized maneuvers in an entire spectrum of new generation of equipment” with a “significant contribution from the ground attack fighter aircraft from Indian Air Force, attack helicopters, unmanned aerial vehicles, remotely piloted vehicles, and utility helicopters.” New operational battled concepts, such as “insertion of troops by air,” complete integration of ISR, and “communication systems in a network centric battlefield environment” at the strategic, operational, and tactical level were tested in the exercise.98 The major strategic stability impact of Pakistani TNWs is forcing India to include flexible response options in its nuclear strategy.99 These new options, likely to include both counterforce and countervalue targeting against Pakistan, can be construed as a contradiction to India’s declared doctrine of massive retaliation because they would use a series of standoff surgical strikes by 1,000-kilometer-range Nirbhay systems—colloquially called the “backbone of cold start.”100 Indian strategists and scholars are already advocating revisions to the massive retaliation strategy to create the option for conventional and nuclear counterforce targeting: “India would look for a doctrine which can provide ‘flexible response’ options ‘allowing policy makers every possibility in a crisis—pre-emptive strike, counter-force and counter-retaliation.’”101 These flexible response options, or even first strike, would be a reaction to Pakistan’s intended use of battlefield nuclear weapons and “could thus be described as a no–first use strategy” from an Indian perspective.102 It would be irrational for Pakistani decisionmakers to unnecessarily expose the Nasr to any situation where loss of control, inadequate field security, or weak concealment might make it vulnerable to preemptive attack by India. One possible solution is to deploy them without actually declaring the type of warhead or only placing conventionally tipped Nasr missiles at selected places. India will likely persist with the belief that the Nasror other short-range systems are all carrying nuclear warheads. Given the operational and deployment challenges, not to mention the dearth of fissile material, Pakistan seems content to use the Nasr as a “force-in-being” rather than a weapon for warfighting.103 Pakistan’s full spectrum deterrent posture, and extensive range of ballistic and cruise missiles, provides a broad menu of targeting options to choose from in the course of meeting the objectives of counterforce targeting. Indian interlocutors and participants in Track 2 events also like to emphasize the futility of Pakistan’s battlefield nuclear weapons, painting them as a non-credible threat even as they continue to vehemently adhere to India’s doctrine of massive retaliation.104 One Indian participant in a recent crisis simulation put it clearly: “So you have battlefield nuclear weapons? Okay, but we don’t consider them as strategic weapons.” He continued that there still was “space for limited conventional war with Pakistan.”105 Bluster aside, the ambiguity surrounding elements of Pakistan’s doctrine, especially Nasr and other short-range nuclear capable systems, is likely to complicate the security calculus for India. How and when Pakistan uses these short-range systems will depend on the evolving shape of the battle and will be decided by the NCA, without actually delegating the launch authority to field commanders. The evolving Indian conventional force modernization and rapidly increasing ISR and space capabilities will also exacerbate the conventional and technological asymmetry between India and Pakistan. This asymmetry will add to the misplaced confidence and bravado of the Indian political and military elite that they can achieve decisive results within the first hundred hours of a limited military campaign against Pakistan and succeed in degrading Pakistan’s conventional forces without triggering Pakistani nuclear thresholds. Pakistani planners have chosen to plug this perceived deterrence gap by introducing TNWs, while simultaneously attempting to plug gaps in conventional forces where possible. Indian claims of the successful development and deployment of a ballistic missile defense shield around New Delhi, its possible extension to other major population centers, and plans for developing cruise missile defenses will also further erode deterrence and crisis stability in the region.106 Any missile defense, effective or not, can lead Indian planners to mistakenly believe that fighting a conventional war does not threaten major population and industrial centers with a Pakistani countervalue strike. Emerging asymmetries in technology and military strength will likewise contribute to India’s false sense of superiority and lead India to pursue escalation dominance during a limited conventional conflict, seeking to terminate hostilities on its terms. Still, some Indians do not consider Pakistan’s new full spectrum deterrent underwritten by TNWs to be credible, insisting that India remain committed to massive retaliation in response to any low-yield counterforce nuclear first use by Pakistan. If Pakistan’s posture is reminiscent of NATO’s theoretical limited nuclear use in self-defense, then India’s doctrine of massively responding appears to follow the erstwhile Soviet strategy of a disproportionate response.107 Similarly, Pakistanis do not consider India’s doctrine of massive retaliation credible because Pakistan’s development of a nuclear triad and second-strike capabilities would enhance deterrence stability by ensuring mutual assured destruction.108 Similarly, Brigadier (retired) Gurmeet Kanwal—former director of India’s Centre for Land Warfare Studies—has argued that “the word ‘massive’ . . . should be substituted with ‘punitive’ as massive is not credible and limits retaliatory options.”109 South Asia’s prevailing nuclear dynamics mean that maintaining adequate conventional forces remains as relevant to South Asia as it was to the Europe during the Cold War. Even as India and Pakistan continue to develop their nuclear forces toward triadic posture and assured second-strike capability, conventional force modernization continues in parallel.110 Acutely aware of the significance of maintaining a semblance of conventional balance, particularly in force-multiplier technologies, Pakistan is also modernizing its conventional forces, although not matching Indian efforts in scale and scope.111 The Pakistan Army is also modernizing its defensive war plans, primarily reflected in the Pakistan Army Doctrine 2011 or “Comprehensive Response” doctrine, which states: “With the possibility of Pakistan being drawn into a war on a very short notice, all formations organize their administrative and routine activities in a manner that effective combat potential can be generated within 24 to 48 hours from the corps to unit level and two to three days at the Army level.”112 The doctrine “emphasizes rapid mobilization in response to a cross-border incursion by Indian forces,” and “endorses a counteroffensive into enemy territory, wherever the opportunity presents itself—a principle that clashes with India’s escalation dominance theory.”113 Pakistan has tested its capability to respond to Indian proactive military operations, like Cold Start, in the annual Azm-e-Nau conventional military exercises.114 Pakistan is believed to have also reorganized existing army formations to include counter-IBG brigade or division-sized groups as part of the Army’s Comprehensive Response Doctrine.115 And it is seeking to replenish and enhance anti-tank and air defense capabilities by introducing fifteen AH-1Z Vipers, WZ-10, and possibly 20 Mi-28 gunship helicopters, in addition to precision guided munitions, anti-tank missiles, and unmanned combat aerial vehicles.116 Pakistan also plans to purchase a new generation of main battle tank (the Al-Khalid-II/MBT-3000/VT-4).117 In order to bolster conventional forces, the Pakistan Army plans to standardize all its artillery pieces to 155 millimeters, procuring new self-propelled howitzers from the United States, China, and Turkey, and a new multiple-launch rocket system from China.118 Simultaneously, Pakistan continues to test more short-range ballistic and cruise missile systems suitable for counterforce employment and fewer longer-range ballistic missiles.119 All dual-use ballistic and cruise missile systems have been “fully integrated into the centralized command-and-control structure through round the clock situational awareness in a digitized network centric environment to decision makers at National Command Center,” according to the official statements released following each missile test.120 A combination of all these capabilities will be used to deter and, if necessary, defeat limited conventional attacks without actually resorting to nuclear use. The fact that none of the short-range nuclear capable missile systems have been placed under an army corps or the artillery division is clear evidence of Pakistan’s determination to repel an Indian conventional attack with Pakistan’s own conventional forces. The nuclear systems suitable for battlefield employment remain under the control of the Army Strategic Force Command, which is controlled by the Strategic Plans Division/National Command Authority (SPD/NCA). TNWs are weapons of last resort, but once a decision is made to use nuclear weapons on the battlefield by the NCA, TNWs are likely to produce strategic consequences, like rapid escalation. The Nasr might be the first or second shot as a last resort in a series of conventional strikes with one or more cruise or ballistic missile systems designed to signal an impending escalation to the nuclear level, should deterrence fail.121 Such signaling, however, would likely not deter India from pressing on toward their objectives. This is the sort of posturing that India tends to reflect during Track-2 events, despite the effectiveness of international calls for restraint during the 2001–2002 and 2008 India-Pakistan crises.122 Strategic stability in South Asia will eventually depend on a variety of factors. The growing asymmetry of conventional and nuclear force modernization and technological maturation between India and Pakistan is likely to erode deterrence stability. Once India is able to modernize and equip its conventional forces to the desired levels in the next decade, it will grow more confident in its ability to fight and win limited conventional wars. With India’s modernization pitted against Pakistan’s Azm-e-Nau strategy and conventional force modernization efforts, this situation mirrors the lessons learned by NATO and the Warsaw Pact forces during the Cold War. India and Pakistan seem to have adopted the erstwhile American, West European, and Soviet Cold War nuclear lexicon, whether unwittingly or intentionally. The United States had 20,000 TNWs in its arsenal in 1967 and deployed about 5,000 of these weapons to Central Europe to compensate for the conventional superiority enjoyed by the Warsaw Pact forces. Only after the Revolution in Military Affairs in the West and the East—also described as the military-technical revolution—could both sides reshape their doctrines and military strategies.123 NATO eschewed reliance on tactical nuclear weapons in Europe, thereby avoiding the intense doctrinal, operational, and technical complexities they imposed.124 Deterrence stability persisted even when TNWs were removed because the Soviet military elite perceived, for the first time, that technology had tilted the conventional balance in Europe toward NATO.125 If an emboldened India is tempted to fight a limited conventional war, that alone amounts to a failure of Pakistan’s conventional deterrence. Even limited conventional war can lead rapidly to escalation and employment of battlefield and strategic nuclear weapons if Pakistan’s conventional forces are degraded or depleted beyond acceptable limits and if territory is lost in strategically critical areas. If the deployment of short-range battlefield nuclear weapons does not succeed in deterring Indian proactive military operations, those same military operations will lead to battlefield nuclear weapons being used. Pakistan’s TNWs are intended to bolster the deterrent value of conventional forces, but deterrence stability can only hold if the conventional balance, including the balance of high-tech conventional weapons, does not swing massively in India’s favor. Other technologies, like ballistic and cruise missile defenses or canisterized ballistic missiles, are also highly destabilizing. These destabilize the first-strike balance and can lead to a nuclear and missile arms race with both sides developing multiple warheaded offensive nuclear forces as part of their arsenals. In the years since the 2001–2002 and 2008 crises, India has clearly been moving toward conventional, and possibly dual-use, counterforce targeting force postures126 in order to carry out new proportionate response options using dual-use short-range ballistic and cruise missiles. This again mirrors the deployment of short-range theater nuclear forces by the Soviet Union in response to NATO’s introduction of tactical nuclear weapons in Central Europe during the Cold War.127 India’s rapid force modernization and evident doctrinal transformation will further widen the gap between proclamations of a minimum deterrent posture, which is already inconsistent with a doctrine of massive retaliation, and the military capabilities, like battlefield counterforce targeting capabilities, at its disposal. New access to force-multiplying conventional military technologies will make it increasingly easy for Indian elites to enter limited conventional conflicts. Ending such conflicts, however, will not be as easy and will depend on highly fluid dynamics that neither India nor Pakistan can adequately predict before the conflict starts. Nonetheless, prior to the introduction of short-range theater nuclear forces by Pakistan and India, a credible first strike in response to Indian incursion meant a massive first use if the country’s existence were at stake. India would have responded massively to such a Pakistani first strike. However, the evolved doctrines of India and Pakistan—full spectrum deterrence for Pakistan and India’s qualification of its NFU doctrine in 2003—coupled with India’s development of a triad beyond minimum deterrence levels, demonstrate that both countries have recognized the need for adding theater nuclear and conventional counterforce capabilities to their existing postures. If or when India chooses to deploy nuclear counterforce capabilities, it already has sufficient fissile material stocks.128 In the future, evolving doctrines and technological maturation on both sides are expected to yield arms-race instabilities and subsequent first-strike instabilities, notwithstanding parallel trajectories toward assured second-strike capabilities by both sides. The broad consensus among Pakistan’s strategic elite is that the introduction of battlefield nuclear weapons has deterred India and complicated Indian plans for limited conventional conflict. They believe the deterrent value of battlefield nuclear weapons outweighs the costs and risks generated by their introduction. TNWs are worth the trouble of grappling with doctrinal and other “complex challenges inherent in the integration of TNW into [conventional] war-fighting plans, notwithstanding the fog of war. Plans made during peacetime would meet unforeseeable obstacles in the battle environment, to the detriment of effective deployment and employment of TNW.”129 The underlying driver for the introduction of theater nuclear forces by Pakistan is the possibility of generating risk at the lower levels of conflict to increase the costs associated with planning and initiating limited conventional war against Pakistan. A limited war by India will certainly be a total war for Pakistan, so Pakistan has shifted its deterrence posture to try and make limited war too risky for India to attempt. Moreover, faced with the threat of proactive military operations from India at a time when the Pakistani armed forces are fully engaged in a war on terror at home, facing chronic instability on the border with Afghanistan, and dogged by economic downturn, nuclear strategy manipulation and the introduction of TNWs appears a cost-effective and quick solution.130 The U.S. Naval Postgraduate School’s report on Pakistan’s battlefield nuclear weapons based on Track 2 findings argues that “TNW would theoretically plug the gap and create a force multiplier effect for a thinly stretched Pakistani Army.”131 With the introduction of these weapons, “Pakistan has asserted it is solving its problems, just as NATO did during the Cold War.”132 Thus, “the Pakistani rationale for TNW is that these weapons are an insurance policy against surprise and a guarantee at the operational level. . . . which will buy time against a strategic defeat.”133 Whether or not tactical or short-range battlefield nuclear weapons will accomplish the objectives for which they were developed remains an open debate in academic, policy, and military circles in South Asia and the world. The fact that these weapon systems have attracted so much criticism and debate in India reflects unease, consternation, and anxiety that Pakistan’s TNW capability cannot be wished away and will have to be factored into India’s future limited conventional planning. This instability was one of the primary objectives that Pakistani decisionmakers hoped to achieve by developing TNWs.

#### 3] Delegation ensures chaos and miscalc and insider threats lead to terrorism and theft

**Shapoo ’17** (Shapoo, Sajid Farid. “Terrorist Threats to Pakistan's Tactical Nuclear Weapons: A Clear and Present Danger.” Small Wars Journal, 2017, smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger. Sajid Farid Shapoo is a highly decorated Indian Police Service officer, a two star general with 20 years of progressively senior experience in high profile counter terror assignments. He has in-depth experience in Counter-terror Investigations and Intelligence Operations. He is currently pursuing his Masters in International Affairs at Columbia University, New York. Accessed 2/6/2020) //ZL

Dynamics of Tactilization: Command and Control Vulnerabilities Pakistan’s Army appears to have procedures in place to operationalize an already offensively oriented posture, thereby ensuring that Pakistan’s nuclear weapons are suitably deployed and are usable in a crisis situation. As Tim Hoyt writes: “It is apparent that Pakistan’s Command and control procedures are delegative, lean heavily toward the always side of the ‘always/never’ divide, and probably include both devolution and possibly pre-delegation in order to ensure the use of weapons[[vi]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn6%22%20%5Co%20%22).” Such delegated command and control structure involves features that enable rapid assembly, accelerated movement, and assured delivery mechanism to maintain the credibility of a tactical first use or asymmetric escalation posture, particularly during crisis situations against India. The credibility of employment of battlefield tactical weapons is predicated on these being in battle ready mode. However, TNWs by their very nature are more at risk in such a delegated command and control structure. Pakistan’s surge towards production of more tactical nukes makes them vulnerable by their very nature. The vulnerability also stems from their command and control mechanism and also a higher probability of falling into hands of a rouge element or a terrorist organization. As battlefield weapons they need to be under the control of theater commanders. While the decision to deploy them may still be under the National Command Authority, their actual use has to be left to the commander in the field. Tactical battlefield weapons are short range weapons. Pakistan would typically want their components to be stored away from the Indian frontier, thus minimizing the chance of these falling into enemy hands. Although most of them can be kept disassembled, it is likely that some portion has to be kept in a ready state if they are to prove useful in stopping an Indian incursion and in order to make the deterrence by denial a credible instrument. This inter alia means that tactical weapons in a ready state would have to be stationed close to the frontline. It would be a challenge for the National Command Authority to exercise control on these ‘ready’ weapons which are deployed close to the border. In a chaotic crisis situation, the decision to ‘press nuke’ may rest with a mid-level theater commander with limited eyes on the battlefield. Brigadier General Khan (retd.) concedes that “[a] theater commander would probably [be able to] take matters into his own hands. Should a trade-off be required, battle effectiveness of the nuclear force will trump over centralized control[[vii]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn7%22%20%5Co%20%22). Such Command and Control procedures, a result of Pakistan’s heavy tilt towards using TNWs in a crisis situation, makes the entire structure vulnerable to rogue elements within its armed forces. A crisis situation also provides opportunity for non-state actors to take advantage of a fluid situation and try to get their hands on a TNW. Threats to Pakistan Nuclear Security: Clear and Present Speaking on the eve of 4th Nuclear Security Summit, President Obama expressed deep concern about the security risks that TNWs face. He feared that the “expanding nuclear arsenal in some countries, with more small nuclear weapons are at a greater risk of theft”. The terrorist use of nuclear weapons with its tsunami-like global and regional consequences is any country’s worst security nightmare. Pakistan claims to have made significant improvement in nuclear security but there are no independent reports which can sufficiently verify these claims. Pakistan’s opacity in sharing any kind of details about its security procedures makes it impossible to ascertain the veracity of its security claims. The gradual radicalization of Pakistan’s Army over the past three decades has posed a grave danger to Pakistan’s nuclear security in terms of insider threats. These insiders have time and again allied with various jihadi organizations to strike at the state itself. The gravest threat to Pakistan’s nuclear weapons is posed by this insider-jihadi collaboration and the possibility of these two potentially dangerous elements coming together and acquiring a nuclear weapon is perhaps one of the most underappreciated threats to international peace and security. Insider-Jihadi Cocktail The possible catastrophic scenario of the acquisition of a nuclear weapon by a terrorist organization with the active help of rogue insiders nearly played out when a group of navy officers attempted to high-jack a sophisticated Pakistan navy frigate. In Sept 2014, an audacious attack was led by serving and former Pak navy officers to take over the Pakistani Navy frigate PNS Zulfiqar. The alleged plan was to gain control of the vessel, steer it to open sea and then turn its guns on a U.S. naval vessel.[[viii]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn8%22%20%5Co%20%22) The attack was thwarted by Pakistan navy commandos. Four persons were killed which included two serving officers and an ex-navy officer. All four were associated with Al Qaeda in Indian Subcontinent (AQIS). It appears the officers on-board were to be joined by other militants who were to arrive by boat and stow away onboard. The plan was to get close to U.S. ships on the high seas and then turn the shipboard weapon systems on the Americans[[ix]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn9%22%20%5Co%20%22). Among those killed was former Pakistan Navy Lt. Owais Jakhrani. He had been recently dismissed from the Navy for harboring extremist views. He was the son of a serving senior police official in Karachi and he reportedly played the key role in recruiting naval officers for Al Qaeda. The group was led by a ‘senior officer’ who was even saluted by a navy guard before other guards became suspicious of their presence in the dockyard and alerted commandos[[x]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn10%22%20%5Co%20%22). The attackers were armed with assault rifles, rocket launchers and hand grenades. These weapons were smuggled earlier into the dockyard by the attackers and were stored in dockyard lockers. What was more concerning is that these officers had a complete appreciation of on-board procedures and offshore deployment of defensive vessels. Before the operation they had given a presentation to Al Qaeda seniors on the operational details of the proposed attack. Al Qaeda in its media release said the “operation took place under the leadership of two brothers from AQIS, namely Owais Jakhrani (former Second Lieutenant in the Pakistan Navy) and Zeeshan Rafeeq (Second Lieutenant)”. AQIS also released the design sketch of the PNS Zulfiqar[[xi]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn11%22%20%5Co%20%22). Al Qaeda said its plan was to use the Zulfiqar to attack U.S. Navy vessels. In the aftermath of the attack four serving mid-level lieutenant commanders from Karachi were also arrested in the western city of Quetta, allegedly trying to flee to Afghanistan two days after the attempted attack on the Zulfiqar. Nothing was known about these mid-level officers and who were their other colleagues in Navy were till recently. In April 2016 a Pakistan Navy tribunal sentenced five serving Navy officers to death for their role in the attack on the Zulfiqar[[xii]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn12%22%20%5Co%20%22). It appears there was a sufficiently large Al Qaeda module operating within the Pakistan Navy as middle level naval commanders. It would not be difficult to imagine that there could be more such modules operating within Pakistan’s Army and Air Force. Imagine a situation where, during a crisis with India, a few of such insiders would be tasked to transport battlefield tactical weapons to the frontline. Such a level of insider threat is what makes Pakistan’s nuclear arsenal extremely vulnerable, more so during a situation of impending crisis, when the arsenal is being moved from the storage station to battlefield deployment. The insider–terrorist cocktail is the most dangerous and credible threat to Pakistan’s nuclear arsenal. Insider Redux The spectrum of insider threats range from defense personnel to Pakistan’s nuclear scientist community. In 2001 Bashiruddin Mahmood, the former head of Pakistan’s Khushab Plutonium Reactor, was arrested for links to Al-Qaeda. Mahmood confessed that he and other colleagues had met Osama Bin Laden and discussed the possibility of developing a nuclear weapon[[xiii]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn13%22%20%5Co%20%22). This startling revelation led Pakistan to adopt stringent security clearance processes and close monitoring of its nuclear science community. The intelligence about Mahmood’s activities was provided by the U.S. Pakistan was unaware of the activities of its top two nuclear scientists. The possibility of that some of Mahmood’s and remnants of AQ’s (Abdul Qadeer) network evading surveillance and monitoring and forging linkage with state and non-state actors remains clear and present. Al Qaeda has made several attempts to obtain nuclear weapons and nuclear material and for a long time Al Qaeda had a WMD division headed by Egyptian Abdel Aziz Al Masri. He was famously called the ‘nuclear CEO’. Al Masri is still active in Al Qaeda and would probably be scouting for such nuclear scientists or Pakistan Army officers who would provide access to a nuclear weapon. It was reported by CIA that, in 2002-2003, Al Qaeda attempted to buy 3 objects which it thought were nuclear weapons[[xiv]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn14%22%20%5Co%20%22). ISIS: The New Threat On The Block ISIS in its May 2015 issue of ‘Dabiq‘, its online propaganda magazine, boasted about the ability to buy a nuclear weapon through links to corrupt officials in Pakistan. While this may be brushed off as a mere propaganda piece with no truth behind it, it does reveal ISIS interest in nuclear weapons and their appreciation that Pakistan is the likely place where they could obtain one. Another unique dimension to this threat is the competition between ISIS and Al Qaeda for global jihadi dominance. Al Qaeda seems to have been lagging behind and some experts believe Al Qaeda may be looking to stage a spectacular attack to wrest the initiative from ISIS and reassert itself in the jihadi world. An attack with a nuclear weapon would be top on its list. The Zulfiqar attack may have been an attempt for such an attack. The Army Alumni Corps: Real and Insidious In the past 5 years there have been at least a half dozen attacks on facilities that reportedly store Pakistan's nuclear weapons. The Kamra air base near Islamabad has been attacked three times by terrorists belonging to the Tehrik-i-Taliban (TTP). The extent of terrorist infiltration into Pakistan’s nuclear armed military apparatus was again highlighted when terrorists with alleged intelligence from ‘insiders’ mounted an attack on one of Pakistan’s biggest Naval bases. In 2011, jihadists belonging to the 313 brigade of Illyas Kashmiri attacked the Mehran Naval Base near Karachi. Since 2005, the 313 brigade has acted as an armed extension of Al-Qaeda. Al-Qaeda has a special unit which focuses on identifying radical elements within the armed forces. This unit is manned by former Pakistani Army officers who worked earlier with Illyas Kashmiri. Kashmiri had a strong contingent of Inter-Services Intelligence and Pakistan Army alumni as its advisors and members. This alumnus contingent was working under the banner of ‘Jund al -Fida’ (Army of Martyrs), a name suggested by Osama bin Laden. Major (Ret.) Abdur Rehman Hashim directed the operations of ‘Jund al Fida’ on behalf of Ilyas Kashmiri[[xv]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn15%22%20%5Co%20%22). He was reportedly detained by Pakistan in 2009 under U.S. pressure and has since been released. Major Hashim had instructed David Headley, one of the primaries accused of the Mumbai terror attacks, to conduct surveillance of the Bhabha Atomic Centre, near Mumbai in 2008[[xvi]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn16%22%20%5Co%20%22). Another Pakistan Army, Major Haroon Ashiq, was arrested for the murder of Major General Ameer Alvi in 2009. Major Haroon was the operational head of Jund al Fida. He is also said to have been released some time back. Haroon’s younger brother, Capt. (Ret.) Khurram Shehzad was killed fighting Canadian forces on behalf of Al Qaeda in Afghanistan in 2006[[xvii]](https://smallwarsjournal.com/jrnl/art/terrorist-threats-to-pakistan%E2%80%99s-tactical-nuclear-weapons-a-clear-and-present-danger%22%20%5Cl%20%22_edn17%22%20%5Co%20%22). With such a battery of ex-army officers at his disposal, it was not surprising that Illyas Kashmiri was able to get vital insider information about entry/exit, deployment of naval airplanes and other strategic information about Mehran Airbase. These army officers use their past contacts to spot radical elements within the forces and then try to get them aligned with Al Qaeda. These ‘insiders’ then provide critical information to groups like Al-Qaeda and TTP.

### 1AR---AT START PIC

* It doesn’t solve anything except US-Russia but in case they fiat everyone signs onto it
* NB is just deterrence/CBW’s – literally nothing else probably

#### 1] Doesn’t solve the aff – it doesn’t change any part of the 2021 renewal which is the squo and 700 nukes is more than enough to blow up the world if launched – their “won’t sign” offense assumes the aff is the squo

#### 2] Perm do both – use START’s verification procedures to pad complete denuclearization

### 1AR---AT Hotlines

#### 1] Hotlines are insufficient

Mulrine and Weir 15 Anna Mulrine & Fred Weir 15. Anna Mulrine, staff writer, CS Monitor, and Fred Weir, correspondent, CS Monitor, internally citing Viktor Baranets, former Russian defense ministry spokesman, Gen. Raymond Odierno, U.S. Army Chief of Staff, Christopher Harmer, former naval officer and deputy director of future operations at the U.S. Navy’s Fifth Fleet, and Andrei Baklitsky, expert with the independent PIR Center in Moscow. 06-09-2015. “NATO and Russia aren't talking to each other. Cold war lessons forgotten? (+video).” Christian Science Monitor. http://www.csmonitor.com/World/Europe/2015/0609/NATO-and-Russia-aren-t-talking-to-each-other.-Cold-war-lessons-forgotten-video

Several times during the cold war, miscommunication almost led to nuclear conflict. Now, amid tensions over Ukraine, Russia and the West are showing a new failure to communicate. Knowing your enemy doesn't just win the war. Sometimes, it also can be critical to keeping the peace. Such was the case in 1983, during a massive NATO drill to test the alliance's capabilities to respond to a Soviet invasion of western Europe. Unknown to its planners, however, "Able Archer," which envisaged using nuclear weapons to halt the enemy advance, looked to Soviet eyes exactly the way Soviet intelligence had predicted a US nuclear "first strike" would unfold. Though many of the details of how war was averted remain undisclosed, experts on both sides say the world came to the very brink of nuclear Armageddon through a chain of preventable misunderstandings. It was one of several cold war close calls that convinced Moscow and Washington to step up military contacts and establish formal, as well as informal, channels of communication that might make all the difference in an emergency. Those old tales are taking on urgent new relevance as the crisis over Ukraine drives East-West tensions to levels unseen since the cold war. Military machines on both sides are engaged in nearly non-stop war games aimed at displaying their readiness to their jittery publics, and scary near-misses between warplanes are multiplying as Russia's Air Force tries to return to its Soviet-era pattern of global patrolling. All this is happening at a time when dialogue, even at the highest levels, is almost nonexistent. "Not just communications, but other mechanisms that used to exist are simply not working anymore," says Viktor Baranets, a former Russian defense ministry spokesman. "I don't want to sound alarmist, but judging by the rapid pace of events and growing aggressiveness on all sides, we may be moving toward disaster. It's like we're all priming a bomb, but no one knows when or how it will explode. Gradually, we are moving from cold to hot war." 'We should be having these conversations' The disconnect between the Russian and American militaries is in part a natural result of the end of the cold war. Most of the old coping mechanisms were scrapped after they became unnecessary 25 years ago. That has left fighter pilots and ship captains today without the experience of their cold war predecessors, who were steeled by regular encounters with the enemy. But as NATO and Russia broke off relations last year amid the escalating spat over Ukraine, communications at lower echelons virtually ended. Last month NATO announced that it would set up a cold war-style "hotline" with the General Staff in Moscow. But that came even as NATO kicked out dozens of Russians formerly stationed at its Brussels headquarters. Pentagon officials say the US decision, alongside NATO, to slash military relations with Russia was the right thing to do "in light of Russia's aggressive actions in Ukraine." Virtually all bilateral engagements were shut down, including military exercises, bilateral meetings, port visits, and planning conferences. They say they continue to maintain "open lines of communication with Russia." But some experts worry that the hotline may prove far too little as tensions spiral, snap war drills become larger and more frequent on both sides, and genuine efforts to see the other ~~guy's~~ point of view dwindle. Army Chief of Staff Gen. Raymond Odierno says the fall-off in communications is indeed of concern. "I’m a big believer in no matter how big your disagreements are, it’s important that you continue to have discussions," he says. "In my mind, when you’re not talking, relationships can deteriorate faster because you can misinterpret---you don’t quite understand exactly what’s being said, and you don’t have the opportunity to discuss the most difficult issues," he told defense reporters on May 28. "I believe we should be having these conversations, but we’re not." Nuclear troubles Strategic nuclear weapons are still subject to strict controls. Five years ago Russia and the US signed the New START treaty, which holds the two sides to defined numbers of warheads and delivery systems. The treaty has its own apparatus for mutual verification and consultation. But the late-cold-war treaty that banned all medium-range nuclear missiles in Europe is under new strains, with the US accusing Russia of violations and some Russian politicians openly calling for the accord to be scrapped altogether. Russia is also warning that it might deploy nuclear-capable Iskander missiles to its western enclave of Kaliningrad and the newly-annexed territory of Crimea, which could add a nuclear dimension to the standoff. In the worst case, there is still the "red phone"---not actually a phone, but a priority connection---between the White House and the Kremlin, established in the wake of the 1962 Cuban Missile Crisis. But that's not enough to offset the shift in attitudes. "Relations are changing in the worst possible direction. We're in a propaganda war, and the realization has dawned that we are not friends," says Viktor Kremeniuk, a veteran Russian America-watcher and author of a new book, "Lessons from the Cold War." "If something should happen in an area not covered by a specific, preexisting agreement, it's not clear how it would be handled," he says. "Basically, the normal channels of diplomacy are all we've got now." Growing risk of accident An air-to-air encounter turned bad is one of the nightmares that plague officials on both sides. Pentagon officials point to an April 2014 incident, in which a Russian fighter plane buzzed a US reconnaissance aircraft and "put the lives of its crew in jeopardy." "During the cold war, it was routine anytime our reconnaissance aircraft was looking at them, or them at us, that we would be flying in formation in a very predictable way," says Christopher Harmer, a retired naval officer who served as former deputy director of future operations at the US Navy’s Fifth Fleet. That tight formation flying helped keep miscalculations to a minimum, Mr. Harmer says. But the sort of "reckless" flying demonstrated by the Russian fighter jet represents a shift in tactics. There is little chance it was the act of a show-off pilot, he adds. "Russian pilots don’t do rogue." The US Navy complains of similar close and "provocative" Russian approaches toward its ships in the Black Sea, including an incident last week involving the guided missile destroyer USS Ross. Russian media accounts of the same event stress the defensive actions of Russian military forces in the face of US "aggressive" moves. Odierno says that he has endeavored to arrange meetings to discuss rules of engagement. "I’ve actually tried to meet to meet with my Russian counterpart on two separate occasions, and both times they’ve refused to do that in neutral settings. So it’s concerning," because the lack of communication "definitely increases the danger of miscalculations" between the two countries, he says. "It's depressing to find ourselves back in this situation. Trust is ebbing, tensions are spiking, there's the constant feeling that something could go badly wrong," says Andrei Baklitsky, an expert with the independent PIR Center in Moscow, a think tank specializing in nuclear security issues. "We need to work out a new set of rules. The way we've been doing things for the past 25 years isn't working in this new situation, so people really need to start talking."

### 1AR---AT NFU

#### 1] Perm do both—solves the practicality args by smoothing the transition to global zero

Zhang 13 Hui Zhang (Physicist, leading a research initiative on China's nuclear policies for the Managing the Atom Project in Harvard Kennedy School' s Belfer Center for Science and International Affairs). “China’s No-First-Use Policy Promotes Nuclear Disarmament.” The Diplomat. 22 May 2013. JDN. <https://thediplomat.com/2013/05/chinas-no-first-use-policy-promotes-nuclear-disarmament/>

In fact, to make substantial progress towards President Obama’s goal of **a nuclear-free world**, each nuclear weapon state must change its strategic doctrine from one based on preemption to a purely defensive one based on a no-first-use policy. **This will provide a solid base to promote further reductions** of nuclear weapons. A no-first-use policy could also be an important measure to strengthen the nonproliferation regime, as no-first-use pledges would discourage other states from seeking nuclear weapons by removing a basic proliferation incentive while deemphasizing the role of such weapons. If the nuclear weapons states truly intend to take steps toward a nuclear-free world, it is time for them to adopt a global agreement on no-first-use of nuclear weapons.

#### 2] NFU fails---circumvention is inevitable.

Payne ‘15 Keith , PhD, Professor and Head of the Graduate Department of Defense and Strategic Studies, Missouri State University, “US Nuclear Weapons and Deterrence”, https://www.airuniversity.af.mil/Portals/10/ASPJ/journals/Volume-29\_Issue-4/V-Payne.pdf

Realists in this regard are from Missouri, the “show me” state, and ask utopians to explain how, why, and when a powerful new cooperative international norm with corresponding international institutions will become a reality. Realists point to the unhappy history of the unmet claims and dashed hopes of the 1928 Kellogg-Briand Pact (intended to prevent offensive war by global legal agreement), the League of Nations, and the United Nations. To be sure, the future does not have to be bound by the past, but before moving further toward nuclear disarmament, realists want to see some clear evidence of the emerging transformation of the global order—not just the claim that it can occur if all key leaders are so willing, faithful, and visionary and can “embrace a politics of impossibility.”12 As the old English proverb says, “If wishes were horses, then beggars would ride.” But has not everything changed in the twenty-first century? Has not the end of the Cold War ushered in a new global commitment to cooperation, the rule of law globally, and benign conflict resolution? The unarguable answer is no. Russian military actions against Georgia in 2008 and Ukraine since 2014 (the latter in direct violation of the 1994 Budapest Memorandum signed by Russia, Great Britain, and the United States) are sufficient empirical evidence to demonstrate that Thucydides’ stark description of reality is alive and well. China’s expansionist claims and military pressure against its neighbors in the East and South China Seas teach the same lesson. Why is this reality significant in the consideration of nuclear weapons? Because in the absence of reliably overturning the powerful norm of raison d’État and Thucydides’ explanation of international relations, states with the capability and felt need will continue to demand nuclear capabilities for their own protection and, in some cases, to provide cover for their expansionist plans. To wit, if Ukraine had retained nuclear weapons, would it now fear for its survival at the hands of Russian aggression? Former Ukrainian defense minister Valeriy Heletey and members of the Ukrainian parliament have made this point explicitly, lamenting Ukraine’s transfer of its nuclear forces to Russia in return for now-broken security promises of the Budapest Memorandum.13 This lesson cannot have been lost on other leaders considering the value of nuclear weapons. Nor is it a coincidence that US allies in Central Europe and Asia are becoming ever more explicit about their need for US nuclear assurances under the US extended nuclear deterrent (i.e., the nuclear umbrella). They see no new emerging, powerful global collective security regime or cooperative norms that will preserve their security; thus, they understandably seek the assurance of power, including nuclear power. The Polish Foreign Ministry observed in a recent press release that “the current situation reaffirms the importance of NATO’s nuclear deterrence policy.”14 This reality stands in stark contrast to utopian claims that powerful new global norms and international institutions will reorder the international system, overturn Thucydides, and allow individual states to dispense with nuclear weapons or the nuclear protection of a powerful ally. As the Socialist French president Francois Hollande has said, “The international context does not allow for any weakness. . . . The era of nuclear deterrence is therefore not over. . . . In a dangerous world—and it is dangerous—France does not want to let down its guard. . . . The possibility of future state conflicts concerning us directly or indirectly cannot be excluded.”15 There could be no clearer expression of Thucydides’ description of international relations and its contemporary implications for nuclear weapons. Opponents of the administration’s plan to modernize the US triad now double down on the utopian narrative by insisting that the United States instead lead the way in establishing the new global norm by showing that Washington no longer relies on nuclear weapons and does not seek new ones. Washington cannot expect others to forgo nuclear weapons if it retains them, they say, and thus it must lead in creation of the new norm against nuclear weapons by providing an example to the world. For instance, “by unilaterally reducing its arsenal to a total of 1,000 warheads, the United States would encourage Russia to similarly reduce its nuclear forces without waiting for arms control negotiations.”16 A good US example supposedly can help “induce parallel” behavior in others.17 If, however, the United States attributes continuing value to nuclear weapons by maintaining its arsenal, “other countries will be more inclined to seek” them.18 Nuclear realists respond, however, that the United States already has reduced its nuclear forces deeply over the last 25 years. America cut its tactical nuclear weapons from a few thousand in 1991 to a “few hundred” today.19 Moreover, US-deployed strategic nuclear weapons have been cut from an estimated 9,000 in 1992 to roughly 1,600 accountable warheads today, with still more reductions planned under the New START Treaty.20 The United States has even decided to be highly revealing of its nuclear capabilities to encourage others to do so, with no apparent effect on Russia, China, or North Korea.21 America has adhered fully to the reductions and restrictions of the 1987 Intermediate-Range Nuclear Forces Treaty—the “centerpiece of arms control”—but the Russians now are in open violation. As former undersec- retary of state Robert Joseph stated recently, decades of deep US reductions “appear to have had no moderating effect on Russian, Chinese or North Korean nuclear programs. Neither have U.S. reductions led to any effective strengthening of international nonproliferation efforts.”22 Utopians want the United States to lead the world toward nuclear disarmament by its good example, but no one is following. The basic reason, realists point out, is that foreign leaders make decisions about nuclear weaponry based largely on their countries’ strategic needs, raison d’État, not in deference to America’s penchant for nuclear disarmament or some sense of global fairness. A close review of India by S. Paul Kapur, for example, concluded that “Indian leaders do not seek to emulate US nuclear behavior; they formulate policy based primarily on their assessment of the security threats facing India.”23 The same self-interested calculation is true for other nuclear and aspiring nuclear states. Nations that are a security concern to the United States seek nuclear weapons to intimidate their neighbors (including US allies), to counter US conventional forces, and to gain a free hand to press their regional military ambitions. They see nuclear weapons as their trump cards and do not follow the US lead in nuclear disarmament. A bipartisan expert working group at the Center for Strategic and International Studies concluded accordingly that “U.S. nuclear reductions have no impact on the calculus of Iran and North Korea.”24

#### 3] Links to the deterrence DA—if the aff decks deterrence, so do you

Payne ‘16 Keith B. Payne (president of the National Institute for Public Policy, the head of the Graduate Department of Defense and Strategic Studies at Missouri State University, and a former deputy assistant secretary of defense). “Once Again: Why a ‘No First Use’ Nuclear Policy Is a Very Bad Idea.” National Review. 6 July 2016. JDN. https://www.nationalreview.com/2016/07/no-first-use-nuclear/

The Obama administration reportedly is seriously considering adopting a “no first use” (NFU) nuclear-weapons policy. A prospective NFU policy would be a U.S. commitment never to be the first to use nuclear weapons — as opposed to existing policy, which retains some ambiguity regarding when and if the U.S. would use nuclear weapons. An NFU policy would eliminate that ambiguity for U.S. adversaries. It sounds warm and progressive and has long been a policy proposal of disarmament activists. NFU has, however, been **rejected by all previous Democratic and Republican administrations** for very sound reasons, most recently by the Obama administration in 2010. The most important of these reasons is that retaining a degree of U.S. nuclear ambiguity helps to deter war, while adopting an **NFU** policy **would undercut** that **deterrence.** How so? Under the existing policy of ambiguity, potential aggressors such as Russia, China, North Korea, and Iran must contemplate the reality that if they attack us or our allies, they risk possible U.S. nuclear retaliation. There is no doubt whatsoever that this risk of possible U.S. nuclear retaliation has deterred war and the escalation of conflicts. In fact, the percentage of the world population lost to war has fallen dramatically since U.S. nuclear deterrence was established after World War II. That is a historic accomplishment. The fatal flaw of the warm and progressive-sounding NFU proposal is that it tells would-be aggressors that they do not have to fear U.S. nuclear retaliation as long as they attack us **or our allies** with advanced conventional, chemical, and/or biological weapons. They would risk U.S. nuclear retaliation only if they attack with nuclear weapons.

#### 4] NFU collapses crisis stability---adversaries think it’s a trick to get them to lower defenses

Joshua Rovner 11, Assistant Professor of Strategy and Policy at the U.S. Naval War College, and Adjunct Assistant Professor in the School of International and Public Affairs at Columbia University, 2/4/11, “Article Review 6 on “No First Use: The Next Step for U.S. Nuclear Policy,”” https://issforum.org/articlereviews/6-no-first-use

Gerson makes good use of classic deterrence theory, and he provides a powerful and persuasive argument about the importance of sharply constraining the roles of nuclear weapons (more on this below). However, he probably overstates the benefits of NFU for reducing the chance of escalation during crises. If the United States found itself in a serious crisis with a nuclear-armed rival, it is unlikely that the adversary would be reassured by official U.S. declaratory policy. A great deal of mistrust, hostility, and fear would have to be present for one or both sides to actually consider using nuclear weapons, and attempts to control escalation by pointing to legal restrictions like NFU would stretch credulity. Rather than being assuaged by the no-first use pledge, adversaries might view it as nothing more than cheap talk. In extreme cases they might even suspect NFU as being part of a deception campaign designed to lull them into a false sense of security. Gerson anticipates this criticism by drawing on recent work in political science on the theory of audience costs, which posits that threats and promises are more credible if everyone knows that leaders will pay a heavy political price for reneging on their commitments. In this case, he writes, a U.S. president who pledges to uphold NFU would be vulnerable to his domestic rivals if he reverses course, especially if they can point to the president’s apparent recklessness in order to win over moderate and independent voters. The United States also pay an enormous international price, undermining faith in bilateral and multilateral agreements and U.S. commitments in general. The domestic and international audience costs of violating NFU would be substantial. This argument is not entirely convincing. To be sure, audience costs might inject a much-needed dose of sobriety in Washington, but they will only reduce instability if foreign adversaries believe that American official care more about those costs than about the issues that led to the crisis in the first place. If core security interests are at stake, then we may reasonably expect that the closer a crisis approaches the nuclear threshold, the less likely those domestic political costs will matter. More generally, while scholars have shown than domestic audience costs may constrain policymakers in some circumstances, it is still far from clear that they are effective ways of generating international credibility, and there is little empirical research to support the idea that audience costs increase the credibility of signals during periods of high crisis.[3] This proposition requires much more scrutiny. To his credit, Gerson suggests the limits of his argument when he notes that during crises, U.S. leaders would need to “repeat and reinforce the commitment to NFU.” They would also need to calibrate public statements with tangible signs of U.S. intentions, such as changes to the alert status of nuclear forces, in order to convince adversaries that their promises were genuine. Standing declaratory policy will not do much to reduce crisis instability without these additional measures. In fact, as Gerson notes, it might actually make things worse if adversaries come to believe that NFU is part of a deception operation in advance of a first strike (46).

### 1AR---AT Moon PIC

#### 1] Space detonation causes extinction – EMP, radiation, grid collapse

Bouchard 18 (Anthony Bouchard, labroots science writer, Here's What'd Happen if We Detonated a Nuclear Bomb in Space, labroots, Oct 02 18)

Have you ever wondered what would happen if humankind detonated its most powerful nuclear bomb in space? If so, then this is a video you’ll want to watch. Detonating nukes in space isn’t a new concept; in fact, the United States government performed such a test in 1962 after launching a 1.4 megaton nuclear bomb into space almost 400 kilometers above Earth’s surface; that's nearly the same altitude occupied by the International Space Station today. The results? Interesting, to say the least. The bomb detonated above the Pacific Ocean, right over Hawaii. The corresponding explosion produced a bright flash and a powerful electromagnetic pulse (EMP). The EMP was so strong that it darkened street lights in Hawaii, made navigation systems go haywire, and even tampered with nearby satellite systems. But this 1.4-megaton bomb was insignificant compared to the largest nuke ever detonated, the 50-megaton Tsar Bomba. Performing the same test with the bigger brother of the two bombs would result in a fireball four times larger than the experiment conducted in 1962, and the EMP would be tremendously more powerful. This EMP would fry hundreds of nearby satellites, put International Space Station astronauts at risk of radiation poisoning, and disrupt substantially more of Earth’s power grid. Fortunately, you needn’t worry about a nuclear bomb of this caliber being detonated in space. Researchers learned a lot from the tests conducted in 1962, and one of the lessons learned was that detonating nukes in space isn’t a good idea. That said, it’ll probably never happen again.

#### Grid collapse causes extinction.

Alice Friedemann 16. Transportation expert, founder of EnergySkeptic.com and author of “When Trucks Stop Running, Energy and the Future of Transportation,” worked at American Presidential Lines for 22 years, where she developed computer systems to coordinate the transit of cargo between ships, rail, trucks, and consumers. 01-24-16. “Electromagnetic pulse threat to infrastructure (U.S. House hearings).” Energy Skeptic. http://energyskeptic.com/2016/the-scariest-u-s-house-session-ever-electromagnetic-pulse-and-the-fall-of-civilization/

Modern civilization cannot exist for a protracted period without electricity. Within days of a blackout across the U.S., a blackout that could encompass the entire planet, emergency generators would run out of fuel, telecommunications would cease as would transportation due to gridlock, and eventually no fuel. Cities would have no running water and soon, within a few days, exhaust their food supplies. Police, Fire, Emergency Services and hospitals cannot long operate in a blackout. Government and Industry also need electricity in order to operate. The EMP Commission warns that a natural or nuclear EMP event, given current unpreparedness, would likely result in societal collapse.

#### [insert blowing up asteroids fails – it still applies]

#### 2] Difficulty of space communication makes accidents more likely

Boyle 18 (Rebecca Boyle, journalist, Space Communications Are Stuck In The Dial-Up Age. Which Means It’s Time For More Lasers., FiveThirtyEight, Apr 18 2018)

Since the first satellite launched 61 years ago, spacecraft have relied on radio waves to communicate with Earth. But radio has its limitations. The airwaves are crowded, and what’s worse, radio signals degrade with distance. Facing a constant barrage of beeps and bits from an increasingly busy — and multinational — solar system, NASA and other space agencies are studying how to shore up and speed up space communications. A sort of multifaceted public works project is under way to get space telecommunications into, well, the space age.

#### 3] The counterplan doesn’t solve, destroys the ozone layer causing extinction, and causes a shotgun effect

Perry 17 [Kellen Perry, MAA from Mo Western, 10 Things That Would Likely Happen If We Nuked an Asteroid, https://www.ranker.com/list/what-if-we-nuked-an-asteroid/kellen-perry]

The Asteroid Might Just Get Warmer So much depends on what this asteroid is literally made of. Dr. Philip Plait, author of [Death from the Skies!: The Science Behind the End of the World](https://books.google.com/books?id=HoVwCIIspWIC&lpg=PT18&dq=What%20Would%20Happen%20If%20We%20Nuke%20an%20Asteroid&pg=PT17#v=snippet&q=might%20only%20warm%20it%20up&f=false), notes that an asteroid made almost entirely of solid iron—which is a lot of them, apparently—would not be destroyed by a nuke. What would happen? It would just get mad, basically. Instead of the iron asteroid exploding into a zillion little pieces, the nuke “might only warm it up a little.” It Could Actually Just Absorb the Damage As asteroids bump and grind against each other in space, they can sometimes turn into floating piles of rubble. Gravity keeps them in an asteroid shape, but they’re actually a porous blob of flying rocks. What happens if you try to blow up a porous blob of flying rocks? Dr. Philip Plait reports that asteroid expert Dan Durda explored that question in an experiment at the Southwest Research Institue in Boulder, CO. The results? Unlike a solid hunk of rock, the simulated flying rubble pile actually absorbs the damage of a blast. Durda says to imagine whacking a sandbag with a hammer. What happens? Thud. That’s it. Asteroid: 1. Humanity: 0. The Aftermath Could Destroy the Ozone Layer Experts also say that a nuked asteroid could totally destroy our already fragile ozone layer. There’s a ton of chlorine and bromine in an asteroid, apparently, which would rain down on the ozone layer and just vaporize it. As Captain Planet taught us, the ozone layer protects all animal and plant life on Earth from powerful, harmful UV rays. Because we all stopped using CFC-filled Aqua Net, as CNN reports, the ozone finally started healing in the summer of 2016. So for the sake of the ozone, going nuclear might have to remain a last-ditch option. The 'Shotgun Effect' Could Cause Massive Devastation What most likely comes to mind when you imagine nuking an asteroid is the so-called “shotgun effect,” which is a colorful way of saying that all those little baby asteroids born after the blast would just rain down on us, wreaking devastation across the globe with massive explosions of white light. It might be worse than just letting Mama Asteroid hit us intact, right? David Morrison, chief scientist for the Planetary Defense Team at NASA's Ames Research Center, says the “shotgun effect” is what would have actually happened at the end of Deep Impact. (Elijah Wood and Leelee Sobieski, in other words, should have been blind and on fire.) Specifically, Don Yeomans, senior research scientist at NASA's Jet Propulsion Laboratory, says that chunks smaller than 50 meters across would not survive entering the atmosphere, but chunks between 50 and 100 meters across would cause “an air blast explosion” and “considerable ground damage.” The meteor that exploded above the Russian city of Chelyabinsk in 2013, for example, was only roughly 20 meters in diameter, and it released energy equivalent to 500 kilotons of TNT, injuring more than 1,400 people. It Could Just Reassemble There’s also a chance that a blown-up asteroid could just reassemble, T-1000-style, back into (roughly) its original shape. Once it has pulled itself together, it could just come screaming down at the same speed it was before, like it was never nuked in the first place. How is this even possible? Well, if the asteroid is not a solid chunk of rock but is instead a cluster of rocks held together by gravity, then an explosion that doesn’t send the individual rocks flying at a fast enough speed (called “escape velocity”) won’t get the job done. At least one experiment at Los Alamos National Laboratory has shown that if we hit the right-sized asteroid with the right-sized blast at the right angle, this can be avoided, in theory, but it’s still a possibility.

#### 4] Perm—do the aff and give control to all nukes to a multilateral organization that will base the nukes on the lunar surface and all the other planks of the cp

#### Intrinsicness perms are justified against counterplans that fiat away the aff impact—a] it’s most reciprocal to testing the intrsincness of their counterplan and b] they also get infinite unpredictable counterplans that abuse utopian fiat.

#### 5] Counterplans must be actions---if not it’s a voter—they say countries can never launch a nuclear or conventional weapon which indefinitely fiats non action which is a] utopian fiat so it’s unpredictable and b] wrecks neg ground

### 1AR---AT North Korea PIC

#### 1] North Korea will strike---

#### A] They don’t solve accidental launches or false alarms

#### B] Military flex – they’ll launch terrible strategic weapons

Brewer '20 (Eric Brewer,; Eric Brewer is deputy director of the Project on Nuclear Issues with the Center for Strategic and International Studies. He previously served as director for counterproliferation on the National Security Council staff., ; 1-9-2020; "North Korean nuclear threat is here"; https://thehill.com/opinion/international/477514-north-korean-nuclear-threat-is-here, TheHill, accessed 2-6-2020; JPark)

Kim Jong Un has done a good job keeping the United States guessing about his next nuclear provocation. North Korea had threatened that it would pursue a more hardline “new path” by the end of last year unless the United States dropped its “hostile” policies toward the country. This was followed by promises of a “Christmas gift” in December, which was widely speculated to be the test of a more advanced long range missile system. Kim most recently announced that North Korea would no longer be bound by its own limits on long range missile and nuclear testing, and stated that “the world will witness a new strategic weapon” system soon. Some experts have been concerned that the United States is on the cusp of losing its last chance to prevent a real nuclear threat from North Korea. Former national security adviser John Bolton, for instance, tweeted only a few weeks ago that the United States needs to act fast before North Korea “has the technology to threaten the American homeland.” Others, though, including apparently some officials in the administration, view the lack of a “Christmas gift” as a demonstration of the success of President Trump. But these concerns miss the broader point that the nuclear threat from North Korea is already here. The days when North Korea was thought of having a handful of nuclear weapons that may not be deliverable with a missile are over. The bigger issue is how the United States and its allies need to adapt to rapidly expanding North Korean nuclear capabilities. While Trump is right that North Korea has not tested a long range missile since his first summit with Kim back in 2018, North Korea has been busily advancing other elements of its nuclear deterrent. Kim has continued to churn out more nuclear warheads and missiles during this interim period. According to one estimate in 2018, he had as many as 60 warheads, and his stockpile has likely grown since. The pace of North Korean missile testing also kept up with some of the most aggressive years on record. This included solid rocket missiles, which can be launched faster than their liquid counterparts thus reducing warning time, and missiles that could pose challenges to regional missile defenses, making American allies and regional bases more vulnerable. North Korea has also made progress in developing its own submarine launched ballistic missile. All these advances, made during a period when the relationship between Pyongyang and Washington was supposedly never better, show that Kim is not interested in disarming. Rather, he seeks a robust nuclear arsenal. This has all occurred in the past year and a half. North Korea conducted what it claimed was its second test of a thermonuclear weapon in 2017, upping the lethality of its force. That same year North Korea also carried out three intercontinental ballistic missile tests, demonstrating that the entire United States is already likely within range of a North Korean attack. While the precise reliability of its reentry vehicle remains unclear, as in the odds that the warhead would survive the intense conditions of flight, any American president will operate under the assumption that North Korea could strike the homeland during a crisis. This is no small victory for Kim. Coupled with these new technical developments, cleavages in the United States alliances with South Korea and Japan, and the critical relationship between Seoul and Tokyo, are creating a vulnerability that North Korea will likely try and exploit in 2020. For instance, American demands that South Korea, and reportedly Japan, drastically increase the amount they pay to support the American forces stationed on their soil has created a useless point of friction and has generated a backlash against the United States.

#### 2] can’t solve the aff---causes second-gen prolif from countries like soko and japan which increases miscalc and accidents---1AC egeland proves that only full elimination creates a nuclear taboo and ensures no one in the future arms.

Cross app this to other pics

### ---AT Invasion

#### Not gonna happen

Hansler et al 19 (Hansler, Jennifer, et al. “Top US Envoy on North Korea: 'We Are Not Going to Invade North Korea'.” CNN, Cable News Network, 1 Feb. 2019, [www.cnn.com/2019/01/31/politics/biegun-trump-north-korea/index.html.)//LK](http://www.cnn.com/2019/01/31/politics/biegun-trump-north-korea/index.html.%29//LK) [Accessed 2/1/20]

Washington (CNN)The State Department's top envoy on North Korea said Thursday that the US is not looking to invade that nation and seemed to strongly signal that the US would be willing to formally end the Korean War. "President Trump is ready to end this war," Steve Biegun said at Stanford. "It is over, it is done. We are not going to invade North Korea. We are not seeking to topple the North Korean regime." "I am absolutely convinced, and more importantly the President of the United States is convinced, that it's time to move past 70 years of war and hostility in the Korean peninsula. There's no reason for this conflict to persist any longer," Biegun added. The North Koreans have pushed for the US to commit to a formal peace treaty to end the decades-old conflict. North Korea's Kim Jong Un and South Korean President Moon Jae-in pledged to bring a formal end to the Korean War during their landmark summit last April. In his remarks at Stanford, Biegun also knocked down the prospect that the US would agree to withdraw troops from South Korea as a concession to Kim -- a move that some were concerned President Donald Trump might make. "We are not involved in any diplomatic discussion -- full stop -- that would suggest this tradeoff. It has never been discussed," Biegun said. Biegun also said that Kim committed to dismantle and destroy all of North Korea's plutonium and uranium enrichment facilities if the United States takes "corresponding measures." "Exactly what these measures are are a matter I plan to discuss with my North Korean counterpart during our next set of meetings," Biegun said. "From our side, we are prepared to discuss many actions that could help build trust between our two countries and advance further progress in parallel on the Singapore summit objectives of transforming relations, establishing a permanent peace regime on the peninsula, and complete denuclearization."

#### North Korea responds to US invasion with nuclear weapons---US conventional response will kill thousands.

Mosher '18 (Dave Mosher; Dave Mosher is a journalist with more than a decade of experience reporting and writing stories about space, science, and technology.; 1-28-2018; "North Korea and Donald Trump may be a recipe for accidental nuclear war — here's how it could happen"; https://www.businessinsider.com/north-korea-nuclear-weapons-miscalculation-preemptive-strike-trump-2018-1, Business Insider, accessed 2-12-2020; JPark)

One of the Bulletin's major concerns is about an "oops" moment of nuclear proportions involving the evolving nuclear arsenal of North Korean leader Kim Jong Un. "Hyperbolic rhetoric and provocative actions by both sides have increased the possibility of nuclear war by accident or miscalculation," the Bulletin said in a statement. Jeffrey Lewis, a nuclear policy expert at the Middlebury Institute of International Studies at Monterey, echoed this concern in an interview with Business Insider earlier this month. "I don't think the North Koreans would ever deliberately use the nuclear weapons unless they thought they were being invaded; that we might invade them, or they might think — wrongly — that we were invading them," said Lewis, who also publishes Arms Control Wonk, a site about nuclear arms control, disarmament, and nonproliferation. Here's how Lewis and others think North Korea, South Korea, the US, and possibly Japan could stumble into a limited nuclear exchange. The dangerous and fuzzy math of miscalculation us navy military aircraft carrier jet drill exercise south korea east sea march 2017 reuters RTX30XHD A US Navy F18 fighter jet takes off from the deck of U.S. aircraft carrier USS Carl Vinson during an annual joint military exercise called "Foal Eagle" between South Korea and US, in the Sea of Japan, South Korea, March 14, 2017. Kim Hong-Ji/Reuters Lewis, who has deeply studied East-Asian nuclear history, and especially that of China's, points out that the apparent growing competence of North Korea's nuclear and missile programs has likely made Kim and his advisors feel more secure on a day-to-day basis. But that doesn't mean there isn't a greater risk of panic within the **isolated nation** — and a grievous error. "It's called miscalculation, where one side makes a calculation that war is inevitable," Lewis said. "They don't think that they're starting a war, they just think they're getting a jump on the other." War history is peppered with instances of miscalculation and preemptive attacks, including Japan's deadly assault on Pearl Harbor during World War II. "The Japanese thought that they would probably lose. So you think, 'Why in the hell are they doing this?'" Lewis said. "They thought war was inevitable, and that their best chance of surviving was to go first." Lewis added this is the canonical case of miscalculation: "Where one side says, 'I don't want to do this, and I'm probably even going to lose if I do this, but I'm certainly going to lose if I do nothing. If I do nothing, I will certainly be attacked and I will certainly be destroyed. Whereas if I take this opportunity now, maybe I have only a 10% or a 20% or a 30% chance of getting out alive ... and then he pushes the metaphorical button." The scenario that Lewis, the Bulletin, and others who watch North Korean tensions with the US — as well as allies South Korea and Japan — deeply worry about is if Kim and his advisors incorrectly interpret military activity around the Korean Peninsula. "The North Koreans, when they write official statements about what their nuclear posture or doctrine is, the phrase they use is 'deter and repel.' So 'deter' means deter," Lewis said, noting that the country's nuclear arsenal is becoming its primary deterrent for conflict. "But 'repel' means if the deterrent fails, and the United States launches an invasion, they will use nuclear weapons to try and repel the invasion — to try to destroy US forces throughout South Korea and Japan, rather than letting the United States ... build up an invasion force and then roll in." Lewis says the trigger to such a crisis has become more likely with the election of President Trump and his use of bellicose tweets and statements targeting Kim. "Let's say we're doing a large military exercise with South Koreans, which always — to the North Koreans — looks like preparations for an invasion, where you're flooding forces in," Lewis said. "If that occur against a crisis, where the North Koreans actually think an invasion is likely, and the Trump says something that they misinterpret, you might get into spot where it's not that they wanted to use the nuclear weapons, but they concluded an invasion was likely, and this was their last best chance to repel. And that's what scares the shit out of me." The move would likely trigger a powerful US military response. To illustrate the consequences of a return attack, consider a different and "best-case" scenario of limited conflict with North Korea, where the US and its allies try to neutralize Kim's nuclear and conventional weapons — and **no nukes are used**. "[Suppose] in the space of, say, three hours, we could destroy all of the 8,000 to 10,000 hardened sites of North Korean artillery that Seoul, South Korea, is in range of," Kori Schake, who studies military history and contemporary conflicts at the Hoover Institution, said on a Nov. 17 episode of the Pod Save The World podcast. "Even in that [scenario] — which would be a level of military virtuosity unimaginable — you're still probably talking 300,000 dead South Koreans." Other estimates suggest millions could die, since Seoul (South Korea's capital) and its 25 million residents, including tens of thousands of US forces, are just 35 miles from the North Korean border.

### ---CBW Module

#### Framing issue – impact D is OP cause their ev says they’d use weapons NOW and Beattie is about FUTURE biotech manufacturing – the ev concedes weapons can’t naturally cause extinction and Noko doesn’t have biotech

#### No motive, no tech, and reports overexaggerate – be skeptical about the negative’s claims

**Parachini ’19** (Parachini, John. “Why We Should Be Skeptical About Recent Reports on North Korea's Biological Weapons Programs: 38 North: Informed Analysis of North Korea.” 38 North, 30 Jan. 2019, www.38north.org/2019/01/jparachini013019/. John Parachini is a senior international policy analyst and the former director of the Intelligence Policy Center at the RAND Corporation. He has led RAND projects on North Korean decision making, WMD proliferation, intelligence and strategic warning, emerging technology forecasting, the propensity of terrorists to acquire chemical, biological, radiological, and nuclear weapons; foreign terrorist fighter adaptations to counter measures; and scenario development for counterterrorism planning. Parachini has testified before both houses of Congress and published articles on terrorism and weapons proliferation in the Washington Quarterly, Arms Control Today, RAND Review, The Nonproliferation Review, Studies in Conflict and Terrorism, Prism, the Los Angeles Times, the San Francisco Chronicle, Newsday, USA Today, Prism and International Herald Tribune. Previously, Parachini served as the executive director of the Washington office of the Monterey Institute of International Studies’ Center for Nonproliferation Studies. Prior to joining the Monterey Institute, he was a senior associate at the Henry L. Stimson Center, where he focused on nonproliferation and arms control issues. He served in short assignments at the U.S. State Department. Parachini has taught at Georgetown University, George Washington University, the University of Southern California Washington Policy Center and the City University of New York’s Baruch College. Parachini holds a B.A. in philosophy from Haverford College; an M.A. in international relations from the Paul H. Nitze School of Advanced International Studies, Johns Hopkins University; and an M.B.A. from Georgetown University. Accessed 2/1/20.) //ZL

While the use of biological weapons (BW) can have great consequences and any state having them in their military arsenal is a major international concern, assessments are made about the extent and sophistication of North Korean BW capabilities that are based on very little information. A [recent news story](https://www.nytimes.com/2019/01/15/science/north-korea-biological-weapons.html) reviewing the danger that North Korea’s biological weapons capabilities may pose is a case in point. One former government official quoted in the report opined that North Korea is “Far more likely to use biological weapons than nuclear ones” and that “the program is advanced, underestimated and highly lethal.” These assertions may be true, but it is virtually impossible to know given North Korea’s secrecy and its track record of hiding military research and production facilities. US Assessments of North Korean BW Capabilities: Not as Definitive as Portrayed US government unclassified statements over the years about North Korea’s BW capabilities do not clarify our understanding. A [threat assessment](https://www.cia.gov/library/reports/general-reports-1/report-of-proliferation-related-acquisition-in-1997.html#North-Korea) by the Central Intelligence Agency (CIA) in 1997 indicated that North Korea was “capable of supporting a limited [biological weapons] effort.” Eight years later, in 2005, then CIA Director Porter Goss [reported](https://www.cia.gov/news-information/speeches-testimony/2005/Goss_testimony_02162005.html) that “North Korea has active [chemical weapons] and [biological weapons] programs and probably has chemical and possibly biological weapons ready for use. However, since 2014, the US Intelligence Community’s unclassified assessments on BW have dropped North Korea from the list of suspect programs. In 2014, US Director of National Intelligence (DNI) James Clapper only [singled out](https://www.dni.gov/files/documents/Intelligence%20Reports/2014%20WWTA%20%20SFR_SSCI_29_Jan.pdf) Syria as having “some elements” of a biological warfare program that had “advanced beyond the research and development stage.” One year later, Clapper [cited](https://www.dni.gov/files/documents/Unclassified_2015_ATA_SFR_-_SASC_FINAL.pdf) no state BW weapons programs of concern. The current DNI, Daniel Coats, also failed to mention any biological programs in his first World Wide Threat (WWT) [testimony](https://www.dni.gov/files/documents/Newsroom/Testimonies/SSCI%20Unclassified%20SFR%20-%20Final.pdf) before Congress in May 2017. In his 2018 WWT [statement](https://www.dni.gov/files/documents/Newsroom/Testimonies/2018-ATA---Unclassified-SSCI.pdf), he said “North Korea has a longstanding BW capability and biotechnology infrastructure that could support a BW program.” Coats does not say “North Korea has one of the most robust offensive bioweapons programs on the earth,” as John Bolton did in a 2002 speech. With much less bravado, Coats uses language that describes what could be the case in a very large number of countries, including North Korea. Assessing ROK and Defector Claims: Cause for Skepticism Many assessments of North Korea’s biological capabilities draw heavily from South Korean sources. These are legitimate sources of information, but like any stream of information, they are imperfect. In a 2012 white paper, the South Korean Ministry of National Defense (MND), [assessed](https://www.nti.org/media/pdfs/ROK_2012_White_Paper.pdf) that North Korea “likely has the capability to produce a variety of biological weapons including anthrax, smallpox, pest, francisella, tularensis, and hemorrhagic fever virus,” but provided no supportive documentation or evidence. In 2016, the MND [altered the language](http://www.mnd.go.kr/user/mndEN/upload/pblictn/PBLICTNEBOOK_201705180357180050.pdf) to “sources indicate that North Korea is capable of cultivating and producing various types of biological agents such as anthrax, smallpox, and pest on its own.”[[1]](https://www.38north.org/2019/01/jparachini013019/#_ftn1) Defectors are also important but not definitive sources of information; their reports present a worrisome picture, but many are based on indirect or secondhand knowledge, repeat what has appeared in the open press, or are implausible.[[2]](https://www.38north.org/2019/01/jparachini013019/#_ftn2) During 2003–04 and again in 2009, several defectors claimed that North Korea tested poisonous materials on political prisoners.[[3]](https://www.38north.org/2019/01/jparachini013019/#_ftn3) However, these charges refer to the use of chemicals on humans and not biological agents. In 2014, a group of scientists, Korea experts and human rights advocates attempted to verify these claims by speaking with South Koreans working with the North Koreans who made these allegations. The group was unable to corroborate the allegations and discovered inaccuracies discrediting the defectors’ claims.[[4]](https://www.38north.org/2019/01/jparachini013019/#_ftn4) There are reports that recent defectors have been vaccinated for smallpox and anthrax, which has led some to assert that the regime has weaponized these agents and is prepared to use them.[[5]](https://www.38north.org/2019/01/jparachini013019/#_ftn5) While we cannot not rule out the possibility, it is also possible that such vaccinations might be a routine practice of North Korea’s defensive program. The Soviet Union, Warsaw Pact nations and Iraq all vaccinated their forces as standard practice. The US military vaccinates its troops before deploying them to potential war zones. North Korean propaganda has claimed since 1951 that the US attacked it with BW during the Korean War. These claims lack credible evidence and have been [discredited](https://www.wilsoncenter.org/sites/default/files/cwihp_wp_78_china_false_bw_allegations_korean_war_march_16.pdf) by Soviet and Chinese documents. While some North Korean leaders may have known the truth about these allegations, others may not have. Continuing to depict the US as an evil power that may invade using all manner of terrible weapons fits with North Korea propaganda and inspires the North Korean people to prepare for it. North Korea also justifies its fear of other states’ biological capabilities by citing how in 2015 the US military acknowledged that it mistakenly sent live anthrax cultures to an American military base in South Korea.[[6]](https://www.38north.org/2019/01/jparachini013019/#_ftn6) Shortly after this mishap, Kim Jong Un [visited](http://www.38north.org/2015/07/mhanham070915) Pyongyang Bio-technical Institute. Photographic images from Kim’s 2015 visit do not exhibit the military security, safety precautions, and other common measures associated with facilities that could produce biological weapons. Biological weapons production facilities are not places one just strolls around without wearing protective gear. Furthermore, none of the countries that revealed and decommissioned their BW programs ever housed them in dual-use facilities. They were always located in heavily guarded military facilities. The Kim regime might have arranged the visit to sow concern about its potential capabilities and serve as a deterrent. What the images do reveal is that the regime evaded export sanction restrictions and obtained equipment that could be used perniciously. Even if North Korea has lab samples of smallpox and some of the other pathogens previously described, weaponizing them is a formidable scientific and engineering challenge. Assessments by the South Korean government estimate that North Korea has a dozen biological agents—if true, it is the exact number of BW agents the US produced and just one short of what the former Soviet Union produced.[[7]](https://www.38north.org/2019/01/jparachini013019/#_ftn7) The US and the Soviet Union spent huge sums of money on their BW programs over several decades, experiencing tremendous difficulties including accidents that resulted in some deaths. Despite its progress in various scientific domains, North Korea is unlikely to have matched the efforts of Cold War superpowers at the same time it was developing nuclear weapons and missile capabilities to deliver them. Moreover, smallpox was eradicated in 1979 and only the US and Russia store and handle the disease under World Health Organization supervision. The assumption of the international community has been that these are the only two remaining repositories of smallpox. A [recent report](https://www.nonproliferation.org/wp-content/uploads/2018/12/op43-dprk-international-scientific-collaborations.pdf) identifying scientific articles North Korean scientists co-authored with foreign scientists raised concern that the Kim regime is taking advantage of international scientific collaboration to boost its technological capabilities and in turn aid its BW programs. The report rightly raises concerns that some of these collaborative efforts violate various international sanctions. It also provides the basis for valuable follow-up research with the foreign co-authors to see how they perceived the implications of the collaboration. This report represents a much more rigorous approach to assessing North Korean capabilities than the statement by one North Korea watcher who opined that North Korea scientists must be experimenting “with gene editing that could enhance bacteria and viruses…because scientists love to tinker.”[[8]](https://www.38north.org/2019/01/jparachini013019/#_ftn8) Again, while this may be possible, more evidence is needed than just the notion that scientists love to tinker. The Need for Greater Transparency North Korea has publicly stated that it is a member of the Biological Weapons Convention when challenged about its biological weapons capabilities and has [asserted](https://www.reuters.com/article/us-northkorea-syria/north-korea-denies-chemical-weapons-link-with-syria-state-media-idUSKCN1GD6IZ) that it “does not develop, produce and stockpile chemical weapons and opposes chemical weapons themselves,” reflecting at least some acknowledgment that these are taboo weapons. Until there is greater transparency, however, on the regime’s dual-use facilities, its claims will be suspect. Although North Korea may not be willing to engage in any dialogue about its actual or latent BW, it might be willing to engage in some confidence building exchanges on medical, agricultural, and other issues that might provide some view on its dual-use facilities that create suspicions. Embarking upon scientific and medical exchanges on clear civilian issues might build important relationships that lead to additional transparency and understanding of the capabilities in biological science. Additionally, as a corollary to the dialogue on North Korea’s nuclear and missile programs, the US and South Korea could invite North Korea to join in a pledge never to use biological weapons. All three countries are parties to the international convention banning biological weapons (the BWC), so, in theory, this should be a diplomatic opportunity to get the three nations to reaffirm their commitment to the BWC. A few attempts to further transparency into North Korea’s biological activities could contribute to the goal of gaining more insight on whether it is complying with the terms of the BWC. If they have a clandestine biological program, such efforts may cause them to halt or dismantle it. As to whether and to what extent North Korea has a clandestine biological weapons program we will not know unless there is more transparency. Without more insight, the US and its allies may risk repeating some of the mistakes made about Iraq’s weapons of mass destruction. The Bottom Line on North Korea’s BW North Korea perceives itself as being on a constant war footing, has engaged in aggressive actions and weapons development programs, treats many of its people inhumanely and is a secretive state. Given how the regime has brutalized its people and inflicted violence on its opponents, human testing is imaginable and should be investigated. Yet, until there is more evidence, uncorroborated reports are not a sound basis for asserting North Korea has produced biological weapons. Does North Korea have infrastructure that could be used for biological weapons? Yes. Do we have clear evidence that it has produced and stockpiled these weapons and has nefarious ambitions? The best one can say is that some North Korea watchers fear that they do but the available open source evidence it is not so clear.[[9]](https://www.38north.org/2019/01/jparachini013019/#_ftn9) As one scholar noted in a historical review of state biological weapons programs “Intelligence assessments of foreign BW programs often have been wrong, sometimes overestimating, sometimes underestimating, and sometimes missing them altogether.”[[10]](https://www.38north.org/2019/01/jparachini013019/#_ftn10) Hence, DNI Coats’ cautious language in his most recent Worldwide Threat Assessment is by no means a [“slam dunk” moment](https://www.washingtonpost.com/blogs/in-the-loop/wp/2015/05/05/heres-why-ex-cia-director-tenet-said-iraq-would-be-a-slam-dunk/?utm_term=.1e9dbbf0df4a).

#### No impact

Michael C. Horowitz & Neil Narang 18. Horowitz is a professor of political science and the associate director of Perry World House at the University of Pennsylvania; Narang is an Assistant Professor in the Department of Political Science at the University of California, Santa Barbara. 02/22/2018. “Poor Man’s Atomic Bomb? Exploring the Relationship between ‘Weapons of Mass Destruction’ 1.” The Logic of American Nuclear Strategy: Why Strategic Superiority Matters, Oxford University Press.

Biological and chemical weapons may also have utility for the purposes of international bargaining—especially at lower levels of hostility—compared to nuclear weapons, because they are perceived as more usable. Despite their perception as inhumane, chemical weapons have been used in warfare several times in the last fifty years. Although biological weapons have not often been used, international perceptions of their importance have always been high. The United States maintained an active offensive BW research program until the 1970s. Revelations about Iraq’s biological weapons program after 1991, and about the former Soviet BW program, exposed the possibility of biological warfare to a broad international audience (Moodie 2001). Combined with widespread policy analysis of the risks of biological warfare, the credibility of biological weapons threats may be relatively high compared to nuclear weapons, due to perceptions that nations are unlikely to use nuclear weapons. This supposition is plausible, given that the blast radius—the area effected by the delivery of a single weapon—and the number of people likely to be killed, would be much higher for an average nuclear attack, in comparison to an average biological or chemical attack (Cordesman 2001). If chemical and biological weapons are perceived as more usable than nuclear weapons, and fulfill somewhat different missions, they might complement each other in a national military arsenal. Additionally, most countries do not view chemical and biological weapons as destructive enough to actually substitute for nuclear weapons. To this end, Zelicoff (2001) argues that the magnitude of destruction possible from chemical weapons means they are not WMD. 3 The historical record provides some support for this view. While the Germans achieved an important tactical breakthrough at the Second Battle of Ypres in 1915, once both sides in World War I developed their own chemical arsenals and defenses, the weapons ceased to be decisive. Also, weather conditions, such as sunlight and wind, can heavily influence the relative effectiveness of chemical weapons (Hammond Jr. 1999, 65). This makes them relatively unreliable in many cases. The difficulty of mating chemical weapons onto missiles also complicates perceptions of their relative effectiveness (Karp 1996). Even for the United States in World War I, when 26.8 percent of US casualties were due to chemical weapons, only 2 percent of those casualties died (Spiers 1994, 4). Attempted uses of chemical weapons in the post-Cold War era may also illustrate the difficulties involved in their delivery. When Aum Shinrikyo distributed sarin gas in the Japanese subway system in 1995, thousands were sent to the hospital but only twelve died (Tucker 2001). Similarly, biological weapons, while offering the possibility for massive destruction, also face a multiplicity of technical complications that potentially reduces their relative utility. 4 First, biological agents are unlikely to survive for a long time in the open atmosphere—meaning they have to be delivered rapidly. Second, changing weather conditions could undermine the effectiveness of a BW attack (Panofsky 1998). Third, biological weapons would either have to be directly placed in a position to cause destruction, such as the poisoning of a water supply, or sprayed in the air above a city. This is harder to do than many realize, and reduces the probability of a successful BW attack (Karp 1996). Finally, if proper warning and containment occur, passive defense measures can substantially reduce the impact of a BW attack (Office of Technology Assessment 1993, 52). For these reasons, it is perhaps not surprising that the empirical record is mixed on the perceived effectiveness of biological weapons. For instance, the United States abandoned its offensive biological weapons program in the early 1970s, believing biological weapons did not provide a relative edge in combat. Biological and chemical weapons also have limited utility in counterforce usages against infrastructure and strategic targets. Since they are predominantly useful for generating casualties, they cannot substitute for the destructive counter-force power of nuclear weapons. Together, the substantial technical limitations of biological and chemical weapons, and the distinct patterns in their historical usage on the battlefield (smaller scale and often domestic threats), suggest that to some degree the three weapons may be treated as complements in states’ overall weapons portfolios. If this supposition is accurate, the popular usage of the term WMD may obscure more than it clarifies, especially if it leads to a single WMD counter-proliferation policy under the assumption that the demand for each type is driven by the same factors. Hypothesis 1: Nuclear weapons and CBWs should function as complements: countries with a nuclear weapon will be equally, if not more likely to pursue CBWs (simultaneously), compared to countries without nuclear weapons

### ---Sanctions

#### Denuclearization repeals sanctions and brings international aid and investment.

Murphy 19 [Peter Murphy (has experience working in Iraq, the Philippines, South Korea, and the Pentagon. He has a bachelor’s degree in History from the University of Michigan, a Master of International Relations from Bond University in Australia, and a Master of Global Affairs and Policy from Yonsei Graduate School of International Studies in Korea. The opinions expressed here are his own and do not represent the U.S government or any other organization., 10-17-2019, "Why North Korea Can, and Should Give Up Their Nukes," Real Clear Defense, <https://www.realcleardefense.com/articles/2019/10/17/why_north_korea_can_and_should_give_up_their_nukes_114795.html>] KD

So North Korea can give up its nuclear program. This is why it should. North Korea can sufficiently ensure no regime change is forced upon it from an outside aggressor, but it must also ensure that regime change does not come from an internal collapse or massive civil unrest. Most of the North Korean population has endured decades of stagnated development and periodic famine. Even today, North Korea ranks dead last in economic freedom,[4] and nearly last on the Global Hunger Index.[5] Meanwhile, the proliferation of more diffuse information technology is providing the North Korean population greater access to contraband media than ever before, which is forcing the Kim regime to expend increasing effort attempting to control information flow to his people. This situation creates the potential for instability and poses a persistent threat to the regime. Against this backdrop, the more significant existential threat to the Kim dynasty comes from within North Korea. Kim Jong-un has promised to boost his country’s economic performance. That requires loosening the stifling sanctions, securing foreign aid, and attracting foreign investment. Kim Jong-un, and his father before him, managed to keep their hermit kingdom afloat with a trickle of aid and trade, primarily from benefactors such as China, while doing their best to skirt sanctions where they could. North Korea exports cheap labor and leverages illicit activities such as drug trade, counterfeiting, and cyber theft to bring in much needed cash. Yet these activities combined will never be enough for North Korea to realize a significant breakthrough in economic development, like so many of their Asian neighbors enjoyed during the twentieth century. In pursuit of that end, Kim Jong-un has emerged onto the international stage to try to make inroads with the global and regional leaders. Whether or not nuclear weapons are necessary for deterring an attack, nuclear weapons got Kim Jong-un a seat at the bargaining table, and they are his ultimate bargaining chip. Rather than small quid-pro-quo measures, like a moratorium on testing or a temporary dismantling of one facility in exchange for some fuel oil or bags of grain, North Korea could cash in its nuclear chip for an almost unlimited aid, development, and investment package from the surrounding countries, including the U.S. The goal of permanent, verifiable denuclearization has built up over the years into a massive prize in the minds of the U.S. and other negotiators. If North Korea can agree to permanent, verifiable measures, it can cash them in, piecemeal if necessary, reaping the economic benefits while continuing to increase its conventional, cyber, special ops, and other deterrent capabilities. This move would go further toward ensuring regime survival than returning to a policy of dangerous nuclear saber rattling that risks miscalculation. It could bring North Korea into the legitimate international community.

### ---China War Module

#### Defense---China’s rise is not zero sum with the US, and no US-China war

Heer 19 (Paul Heer, Served as National Intelligence Officer for East Asia in the Office of the Director of National Intelligence from 2007 to 2015, since served as Robert E. Wilhelm Research Fellow at the Massachusetts Institute of Technology’s Center for International Studies and as Adjunct Professor at George Washington University’s Elliott School of International Affairs. 1-8-2019. "Rethinking U.S. Primacy in East Asia." National Interest. https://nationalinterest.org/blog/skeptics/rethinking-us-primacy-east-asia-40972)

But this policy mantra has two fundamental problems: it mischaracterizes China’s strategic intentions in the region, and it is based on a U.S. strategic objective that is probably no longer achievable. First, China is pursuing hegemony in East Asia, but not an exclusive hostile hegemony. It is not trying to extrude the United States from the region or deny American access there. The Chinese have long recognized the utility—and the benefits to China itself—of U.S. engagement with the region, and they have indicated receptivity to peaceful coexistence and overlapping spheres of influence with the United States there. Moreover, China is not trying to impose its political or economic system on its neighbors, and it does not seek to obstruct commercial freedom of navigation in the region (because no country is more dependent on freedom of the seas than China itself). In short, Beijing wants to extend its power and influence within East Asia, but not as part of a “winner-take-all” contest. China does have unsettled and vexing sovereignty claims over Taiwan, most of the islands and other features in the East and South China Seas, and their adjacent waters. Although Beijing has demonstrated a willingness to use force in defense or pursuit of these claims, it is not looking for excuses to do so. Whether these disputes can be managed or resolved in a way that is mutually acceptable to the relevant parties and consistent with U.S. interests in the region is an open, long-term question. But that possibility should not be ruled out on the basis of—or made more difficult by—false assumptions of irreconcilable interests. On the contrary, it should be pursued on the basis of a recognition that all the parties want to avoid conflict—and that the sovereignty disputes in the region ultimately are not military problems requiring military solutions. And since Washington has never been opposed in principle to reunification between China and Taiwan as long as it is peaceful, and similarly takes no position on the ultimate sovereignty of the other disputed features, their long-term disposition need not be the litmus test of either U.S. or Chinese hegemony in the region. Of course, China would prefer not to have forward-deployed U.S. military forces in the Western Pacific that could be used against it, but Beijing has long tolerated and arguably could indefinitely tolerate an American military presence in the region—unless that presence is clearly and exclusively aimed at coercing or containing China. It is also true that Beijing disagrees with American principles of military freedom of navigation in the region; and this constitutes a significant challenge in waters where China claims territorial jurisdiction in violation of the UN Commission on the Law of the Sea. But this should not be conflated with a Chinese desire or intention to exclusively “control” all the waters within the first island chain in the Western Pacific. The Chinese almost certainly recognize that exclusive control or “domination” of the neighborhood is not achievable at any reasonable cost, and that pursuing it would be counterproductive by inviting pushback and challenges that would negate the objective. So what would Chinese “hegemony” in East Asia mean or look like? Beijing probably thinks in terms of something much like American primacy in the Western Hemisphere: a model in which China is generally recognized and acknowledged as the de facto central or primary power in the region, but has little need or incentive for militarily adventurism because the mutual benefits of economic interdependence prevail and the neighbors have no reason—and inherent disincentives—to challenge China’s vital interests or security. And as a parallel to China’s economic and diplomatic engagement in Latin America, Beijing would neither exclude nor be hostile to continued U.S. engagement in East Asia. A standard counterargument to this relatively benign scenario is that Beijing would not be content with it for long because China’s strategic ambitions will expand as its capabilities grow. This is a valid hypothesis, but it usually overlooks the greater possibility that China’s external ambitions will expand not because its inherent capabilities have grown, but because Beijing sees the need to be more assertive in response to external challenges to Chinese interests or security. Indeed, much of China’s “assertiveness” within East Asia over the past decade—when Beijing probably would prefer to focus on domestic priorities—has been a reaction to such perceived challenges. Accordingly, Beijing’s willingness to settle for a narrowly-defined, peaceable version of regional preeminence will depend heavily on whether it perceives other countries—especially the United States—as trying to deny China this option and instead obstruct Chinese interests or security in the region.

#### Pickrell’s false---we’re out of the worst of the SCS and a fucking *trade war* too and still zero conflict---proves relations are resilient

#### Impact’s also not existential---there are no nukes!

### ---2AR Noko Offensive

#### They say North Korea’s nuclear arsenal is solely defense

#### 1] Doesn’t assume the world of the CP---in the status quo yes it might be defensive but that’s because it’s trying to stay afloat when it’s massively outnumber by a bunch of other nuclear powers that hate it---in the world of the CP, North Korea’s *literally the only country with nukes in the world*---yes they have no outside threats but that doesn’t mean it’ll put them on the shelf, but it means they’ll attack other countries with it in pursuit of its regional and global ambition

### 1AR---AT Modernization

#### Tech innovations like AI ensure terrorists and hackers can keep up---unreliable for cyberdefense but not relevant for hackers

**Ashford 2/21** (Ashford, Warwick. “AI a Threat to Cyber Security, Warns Report.” Computer Weekly, 21 Feb. 2018, [www.computerweekly.com/news/252435434/AI-a-threat-to-cyber-security-warns-report](http://www.computerweekly.com/news/252435434/AI-a-threat-to-cyber-security-warns-report).) //ZL

The [Malicious use of artificial intelligence](https://maliciousaireport.com/) report examines the potential security threats from malicious uses of artificial intelligence technologies, and proposes ways to better forecast, prevent and mitigate these threats. “Because cyber security today is largely labour-constrained, it is ripe with opportunities for automation using AI. Increased use of AI for cyber defence, however, may introduce new risks,” the report warns. As AI capabilities become more powerful and widespread, the report predicts an [expansion of existing threats](https://searchcio.techtarget.com/blog/TotalCIO/AI-attacks-are-coming-soon-to-a-network-near-you) by making it easier and cheaper to carry out cyber attacks, the introduction of new threats as attackers [exploit vulnerabilities in AI systems](https://searchhealthit.techtarget.com/tip/Hacking-and-fraud-escalate-concerns-about-AI-in-healthcare) used by defenders, and the increased effectiveness of existing attacks through automation, for example. “The use of AI to automate tasks involved in carrying out cyber attacks will alleviate the existing trade-off between the scale and efficacy of attacks,” the report said. As a result, the researchers believe the threat from labour-intensive cyber attacks such as spear phishing will be increased. They also expect new attacks that exploit human vulnerabilities by using speech synthesis for impersonation, for example. Malicious actors have natural incentives to experiment with using AI to attack the typically insecure systems of others, the report said, and while the publicly disclosed use of AI for offensive purposes has been limited to experiments by “white hat” researchers, the pace of progress in AI suggests the likelihood of cyber attacks using machine learning capabilities soon. “Indeed, some popular accounts of AI and cyber security include claims based on circumstantial evidence that AI is already being used for offence by sophisticated and motivated adversaries. Expert opinion seems to agree that if this hasn’t happened yet, it will soon,” the report said.

### 1AR---AT Aliens PIC

#### 1] Circumvention---governmental disjunct means that there’s always the risk of a nuke being launched especially amidst war---they’ll just say they were “trying” to kill an alien.

#### 2] No aliens….? No evidence

#### 3] Accidental launch

#### 4] If there are aliens, killing them is bad.

Tough ‘86 (Allen, Ph.D. University of Toronto, “What Role Will Extraterrestrials Play In Humanity's Future?” http://www.ieti.org/articles/1986.htm)

Helping us reduce (over time) our worst risks and dangers is a second type of potential help. In the childhood analogy, we might build a fence or gate so that the child cannot reach the busy street or we might teach the child to stay off the road. Extraterrestrials are very likely to provide this type of help when they cannot handle a future danger cheaply and easily through instant protection. They also may provide it when the civilization becomes mature enough to accept and implement extraterrestrial suggestions. As human youngsters: mature, for example, we gradually help them gain more and more of the knowledge, skill, and responsibility necessary for independent safety. There is less and less need for our constant monitoring, our alert readiness to intervene, and our efforts to safely "child-proof" their home. Three sorts of approaches might be used to help us, over time, reduce our worst risks and dangers: 1. Advanced extraterrestrials may perform some invisible action: behind the scenes in order to eliminate certain risks. Human beings might be unaware that extraterrestrials were influencing certain events, phenomena, miracles, objects, widespread beliefs and feelings, or key decisions of world leaders. We might not notice if they rendered inoperable the detonation or navigation system of every nuclear weapon at the time of its installation. We might not realize why our experiments to develop one particularly deadly agent for biological warfare always seemed to fail. We might not know that a giant asteroid or comet abruptly changed course long before astronomers realized that it was on a collision course with Earth. Highly advanced beings could produce these various sorts of influence in several ways: electronically from a great distance, directly through their presence here in our Solar System, or indirectly by changing the minds or behaviour of certain key individuals.

### 1AR---AT NPT

#### 1] Can’t solve the aff---arms control agreements are unenforceable

Knopf 18—Jeffrey W. Knopf, professor at the Middlebury Institute of International Studies at Monterey, chair of the M.A. program in Nonproliferation and Terrorism Studies (“After diffusion: Challenges to enforcing nonproliferation and disarmament norms,” *Contemporary Security Policy*, Vol. 39, Issue 3, February 9th, pages 367-398, Available Online)

Social constructivists focus on how norms are created, spread, and influence actors (Finnemore & Sikkink, 2001). The processes that lead to norm diffusion mostly involve actors embracing norms voluntarily. If there is an element of coercion in the process, it is typically the desire to avoid the social sanction of others’ disapproval, as might happen when NGOs engage in “naming and shaming” tactics. The constructivist literature has devoted less attention to what happens when an actor actively defies a norm, meaning that the rest of the world must decide whether to attempt norm enforcement. When it comes to norms about nuclear weapons, though, the enforcement issue cannot be dodged. There are cases where states have violated their existing legal commitments or else acted contrary to emerging global norms. This makes it important to think about how norm enforcement might function in the context of the world’s attempts to lessen the dangers posed by nuclear weapons. This article has reviewed potential obstacles to enforcing nuclear nonproliferation and disarmament norms. It identifies six challenges. Three of these reflect generic problems in world politics. First, an unfavorable distribution of power can leave those actors that wish to enforce norms with insufficient enough leverage to make enforcement effective. Second, the logic of collective action can encourage free riding that undermines efforts at enforcement. Obstacles to collective action can also emerge if ambiguities about norm requirements and the standards for judging compliance lead to disagreements about whether norm enforcement is even required. And third, other national interests can conflict with and ultimately trump interests in norm enforcement. Three other challenges arise from specific features of the nuclear nonproliferation and disarmament regime. First, membership in the NPT is not universal. This leaves the international community without a solid source of legitimacy if it wants to enforce nonproliferation or disarmament on the NPT holdout states. Second, the requirements of nonproliferation and disarmament norms can come into conflict. A decision to give priority to enforcing one of these norms may come at the expense of efforts to enforce the other. Finally, the common enforcement device of tit-for-tat is, in its literal interpretation, not a desirable option when dealing with nuclear weapons. If one state “defects” by developing nuclear weapons, supporters of nonproliferation and disarmament do not want to see other states engage in a retaliatory defection by starting their own nuclear weapons programs. This means enforcement must rely on mechanisms other than a mirror-imaging tit-for-tat. The option of use of force seems unlikely to get international support except in the most extreme of circumstances, leaving sanctions as the most likely alternative. Sanctions can have an influence, but it is hard to mobilize international support for sanctions that are both timely enough and strong enough to make a difference. In addition, sanctions are only an option for enforcing nonproliferation norms; on the disarmament side, the most likely enforcement measure will actually be a withholding of support for measures to strengthen nonproliferation. This only deepens the trade-off created by norm conflicts.

#### 2] Norms fail---security outweighs

Knopf 18—Jeffrey W. Knopf, professor at the Middlebury Institute of International Studies at Monterey, chair of the M.A. program in Nonproliferation and Terrorism Studies (“After diffusion: Challenges to enforcing nonproliferation and disarmament norms,” *Contemporary Security Policy*, Vol. 39, Issue 3, February 9th, pages 367-398, Available Online)

In some cases, states choose to actively defy norms. In other cases, they may not comply for reasons having to do with limited capacity or incomplete understanding of their obligations. Such situations raise the question of whether to seek to enforce compliance. All efforts to enforce norms in global politics, however, run into certain challenges. Three potential problems are not unique to nuclear weapons issues. They reflect generic challenges in an international system that lacks a central authority to enforce agreements. This section highlights the following problems: power differentials, collective action problems, and conflicting interests. Relative power issues Norm enforcement does not require and usually does not involve the use of military force, but the fact that the word “force” can be found inside the term “enforcement” conveys something of the flavor of the exercise. Enforcement often involves an exercise of power in an effort to pressure an actor into complying with the norm in question. The instruments used might involve economic or diplomatic sanctions (discussed more fully below), or even a rhetorical effort to “name and shame” a norm violator. But whatever means are employed, they are likely to work only if they give the actors aiming at norm enforcement a degree of leverage over the target. In addition, if the initial enforcement effort does not work, there is also a potential for escalation that could eventually lead to a decision to apply military force. Hence, even when use of force is not ostensibly on the table, it can still lurk in the background. Given the importance of finding a source of leverage and the possibility, however dim, of eventual use of force, power will often be an important consideration in efforts at norm enforcement. And, as realists (e.g., Morgenthau, 1948 Morgenthau, H. (1948). Politics among nations: The struggle for power and peace. New York, NY: Alfred A. Knopf. [Google Scholar]) have long pointed out, power is relative. This makes it hard for a relatively weaker actor or set of actors to enforce norms against a stronger actor. Other things being equal, the more powerful the target (or the target’s allies), the more difficult it will be to enforce norms. In addition, even stronger states with relative power advantages can sometimes be deterred if a weaker target state possesses capabilities to impose costs greater than stronger states are willing to pay on behalf of enforcement. This means ostensibly weaker actors can in some cases resist norm enforcement if they have useful instruments of power at their disposal. This can be seen in the reluctance of the United States and other actors to initiate preventive military strikes against either Iran or North Korea. Although the United States was willing to lead a coalition in invading Iraq in 2003 over suspicions that country had covert weapons of mass destruction (WMD) programs, greater caution has prevailed in dealing with the other charter members of President Bush’s “axis of evil.” This is true even though there is much clearer evidence for nuclear activities on the part of Iran than there was for Iraq before the 2003 invasion, while North Korea has conducted actual tests of nuclear weapons. Iran is a larger country with a more capable military than Iraq possessed, and it also has the ability to use proxies such as Hizbollah to strike back in response to an attack on its nuclear facilities. For these reasons, even though some analysts advocated a military strike against Iran, the United States ultimately held back from such a course of action and pursued a diplomatic resolution instead.33 U.S. presidents since Bill Clinton have also contemplated military action against North Korea. But the calculation here is even more unpromising. North Korea has the ability to strike the South Korean capital Seoul with thousands of artillery pieces. And more recently, it has also seemingly achieved the ability to hit the continental United States with a nuclear-tipped missile.44. Since coming to office, the Trump administration has rhetorically at least suggested a greater U.S. willingness to use force against North Korea. So far, however, President Trump has held back from ordering military action, and the administration’s main effort has gone into convincing China to apply greater economic pressure in hopes of avoiding the need to actually take military action. This again shows that relatively weaker states, as long as they have significant countercoercion capabilities, can deter the use of military force as a tool for enforcing compliance with nonproliferation. It is possible that the United States will launch a preventive strike at North Korea in the future, but if this happens it will most likely result from intelligence that detects preparations for a North Korean attack; the main motivation will be to prevent North Korean use of nuclear arms rather than to reverse its development of a nuclear capability. The relative power problem looms even larger when it comes to enforcing disarmament rather than nonproliferation norms. Many states express dissatisfaction with the pace of nuclear disarmament efforts by the five NPT nuclear weapon states (Arms Control Association, 2015 Arms Control Association. (2015, May 22). But all five are major powers. They are the permanent members (P-5) of the UN Security Council, with veto power. And, of course, they have nuclear arsenals. Non-nuclear weapon states fundamentally lack the power to overtly coerce the nuclear weapon states into moving faster toward nuclear abolition. As I will discuss below, their most likely effort to pressure nuclear weapon states on disarmament would instead involve withholding cooperation with nonproliferation efforts favored by the nuclear weapon states. At present, however, the main effort by non-nuclear weapon states involves a different kind of tactic. Following the 2010 NPT Review Conference, a group of states organized a series of conferences to draw attention to the humanitarian consequences of nuclear weapons use. These states worked with a coalition of NGOs, most notably the International Campaign to Abolish Nuclear Weapons (ICAN). The organizers of the humanitarian initiative hoped the effort would lead to a renewed commitment at the 2015 NPT Review Conference to making further progress toward Article VI obligations on nuclear weapons elimination. After the 2015 conference collapsed in failure, not even agreeing on a final document, the humanitarian impact movement shifted its focus to negotiating a new international treaty calling for nuclear disarmament. In July 2017, the UN General Assembly adopted a Treaty on the Prohibition of Nuclear Weapons, with 122 member states voting in favor (Mukhatzhanova, 2017 Mukhatzhanova, G. (2017). The Nuclear Weapons Prohibition Treaty: Negotiations and beyond. Arms Control Today, 47(7), 12–19. [Google Scholar]; Potter, 2017 Potter, W. (2017). Disarmament diplomacy and the nuclear ban treaty. Survival, 59(4), 75–108. doi: 10.1080/00396338.2017.1349786[Taylor & Francis Online], [Web of Science ®], [Google Scholar]). The main supporters of the ban treaty do not frame it as an effort at enforcement of disarmament norms. Instead, they describe it as an effort to strengthen those norms. Beatrice Fihn, the executive director of ICAN, says the first priority is “to build a strong norm” by getting more countries to sign and ratify the treaty (Arms Control Today, 2017 Arms Control Today. (2017, December). “We’ve done something quite significant”: A conversation with ICAN’s Beatrice Fihn. Arms Control Association, 47(10), 18–20. [Google Scholar], p. 20). The current nuclear-possessor states, both inside the NPT and out, refused to participate in the talks, meaning that—barring a significant change of heart on their part—the treaty will not lead to the actual elimination of nuclear arms. This makes it clear that the treaty is meant to be symbolic and part of an effort to develop a stronger disarmament norm. On disarmament, the prevailing strategy involves norm construction, not enforcement, a strategy that reflects the difficulty of enforcing a norm on reluctant nuclear powers. Below, when it discusses tit-for-tat, this article will consider the possible effects of the ban treaty on nuclear weapon state behavior, but the key point here is simply that this initiative was not launched with the idea that it is an attempt to enforce disarmament norms. In a world where power matters, efforts at norm enforcement will be challenging when the actor or actors not complying with norms enjoy an advantage in relative power or have substantial countercoercion capabilities. This is the first generic challenge that can complicate enforcement of nonproliferation and disarmament norms.

### 1AR---AT Hurricanes PIC

#### 1] Perm do the plan and do all the planks of the CP with the 7 other nuclear states---limited intrinsicness is key to preventing artificial competition---the perm proves the net benefit isn't an opp cost cuz they haven’t proven the aff is bad

#### 2] Alt solvency---other countries can nuke the hurricanes instead

#### 3] Circumvention---leaders say nukes are for hurricanes and then use them for other purposes like escalation

#### 4] Fallout spreads and causes radiation poisoning

Woodward 19 [Aylin Woodward is a science and environment reporter for Business Insider. AB from Dartmouth in biological anthropology and government. Graduated UC Santa Cruz Science Communication program.] “Here’s What Would Happen if You Nuked a Hurricane.” Science Alert. August 27, 2019. <https://www.sciencealert.com/here-s-what-would-happened-if-you-nuked-a-hurricane-like-trump-reportedly-suggested> TG

The NOAA article also says that if we were to nuke a hurricane, radioactive fallout would spread far beyond the bounds of the hurricane. "This approach neglects the problem that the released radioactive fallout would fairly quickly move with the tradewinds to affect land areas and cause devastating environmental problems," the authors wrote. [Fallout](https://www.businessinsider.com.au/how-survive-nuclear-attack-fallout-radiation-2017-6) is a mixture of radioisotopes that rapidly decay and emit gamma radiation---an invisible yet highly energetic form of light. Exposure to too much of this radiation in a short time can damage the body's cells and its ability to fix itself---a condition called [radiation sickness](https://www.businessinsider.com.au/how-to-lessen-the-effects-of-radiation-poisoning-from-a-nuclear-disaster-2011-3). Land contaminated by fallout can become uninhabitable. After the Chernobyl nuclear power plant blew up in 1986 and spread toxic radiation into the air, people were forced to abandon a 1,500-square-mile area. If the US were to attempt to disrupt a hurricane with a nuke, radioactive fallout could spread to island nations in the Caribbean or states bordering the Gulf of Mexico.

#### 5] It takes too much energy

Woodward 19 [Aylin Woodward is a science and environment reporter for Business Insider. AB from Dartmouth in biological anthropology and government. Graduated UC Santa Cruz Science Communication program.] “Here’s What Would Happen if You Nuked a Hurricane.” Science Alert. August 27, 2019. <https://www.sciencealert.com/here-s-what-would-happened-if-you-nuked-a-hurricane-like-trump-reportedly-suggested> TG

Hurricanes are extremely powerful: A fully developed hurricane releases the same amount of energy as the explosion of a 10-megaton nuke every 20 minutes, [the NOAA article says](https://www.aoml.noaa.gov/hrd/tcfaq/C5c.html). That's more than 666 times bigger than the "Little Boy" bomb that the US dropped on Hiroshima, Japan, in 1945. So in order to match the energetic power of a hurricane, there would need to be almost 2,000 "Little Boys" dropped per hour as long as the hurricane remained a hurricane. Even the largest nuke ever detonated---a 50-megaton hydrogen bomb known as Tsar Bomba, which the Russians detonated over the Arctic Sea in 1961---wouldn't be enough. What's more, the NOAA article says, once an explosive's initial high-pressure shock moves outward, the surrounding air pressure in the hurricane would return to the same low-pressure state it was in before. And the shock wave that a nuke produces travels faster than the speed of sound.

### 1AR---AT Asteroids PIC

#### 1] Circumvention---governmental disjunct means that there’s always the risk of an ICBM being launched especially amidst war---causes space mil

James Green 19. Professor of Public International Law, University of Reading. “Nuclear weapons might save the world from an asteroid strike---but we need to change the law first.” The Conversation. 4/24/2019. https://theconversation.com/nuclear-weapons-might-save-the-world-from-an-asteroid-strike-but-we-need-to-change-the-law-first-115865

So what? If it came to a choice between legal niceties and saving humanity from extinction, there wouldn’t be much of a choice at all: law shouldn’t be a global suicide pact. Indeed, one nuclear power, Russia, has already indicated that---if that asteroid appeared---it likely would opt for “launch first, litigate second”. But ignoring the law is always a dangerous business, and it’s not hard to envisage nuclear powers using the vague threat of “asteroids” as a pretext for developing new warheads, or even for launching nukes into space. And if they do so in unapologetic violation of international law, they’ll also circumvent all the checks and balances that the law can provide. That threat is maybe more worrying than the threat of some hypothetical space rock. In a major article just published in the Hastings International & Comparative Law Review, I argue that international law needs to work out a way to thread this needle. The law has to protect us from states using asteroids as a pretext for dodging nuclear disarmament obligations, or---gulp---nuclear aggression in space, while at the same time providing for a limited, safeguarded exception that would allow for multilateral nuclear planetary defence, should it ever come to pass that we need the “nuclear option” to save ourselves. A solution? As such, I propose either treaty amendment (or, more likely, the adoption of additional protocols) to carve out a new, bespoke legal exception for the use of nuclear weapons in space, in instances where a large collision-course NEO was identified and verified, and where the balance of independent scientific option clearly supported a nuclear response. At the same time, to promote certainty, protect against abuse and increase the chances of success through the pooling of expertise and resources, I also argue for the creation of a new multilateral decision-making and oversight body, composed of all states (or as many states as possible), and which additionally included direct input from independently appointed scientific experts and organisations. The aim is that the new body would be equipped both to stop countries misusing the new legal exception to develop militarised nuclear space programmes, while at the same time avoiding the deadlock issues associated with existing institutions (such as, for example, the UN Security Council) if humanity has to act quickly to avoid going the way of the dinosaurs. All of this would be extremely complex (legally, politically and financially) and would take a huge amount of time to set up. But when it comes to the “asteroid threat”, time is not an issue. Until it is. So I suggest we get started now. The political and scientific context has changed since 2013 but the legal context is still stuck in the thinking of the 1960s---and we need to update it. If we don’t, we really could risk Armageddon.

#### 2] Can’t solve accidental launch---

#### 3] Perm---do the aff and give control of anti-asteroid nukes to the UN---even if anti-asteroid nukes are good, no reason why states need to have them. Intrinsicness perms are justified against PICs---anything else gives the aff 0 leverage and skews strategy.

#### 4] Asteroids aren’t existential, squo methods solve, low probability and magnitude and best research proves nukes don’t solve and create more debris.

Resnick 19 (Brian Resnick, Senior Science Reporter- Brian Resnick is a science reporter at Vox.com, covering social and behavioral sciences, space, medicine, the environment, and anything that makes you think "whoa that's cool." Before Vox, he was a staff correspondent at National Journal where he wrote two cover stories for the (now defunct) weekly print magazine, and reported on breaking news and politics. 3-7-2019 19 What would it take to blow up an asteroid? The force of 10 million atomic bombs. Vox <https://www.vox.com/science-and-health/2019/3/7/18251559/asteroid-blow-up-how-to>, DOA 12-12-2019) arnavvs

This is the asteroid Eros. It has a diameter of around 16.8 kilometers and would be very, very hard to destroy. NASA/JPL If you were a moviegoer in the late ’90s, I wouldn’t blame you for thinking the best way to deal with an apocalyptic-size asteroid hurtling toward Earth is to blow it to smithereens. After all, that’s how Bruce Willis saved the world in Armageddon. Saving the planet ought to be as easy as the press of a thermonuclear button, right? Not so fast. For one, experts in planetary protection (a real thing) say it would be a lot simpler to just push a deadly incoming asteroid into a safer orbit. This is a real consideration because NASA is keeping its eye on about 2,000 ”potentially hazardous” objects that come within 4,647,790 miles of Earth and are large enough to cause damage. But also there’s this: New research suggests it’s really, really difficult to pulverize an asteroid. How hard can it be to destroy a 10-kilometer-wide asteroid? Kaliat Ramesh is a professor of mechanical engineering and material science at Johns Hopkins University. And recently, he and colleagues published a paper in the planetary science journal Icarus that basically asked the question: What would it take to break up an asteroid? The answer to that question matters — but not so much for what it means for the future of life on Earth. Instead, it helps us better understand what asteroids look like, and how they evolve over time as asteroids collide with one another. First off, there’s no way to do this sort of exercise without making some assumptions. While we know that asteroids are mainly made up of iron and rock, we have limited data on their surface and interior composition. Any rock’s vulnerability to destruction is highly dependent on how many cracks, pores, and other such deformities exist on its surface. But Ramesh and his colleagues were able to take the results of experiments on Earth — experiments involving very high-speed cameras studying how rocks here on Earth fissure and crack when hit with a projectile — and extrapolate them up, accounting for the low-gravity environment of the space around an asteroid. If you die via asteroid, this is how it will happen Smashed, fissuring rocks are a complicated thing to model in a computer. When cracks form on the surface, “you suddenly you get this collective behavior of cracks all trying to [move] really fast, all of them interacting with each other,” Ramesh says. How quickly those numerous cracks spread and form helps determine the resiliency of the rock. So it’s a massively complicated process to predict how a collision will change or deform a rock in space. These limitations aside, Ramesh and his colleagues determined that, well, it’s going to be very hard to destroy an asteroid — near impossible. Even if there is an asteroid hurtling toward Earth, it wouldn’t make a lot of sense to launch the world’s entire nuclear arsenal at it in the hopes of blowing it up. “We would estimate that it would take energy equivalent to about 200 gigatons of TNT to fully disrupt an asteroid with a 20-kilometer diameter,” Ramesh says. (This is roughly double the estimated size of the asteroid or comet that is believed to have killed the dinosaurs. But there is some evidence that Earth has been struck by a massive 20-kilometer asteroid in the past.) 200 gigatons of TNT (dynamite) contains roughly the energy equivalent of about 10 million Hiroshima-size bombs. It’s also about 10 times more energy than previous estimates of what it would take to destroy an asteroid of this size. (This new estimate takes into account the complex interactions between small cracks that form on the asteroid’s surface upon impact, which actually make for a more impact-resistant object.) The most powerful bomb in human creation had an explosive yield of 50 megatons. You’d need the power of 4,000 of those to annihilate a 20-kilometer-wide asteroid. But even then, you couldn’t just launch 4,000 nuclear weapons to destroy the asteroid. That energy would need to be delivered with a particular momentum (that is, motion confined to a particular mass). Which is to say: you’d probably need to confine the force of 4,000 of the most powerful nuclear bombs into a projectile. This research really isn’t about destroying asteroids. It’s about what to expect when we visit them. The tremendous amount of energy needed is why we wouldn’t want to blow up an asteroid to save Earth. But Ramesh stresses that his research isn’t exactly about finding out how to destroy an asteroid on a collision course with Earth. He’s well aware it would be a lot easier just to push an asteroid out of the way. (Which is something NASA has some preliminary plans for.) In the paper, Ramesh and his colleagues weren’t modeling what a nuclear explosion would do to an asteroid. No, they were modeling something that happens naturally: What happens when one smaller asteroid slams into a larger one, as has happened continually over the life span of the solar system? The answer to that question helps us understand what asteroids might look like if we were to explore more of them, and anticipate what might happen if we wanted to mine them (possibly with the use of explosives). Asteroids are rich sources of metals, minerals, and even water. They may one day provide the raw ingredients to refuel spaceships without the need to return to Earth. Eventually, “humans and robots are going to go to an asteroid, and we want some sense of what we’re going to see when we get there,” Ramesh says. Some robots already have. NASA’s OSIRIS-REx is currently orbiting the asteroid 101955 Bennu, with the eventual goal of collecting material from its surface and returning it to Earth in 2023 (a similar Japanese mission brought asteroid dust back to Earth in 2010). NASA’s Dawn spacecraft flew by the dwarf planets (which also can be thought of as very large asteroids) Ceres and Vesta in 2012 and 2015, respectively. NASA has laid the groundwork for an eventual “asteroid redirect” mission. The plan: A robot spacecraft will land on an asteroid, grab a boulder, and bring it into orbit around the moon. Asteroids — like the ones humans might want to explore or mine one day for raw materials — have been subjected to such collisions over the life of the solar system. By imagining how asteroids collide and are destroyed (or not), we can better understand their composition and surface features, and how they evolve over time as more collisions take place. “We wanted to predict what we’d find on a surface of an asteroid if we’d go visit one,” Ramesh says. When a large asteroid is pummeled by a smaller one, gravity keeps much of it together One fascinating thing that happens when an asteroid is hit but is not destroyed is that much of the rubble that flies off after the collision is eventually pulled back toward the intact core of the asteroid via gravity. We could very well find asteroids that have this rubble loosely attached at the surface (and are therefore easy to mine). Here’s an animation of this recollection process generated by the researchers’ model. Charles El Mir/Johns Hopkins University These calculations also help us understand that if we were to destroy at least part of an asteroid, we could also be creating more hazardous objects. The good news is that asteroids that pose an existential threat to life on Earth only strike once every 500,000 years or more. Even the 140-meter-wide asteroids that could destroy cities and regions hit once every 10,000 years. And the risk of even being injured from a 20-meter object — like the one that exploded over Chelyabinsk, Russia, in 2013 and hurt nearly 1,500 people — is tiny. So instead of being worried about asteroids killing us, we should look at them in wonder. Asteroids are fascinating because they represent the leftover building blocks of the planets in our solar system. “You have all these [asteroid] bodies that have been around for a few billion years,” Ramesh says. “For us to understand the processes that drive these things over time, that is tied into the history of where we come from, and it’s also tied into our future, when we get out into the solar system and try to use them.”

#### Debris collisions cause 5 billion deaths

Zaitsev 09 (Yuri Zaitsev, academic adviser with the Russian Academy of Engineering Sciences, ‘9, “Russia to develop nuclear-powered spacecraft for Mars mission” [http://en.rian.ru/analysis/20091111/156797969.html)//RCT](http://en.rian.ru/analysis/20091111/156797969.html%29//RCT) arnavvs

Soviet and U.S. nuclear spacecraft programs were marred by a number of accidents. In April 1964, a U.S. Navy Transit navigation satellite with a radio-isotopic generator onboard failed to reach orbit and disintegrated in the atmosphere, spewing out over 950 grams of plutonium-238. This was more than the total amount of plutonium released during all nuclear explosions by 1964. In January 1978, Kosmos-954, a Soviet Radar Ocean Reconnaissance Satellite (RORSAT) with a nuclear reactor onboard reentered the atmosphere, after the satellite's reactor core failed to separate and boost it into a nuclear-safe orbit, and fell in Canada, contaminating 100,000 sq. km. of its territory. In February 1983, the nuclear-powered Soviet satellite Kosmos-1402 went down in the South Atlantic. The most serious threat involved Cassini-Huygens, a joint NASA/European Space Agency/Italian Space Agency robotic spacecraft mission currently studying the planet Saturn and its many natural satellites, that was launched on October 15, 1997 and which made a gravitational-assist flyby of the Earth on August 18, 1999. The spacecraft, which had a nuclear reactor with 32.7 kg of plutonium-238, passed only 500 km above the Earth. Up to five billion people could have got radiation poisoning had the spacecraft plunged into the atmosphere. On February 10, 2009, the Iridium-33 telecommunications satellite owned by U.S. company Iridium Satellite LLC and its defunct Russian equivalent, the Kosmos-2251 with a nuclear propulsion unit, collided over northern Siberia. This resulted in potentially hazardous space debris. At present, 30 Russian and seven U.S. spacecraft with nuclear systems onboard are orbiting the earth at 800-1,100-km altitudes, where similar collisions can take place. This makes up for about 40 "potential nuclear explosions." If any of these satellites hits a fragment of space junk, it will slow down and eventually re-enter the atmosphere, spewing radiation above the Earth and on its surface.

#### 5] The solvency deficit outweighs the net benefit.

Baum, 15 [Seth Baum, executive director of the Global Catastrophic Risk Institute, "Should nuclear devices be used to stop asteroids?", 6-16-2015, Bulletin of the Atomic Scientists, https://thebulletin.org/2015/06/should-nuclear-devices-be-used-to-stop-asteroids/, accessed 12-3-2019]

Today the International Campaign to Abolish Nuclear Weapons is calling for a new treaty to ban them, and some people argue that the weapons are categorically immoral. The idea of an anti-NEO nuclear stockpile is fundamentally incompatible with both the ban effort and the moral stance—unless a distinction is made between nuclear weapons and peaceful nuclear devices. I don’t believe that nuclear devices, which include nuclear weapons, are categorically immoral. The problem is not the devices themselves but their potential consequences, which include massive humanitarian and environmental damage, though possibly also fewer wars (as in deterrence). Politically, it might be easier to simply ban all nuclear devices instead of attempting to retain some for peaceful purposes, such as NEO protection, or even beneficial military purposes, such as deterrence. In the decision over whether a small stockpile should be maintained for protection against asteroids and comets, the question is whether the reduced risk that one might crash into Earth is worth whatever harm the stockpile might cause to the political process of nuclear disarmament. The risk posed by NEOs is not zero, but it is small relative to the risk posed by nuclear weapons. A large NEO impact and a nuclear war would have similar consequences: massive initial explosions followed by severe global cooling. But NEO collisions large enough to threaten all of human civilization occur approximately once every 100,000 years. (Smaller NEO impacts are more common and less damaging.) The probability of nuclear war is harder to estimate but clearly much larger; based on current arsenals, it is reasonable to assume a rate of between once per 100 years and once per 1,000 years. So if retaining an anti-NEO nuclear stockpile would halt progress on nuclear disarmament, then we shouldn’t try to keep one. Nuclear war is too much larger of a threat.

#### 6] Asteroids rebuild---can’t solve

Andrews ‘19 [Robin George Andrews, () "If We Blow Up an Asteroid, It Might Put Itself Back Together" The New York Times, 3-8-2019, https://www.nytimes.com/2019/03/08/science/asteroids-nuclear-weapons.html, DOA:12-2-2019 // WWBW]

Using computer models, scientists simulated a 4,000-foot asteroid smashing into a 15.5-mile asteroid at 11,200 miles per hour. Immediately after colliding, the large asteroid cracked considerably, with debris flowing outward like a cascade of Ping-Pong balls. Despite some deep fractures, the heart of the asteroid was not comprehensively damaged. As time went on, the **gravitational pull** of the asteroid’s resilient core was able to pull back **ejected shards**. It seems that asteroids don’t just absorb **mind-boggling** amounts of damage, but, as previous work has hinted, they also are able to **rebuild** themselves. Charles El Mir, who studies asteroid annihilation at Johns Hopkins University and is the paper’s lead author, said his findings “could be interpreted as an argument **against ‘blowing up’** an asteroid as a defensive strategy.” Asteroid collisions and demolitions have been simulated many times in recent decades. Earlier studies suggested that large asteroids are full of internal scars because of their violent history, and that a fast enough impact would completely shatter them. The new study, published this month in the journal Icarus, tried a different simulation. K.T. Ramesh, director of the Hopkins Extreme Materials Institute, said that Andy Tonge, a former graduate student, had developed a computational model that looked at how materials like bulletproof vests respond to impacts. Realizing that Dr. Tonge’s model could simulate asteroid impact events, the team merged it with another model that also replicated the effects of a large asteroid’s gravitational field. This hybrid model allowed them to **more realistically** see how an asteroid responds to being hit by a powerful projectile. It captured previously missing but vital small-scale details, including where fractures would appear and precisely how they would spread. Michele Bannister, a planetary astronomer at Queen’s University Belfast, described the research as “a **nice upgrade** on modeling the complex physical realities” of the solar system’s enigmatic rocky monsters. The study has limitations. Both asteroids are modeled as simple, nonrotating chunks of rock, whereas real asteroids are far more variable. In addition, the larger asteroid, despite featuring a starting collection of cracks, did not have a history of multiple impacts as true asteroids would. A large space rock smashing into a humongous space rock also differs from a missile onslaught, or an atomic bomb exploding on or beneath an asteroid’s surface while a popular rock band plays. The study doesn’t rule out using projectiles to destroy an incoming asteroid, Dr. El Mir said. But, he added, shattering a large asteroid may end up causing more problems than it solves. Turning a **cannonball** into **shotgun-shell** fragments could still result in Armageddon if the shards **strike Earth**.

#### Asteroid fragments are worse than complete asteroids---they increase the likelihood that at least one will hit earth.

### ---AT DV Version

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#### 3] Asteroids rebuild---can’t solve

Andrews ‘19 [Robin George Andrews, () "If We Blow Up an Asteroid, It Might Put Itself Back Together" The New York Times, 3-8-2019, https://www.nytimes.com/2019/03/08/science/asteroids-nuclear-weapons.html, DOA:12-2-2019 // WWBW]

Using computer models, scientists simulated a 4,000-foot asteroid smashing into a 15.5-mile asteroid at 11,200 miles per hour. Immediately after colliding, the large asteroid cracked considerably, with debris flowing outward like a cascade of Ping-Pong balls. Despite some deep fractures, the heart of the asteroid was not comprehensively damaged. As time went on, the **gravitational pull** of the asteroid’s resilient core was able to pull back **ejected shards**. It seems that asteroids don’t just absorb **mind-boggling** amounts of damage, but, as previous work has hinted, they also are able to **rebuild** themselves. Charles El Mir, who studies asteroid annihilation at Johns Hopkins University and is the paper’s lead author, said his findings “could be interpreted as an argument **against ‘blowing up’** an asteroid as a defensive strategy.” Asteroid collisions and demolitions have been simulated many times in recent decades. Earlier studies suggested that large asteroids are full of internal scars because of their violent history, and that a fast enough impact would completely shatter them. The new study, published this month in the journal Icarus, tried a different simulation. K.T. Ramesh, director of the Hopkins Extreme Materials Institute, said that Andy Tonge, a former graduate student, had developed a computational model that looked at how materials like bulletproof vests respond to impacts. Realizing that Dr. Tonge’s model could simulate asteroid impact events, the team merged it with another model that also replicated the effects of a large asteroid’s gravitational field. This hybrid model allowed them to **more realistically** see how an asteroid responds to being hit by a powerful projectile. It captured previously missing but vital small-scale details, including where fractures would appear and precisely how they would spread. Michele Bannister, a planetary astronomer at Queen’s University Belfast, described the research as “a **nice upgrade** on modeling the complex physical realities” of the solar system’s enigmatic rocky monsters. The study has limitations. Both asteroids are modeled as simple, nonrotating chunks of rock, whereas real asteroids are far more variable. In addition, the larger asteroid, despite featuring a starting collection of cracks, did not have a history of multiple impacts as true asteroids would. A large space rock smashing into a humongous space rock also differs from a missile onslaught, or an atomic bomb exploding on or beneath an asteroid’s surface while a popular rock band plays. The study doesn’t rule out using projectiles to destroy an incoming asteroid, Dr. El Mir said. But, he added, shattering a large asteroid may end up causing more problems than it solves. Turning a **cannonball** into **shotgun-shell** fragments could still result in Armageddon if the shards **strike Earth**.

#### Asteroid fragments are worse than complete asteroids---they increase the likelihood that at least one will hit earth.

### 1AR---AT Fracking PIC

#### Nuclear fracking causes earthquakes and reactor meltdowns – the impact is magnified because they literally detonate nukes

Melman 11 Howard Melman, VP R%D Identity Applications at Novell. BS in Applied Math/Computer Science from CMU. "Fracking Earthquakes and Nukes Oh My." Castro's Favorite Color, 4 Nov. 2011, castrosfavoritecolor.wordpress.com/2011/11/04/fracking-earthquakes-and-nukes-oh-my/amp.

“The east coast earthquake hit on August 23rd this year. The damage to roads and homes and offices was not catastrophic except in some very specific locations. However, the epicenter was 12 miles away from the North Anna Nuclear Plant in Louisa County Virginia and because of the earthquake, the plant had to shut down. That is the first time that’s ever happened to any nuclear plant in the country. They’ve never before had to shut one down before a quake. Well ten weeks after that August earthquake, the North Anna Nuclear Plant is still not back up and running. When that plant shut down we were first told it was shut down because it was knocked off the electrical grid when power went out in the area due to the quake. Turns out that was not true. We’ve since learned that the North Anna Plant shut down because of all the shaking from the earthquake. It was only after the plant shut down because of all the shaking, that the electrical power went off. And eight seconds after the electrical power went off, the generators kicked in, three diesel generators kicked in. One of the four generators at the North Anna Plant tried to kick in and failed. Right now the rule for American nuclear power plants is that they have to have backup generator capabilities for four hours before off site power is restored. Here’s my question. What if it takes more than four hours to get the power back on? Remember, if can you cannot keep the power on, if your diesel generators aren’t running to keep the cooling system going, if you can’t keep the cooling system on, Fukushima. I know there is no sex scandal or partisan advantage here but for the record, today we learned that, okay the headline in the Associated Press calls it a glitch, but check this out. Utility officials say gas from inside the Fukushima plant’s No. 2 reactor indicated the presence of radioactive xenon which could be the byproduct of unexpected nuclear fission. This is happening now, today at Fukushima. Unexpected nuclear fission. Nuclear fission as in the very thing emergency crews were trying to prevent in the meltdown of Fukushima because a small burst of fission could trigger a much larger nuclear reaction. That’s still going on. Here in the United States in just the last couple months, in addition to the earthquake damaged North Anna Plant which is still not online, the Palisades Nuclear Plant in southwestern Michigan was shut down for a week because a mechanical fault led to a small release of radioactive tritium into the air. This is the same plant shut down in September because it lost water in its cooling system. At a plant in Georgia, in Baxley Georgia, they found radioactive water, tritium again, leaking out of the plant. The Seabrook Station Nuclear Power Plant in New Hampshire shut down automatically after a faulty water pump caused a low water level in its steam generator. After three weeks of being online [sic], it is just now being turned on again. At a plant in Ohio, more cracks were found this week in the concrete shield building that’s supposed to protect the plant from wind and tornadoes. The plant’s been shut down since October 1st because of previously discovered cracks. Those cracks were found accidentally when the plant’s owners were doing some unrelated renovations. And yesterday, a nonradioactive ammonia leak at the San Onofre Nuclear Plant in California set off alarms and caused a partial evacuation of the plant. On top of all that, the General Electric Corporation, hi boss, says that the 35 nuclear reactors that it built over the last 40 years from New York all the way down to Washington may not shut down properly during an earthquake. The company is recommending testing now to determine how much of a jolt it would take to stop the nuclear fission process during an earthquake in one of those plants. They’re recommendation additional testing, 40 years after making them, because we don’t know the answer to that yet. Some of these plants are 40 years old. These plants are all 40 years old. And we’re just now getting around to figuring out how big a quake would turn them from a disaster into a catastrophe. All of our nuclear plants being decades old and constantly subject to poorly understood and unprecedented mechanical failure is not the kind of scandal that involves sexy things like reality show stars getting divorced after 72 days of matrimony or regulators shtooping lobbyists or drugs be snorted on household appliances. But some day this stuff, this nuclear plant stuff, is going to drive me nuts enough that I’m going to send cocaine-laden divorce papers without a prenup up to Indian Point in the hopes of getting somebody outraged.” So I’m not sure how bad some of this is. Nonradioactive ammonia leaks don’t sound that bad and a partial evacuation could just be a prudent standard operating procedure. But the issue with earthquakes does sound bad, and after my sister just went 50 hours without power after a snowstorm, a four hour backup battery supply does sound inadequate. But Maddow didn’t connect a few other things that I’ve come across lately. Reuters reported Natural Gas Firm Says Shale Fracking Caused UK Earthquakes “Shale gas exploration triggered small earthquakes near Blackpool in northwest England earlier this year, UK firm Cuadrilla Resources said, adding to concerns about the safety of a technology that is transforming U.S. energy markets.” The report says “”It is highly probable that the hydraulic fracturing of Cuadrilla’s Preese Hall-1 well did trigger a number of minor seismic events.” Apparently the events were 2.3 and 1.5 on the Richter scale and the site’s geological features are rare which would make it unlikely that at other sites there would be quakes caused. Ars Technica has more details. Brian Williams’ new show Rock Central had a segment about how there are tons of jobs in North Dakota because of the new booming oil industry there because of all the fracking. EarthJustice has a map shading “areas of active and potential natural gas drilling and fracking” Frackmap png 14404 copy I know there’s a lot of controversy over fracking and I’ve seen the movie Gasland. Usually the complaints about fracking are about the (underregulated) chemicals used and the affect on the water supply. The video of someone lighting their water faucet on fire is certainly compelling. The EPA is studying it with reports due out in several years. But I hadn’t heard the earthquake issue before. The USGS says “Earthquakes induced by human activity have been documented in a few locations in the United States, Japan, and Canada. The cause was injection of fluids into deep wells for waste disposal and secondary recovery of oil, and the use of reservoirs for water supplies. Most of these earthquakes were minor. The largest and most widely known resulted from fluid injection at the Rocky Mountain Arsenal near Denver, Colorado. In 1967, an earthquake of magnitude 5.5 followed a series of smaller earthquakes. Injection had been discontinued at the site in the previous year once the link between the fluid injection and the earlier series of earthquakes was established. “ So look at that map of fracking sites. Remember the unusual east coast earthquake in August? It was centered in Virgina. Well wikipedia tells me I’m not the first one to put these two together and that the USGS doesn’t think it could have caused the Virginia quake. Fair enough, I’m happy to have that idea disproved. But, we have all these 40 year old nuclear power plants that I’m sure were built in areas of low seismic activity. Well I know the Indian Point plant in NY was built on a fault line and there are some in California. Conveniently, the sunlight foundation has made a map of nuclear plants and fault lines. Regardless, the idea that lots of fracking could cause even small seismic events in areas that might not otherwise have them is kind of disturbing. If I think that those areas might have been low seismic activity areas and might have been chosen as sites for nuclear plants it’s certainly more alarming. I don’t mean to be alarmist or generate stupid internet fears, but I’m sure 40 years ago, nuclear plant designers didn’t factor in fracking and I want to know what they now think of it.

#### Extinction from nuclear meltowns

Lendman 2011 Stephen Lendman. BA from Harvard University. Two years of US Army service followed, then an MBA from the Wharton School at the University of Pennsylvania. Syndicated journalist riting on major world and national issues The People’s Voice: News and Viewpoints. “Nuclear meltdown in Japan,” March 13th, 2011. http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/13/nuclear-meltdown-in-japan

For years, Helen Caldicott warned it's coming. In her 1978 book, "Nuclear Madness," she said: "As a physician, I contend that nuclear technology threatens life on our planet with **extinction**. If present trends continue, the air we breathe, the food we eat, and the water we drink will soon be contaminated with enough radioactive pollutants to pose a potential health hazard far greater than any plague humanity has ever experienced." More below on the inevitable dangers from commercial nuclear power proliferation, besides added military ones. On March 11, New York Times writer Martin Fackler headlined, "Powerful Quake and Tsunami Devastate Northern Japan," saying: "The 8.9-magnitude earthquake (Japan's strongest ever) set off a devastating tsunami that sent walls of water (six meters high) washing over coastal cities in the north." According to Japan's Meteorological Survey, it was 9.0. The Sendai port city and other areas experienced heavy damage. "Thousands of homes were destroyed, many roads were impassable, trains and buses (stopped) running, and power and cellphones remained down. On Saturday morning, the JR rail company" reported three trains missing. Many passengers are unaccounted for. Striking at 2:46PM Tokyo time, it caused vast destruction, shook city skyscrapers, buckled highways, ignited fires, terrified millions, annihilated areas near Sendai, possibly killed thousands, and caused a nuclear meltdown, its potential catastrophic effects far exceeding quake and tsunami devastation, almost minor by comparison under a worst case scenario. On March 12, Times writer Matthew Wald headlined, "Explosion Seen at Damaged Japan Nuclear Plant," saying: "Japanese officials (ordered evacuations) for people living near two nuclear power plants whose cooling systems broke down," releasing radioactive material, perhaps in far greater amounts than reported. NHK television and Jiji said the 40-year old Fukushima plant's outer structure housing the reactor "appeared to have blown off, which could suggest the containment building had already been breached." Japan's nuclear regulating agency said radioactive levels inside were 1,000 times above normal. Reuters said the 1995 Kobe quake caused $100 billion in damage, up to then the most costly ever natural disaster. This time, from quake and tsunami damage alone, that figure will be dwarfed. Moreover, under a worst case core meltdown, all bets are off as the entire region and beyond will be threatened with permanent contamination, making the most affected areas unsafe to live in. On March 12, Stratfor Global Intelligence issued a "Red Alert: Nuclear Meltdown at Quake-Damaged Japanese Plant," saying: Fukushima Daiichi "nuclear power plant in Okuma, Japan, appears to have caused a reactor meltdown." Stratfor downplayed its seriousness, adding that such an event "does not necessarily mean a nuclear disaster," that already may have happened - the ultimate nightmare short of nuclear winter. According to Stratfor, "(A)s long as the reactor core, which is specifically designed to contain high levels of heat, pressure and radiation, remains intact, the melted fuel can be dealt with. If the (core's) breached but the containment facility built around (it) remains intact, the melted fuel can be....entombed within specialized concrete" as at Chernobyl in 1986. In fact, that disaster killed nearly one million people worldwide from nuclear radiation exposure. In their book titled, "Chernobyl: Consequences of the Catastrophe for People and the Environment," Alexey Yablokov, Vassily Nesterenko and Alexey Nesterenko said: "For the past 23 years, it has been clear that there is a danger greater than nuclear weapons concealed within nuclear power. Emissions from this one reactor exceeded a hundred-fold the radioactive contamination of the bombs dropped on Hiroshima and Nagasaki." "No citizen of any country can be assured that he or she can be protected from radioactive contamination. One nuclear reactor can pollute half the globe. Chernobyl fallout covers the entire Northern Hemisphere." Stratfor explained that if Fukushima's floor cracked, "it is highly likely that the melting fuel will burn through (its) containment system and enter the ground. This has never happened before," at least not reported. If now occurring, "containment goes from being merely dangerous, time consuming and expensive to nearly impossible," making the quake, aftershocks, and tsunamis seem mild by comparison. Potentially, millions of lives will be jeopardized. Japanese officials said Fukushima's reactor container wasn't breached. Stratfor and others said it was, making the potential calamity far worse than reported. Japan's Nuclear and Industrial Safety Agency (NISA) said the explosion at Fukushima's Saiichi No. 1 facility could only have been caused by a core meltdown. In fact, 3 or more reactors are affected or at risk. Events are fluid and developing, but remain very serious. The possibility of an extreme catastrophe can't be discounted. Moreover, independent nuclear safety analyst John Large told Al Jazeera that by venting radioactive steam from the inner reactor to the outer dome, a reaction may have occurred, causing the explosion. "When I look at the size of the explosion," he said, "it is my opinion that there could be a very large leak (because) fuel continues to generate heat." Already, Fukushima way exceeds Three Mile Island that experienced a partial core meltdown in Unit 2. Finally it was brought under control, but coverup and denial concealed full details until much later. According to anti-nuclear activist Harvey Wasserman, Japan's quake fallout may cause nuclear disaster, saying: "This is a very serious situation. If the cooling system fails (apparently it has at two or more plants), the super-heated radioactive fuel rods will melt, and (if so) you could conceivably have an **explosion**," that, in fact, occurred. As a result, **massive radiation releases** may follow, impacting the entire region. "It could be, literally, **an apocalyptic event.** The reactor could blow." If so, Russia, China, Korea and most parts of Western Asia will be affected. Many thousands will die, potentially millions under a worse case scenario, including far outside East Asia.

### 1AR---AT US PIC

#### 1] Can’t solve hypersonics---russia and china still have cpgs that us can retaliate against with nuclear weapons

#### 2] Extend wellerstein---single launch---even if accidental it causes fusion chain reaction that causes extinction

#### 3] Turn---US nuclear weapons kill US perception and hurt US heg

Marvin 11

(Taylor, BA InternationalAffairs@UCSanDiego, went on to receive MIA@UCSanDiego, 11-16, <https://smokeandstir.org/2011/11/16/why-the-us-should-unilaterally-eliminate-icbms/>)

The ratification of the New START agreement was a victory for nuclear arms control advocates. It should not, however, be the end of efforts to reduce stockpiles of nuclear arms: in addition to the 1,550 deployed strategic nuclear warhead limit mandated by New START, both Russia and the US currently stockpile thousands of tactical nuclear warheads – weapons designed for attacking military targets not covered by New START — and maintain thousands more warheads in storage. Other nuclear powers field hundreds of their own warheads. Though the threat of nuclear war has declined since the end of the Cold War, as long as large numbers of nuclear missiles remain armed the threat of an accident or misunderstanding escalating into a nuclear exchange that ends human civilization remains. The United States should continue to reduce its nuclear arsenal. Nuclear disarmament has long been a goal of progressives around the world. However, their efforts are often hampered by an unwillingness to recognize the deep structural incentives that encourage the preservation of the nuclear status quo. Anti-nuclear activists are too often unwilling to offer any detailed arguments about which specific weapons systems should be cut, and often seem to feel that by recognizing that nuclear weapons have some degree of strategic value compromises their deep moral opposition to their existence. This is unfortunate – if anti-weapons activists are unable or unwilling to offer detailed arguments in favor of specific arms control proposals, their laudable mission won’t be successful. Progressives in the US and Russia must continue to argue for further bilateral arms control treaties that reduce both countries’ number of nuclear weapons. However, the United States should also take the revolutionary step of eliminating intercontinental ballistic missiles, a nuclear delivery system that plays a key role in America’s nuclear force. Though we should encourage Russia to do the same, US lawmakers should be prepared to make these unprecedented cuts unilaterally. This is a rational strategy that would increase global security, lower US defense costs and dramatically improve international perceptions of the US, all while not compromising American safety. The end of the Cold War is an enormous opportunity to defuse what’s still the greatest threat to human civilization. We shouldn’t let fear prevent us from taking it. The Nuclear Triad System Both the US and Russian nuclear arsenals are split between three distinct delivery systems in an arrangement termed the ‘nuclear triad’. At the dawn of the nuclear age, the only vehicles available to deliver nuclear bombs into enemy territory were large aircraft. As tensions between the USSR and its onetime Western allies began to escalate in the aftermath of World War II, the USSR, US and UK all invested in large fleets of intercontinental range strategic bomber aircraft capable of penetrating deep into enemy airspace in the event of a nuclear war. However, by late 1950s advances in surface-to-air missiles made it increasingly apparent that bomber aircraft would have difficulty surviving long enough to deliver their nuclear payloads. While this revelation led to the development of more technologically advanced and survivable strategic bomber aircraft and autonomous nuclear cruise missiles that enabled strategic bombers to hang back from heavily defensed targets, it also encouraged the US and USSR to develop missiles with intercontinental ranges able to carry nuclear warheads across the planet in minutes. These ICBMs – intercontinental ballistic missiles – heralded a revolutionary shift in the Cold War calculus of nuclear destruction. Unlike relatively slow bomber aircraft, a mass exchange of ICMBs kill a significant portion of humanity in minutes, and apart from the wild-eyed, technologically infeasible missile defense schemes of the 1980s ICBMs defied all hope of being intercepted or destroyed before they reached their targets. Paradoxically, the almost incomprehensible destructive power of these new weapons stabilized tensions between the USSR and US, and likely prevented the Cold War from escalating into World War III. Because it was unlikely that any side could prevent an opponent’s ICBMs from reaching their targets both adversaries knew that any war would be unwinnable, removing any incentive for a preemptive strike. However, the first generation of ICBMs were not entirely effective. Early ICBMs were large and delicate, limitations that forced them to be stored in fixed silos, meaning that both the Americans and Russians knew the exact locations of their adversary’s missiles. In the early years of the Cold War this was not a fatal deficiency, because early ICBMs were not accurate enough to target enemy missiles. However, rapid advances in ICBM guidance systems soon made targeting and destroying enemy missiles on the ground a realistic possibility. Both the US and USSR assigned large numbers of their ICBMs to the counterforce mission – destroying enemy nuclear forces and their command and control infrastructure – rather than the more traditional countervalue mission – destroying an enemy’s cities. A country capable of destroying the bulk of its opponent’s nuclear weapons on the ground possessed what was referred to as ‘first strike capability’: the ability to launch a surprise attack without suffering retaliation. The advent of counterforce capabilities was destabilizing because it created a tempting incentive for a preemptive strike – because the side that launched their missiles first in a crisis had the advantage, both sides had an incentive to escalate any crisis to Armageddon. Because the flight time of these missiles is measured in minutes, by the time one side detected the enemy’s missiles launching they would have only minutes before their own missiles were destroyed on the ground. In a crisis this meant that both sides had the incentive to strike first, rather than risk their enemy making the decisive first move. Though the advent of counterforce capabilities did destabilize the Cold War, it also introduced the possibility of limited nuclear war. While early nuclear war planners had assumed that any nuclear war would immediately escalate to targeting cities, a purely counterforce exchange would spare population centers, dramatically lowering casualties and potentially allowing for human civilization to survive a nuclear war. However, it’s worth remembering that even a pure counterforce strike would be unimaginably destructive: a US strike against a single group of Chinese ICBM silos would cause upwards of 20 million casualties [1]. A less restricted counterforce exchange – for example, one between the US and Russia – could kill millions more. The high civilian casualties inherent to even limited counterforce strike makes it hard to believe that a counterforce exchange would not escalate to a full scale war. Russians and American engineers worked furiously to reduce the vulnerability of their countries’ nuclear forces. Early efforts to reduce vulnerability to a devastating counterforce first strike ranged from the practical step of hardening ICBM silos against anything but a direct nuclear strike to more dangerous schemes, like the US 1960s effort to keep B-52 bombers armed with live nuclear bombs in the air at all times to prevent a surprise Russian attack from destroying them on the ground (this scheme was abandoned after a series of accidental crashes terrifyingly resulted in the temporary loss of live nuclear bombs). However, other technological advancements more effectively reduced missile vulnerability. By the end of the 1960s ICBMs were smaller and powered by stable solid fuel rockets, meaning they could be stored fueled in very heavily armored underground silos and launched at literally minutes warning. Similarly, in the early 1960s the US and later USSR successfully deployed ballistic missiles that could be launched from a submerged submarine. While early submarine launched ballistic missiles – SLBMs – lacked the range to strike targets deep within the US or USSR, by the 1970s SLBMs were capable of the full countervalue mission. The value of a submarine launched ballistic missile were obvious – unlike land based missiles, submarines were mobile and, with the advent in the 1950s of nuclear propulsion that allowed submarines to remain deep underwater for months, increasingly undetectable. Nuclear powered submarines capable of carrying dozens of SLBMs could lurk off enemy coastlines with impunity, allowing them to launch their nuclear weapons at close range and with little warning. Unlike land-based ICBMs, a preemptive first strike had no possibility of destroying SLBMs before a reprisal could be launched. With the introduction of SLBMs, the possibility of a survivable nuclear war largely vanished. While the USSR and US were the first to introduce nuclear SLBMs, the UK, France, and China soon introduced their own missile systems, and India is expected to field one by 2015. Additionally, the Israeli Navy is believed to possess a submarine nuclear deterrence in the form of shorter range submarine-launched nuclear cruise missiles. However, unlike land-based ICBMs smaller SLBMs were never accurate enough for the counterforce mission. Both the US and USSR reserved their SLBMs for the ‘second strike’ mission that would annihilate the cities of any opponent foolish enough to launch a nuclear attack, while a large portion of ICBM forces were tasked with destroying their opponents own ICBMs. The total destruction SLBMs guaranteed to inflict on any nuclear aggressor was referred to as ‘mutually assured destruction’ – or, fittingly, MAD. The introduction of SLBMs capable of guaranteeing MAD stabilized the Cold War by definitively removing any incentive to launch a nuclear attack no matter the circumstances – for both the US and USSR, war was the worst case scenario. These three classes of weapons – nuclear bombs and cruise missiles carried by strategic aircraft, land-based ICBMs, and SLBMs – make up the nuclear deterrence ‘triad’. Not all nuclear powers maintain a full triad. Because of the high cost of developing sophisticated SLBMs and the dedicated submarines to carry them, Israel only fields a short range cruise missile-born submarine based deterrent to complement its Jericho III land-based ballistic missile. Smaller, densely settle countries like France and the UK do not choose to field ICBMs due to the land requirements and cost of large ICBM bases (the US and Russia all base their ICBM forces in the sparsely settled open prairie and steppe), preferring to base their nuclear deterrent completely on SLBMs. Similarly, the high costs and limited everyday utility of long-range strategic bomber aircraft make them unpractical for smaller nuclear powers, many which only field tactical aircraft (in common usage, fighter aircraft) capable of delivering nuclear weapons over short distances rather than dedicated strategic bombers. Because of its high cost and the limited utility of nuclear triad redundancy, today only three countries maintain a full nuclear triad: the US, Russia, and China, though the People’s Liberation Army Air Force lacks the in-air refueling infrastructure to give their Xian H-6 strategic bombers true intercontinental capability. The nuclear triad’s massive redundancy was its key advantage during the Cold War – while both the US and USSR had some incentive to strike first and destroy their rival, the triad system’s redundancy, varied delivery platforms and large number of individual weapons guaranteed that even if hit by a devastating first strike, a nuclear power would still retain the capability to retaliate. This redundancy was a key part of US nuclear doctrine: US nuclear planners required that each leg of the triad be capable of destroying the USSR independently of the other two. In this way the triad system was an important moderating influence on Cold War rivalry. However, the triad system also owed its existence to less defensible rationales. In the United States, after the development of the atomic bomb the Air Force had a monopoly on the strategic bombers needed to deliver early nuclear weapons, and later on ICBMs – a monopoly that marginalized other services. To counter this perceived deficiency, the US Navy lobbied for its own nuclear forces. In the late 1940s, before the invention of workable intercontinental ballistic missiles, US admirals vehemently argued for the construction of an extremely large class of aircraft carriers capable of launching the large strategic bombers required to carry early nuclear weapons. Air Force officials rightly perceived this as an explicit effort to end the Air Force’s monopoly on nuclear weapons, and bitterly opposed the construction of the USS United States supercarrier, which was canceled in 1949. Despite this setback, the shrinking size of nuclear weapons soon allowed the Navy to fly nuclear-armed aircraft off conventional aircraft carriers, and the Navy was later allowed to obtain its own SLBM deterrence force. While the nuclear triad’s redundancy did have its strategic advantages, its emergence was partially due to interservice bureaucratic rivalries. Competition between the US and USSR also contributed to the supremacy of the triad system. Unlike the smaller nuclear powers, both US and USSR held rival positions of leadership in the internationally community. Maintaining these bipolar leadership positions made keeping up appearances extremely important, and both the US and USSR made great efforts to match each other’s technological and social developments. When the Soviets launched the successful Sputnik satellite in 1957, the US launched a crash program to launch their own spacecraft as quickly as possible. Similarly, despite the dubious economics of building a supersonic passenger airliner, when the British and French began the high profile Concorde program (which never became anywhere near profitable) the Soviets immediately began work on their own supersonic airliner, the similarly unsuccessful Tu-144. Of course, the Cold War balance of power wasn’t altered by prestige projects like civilian space programs or glamorous supersonic airliners – the civilian technological arms race between the superpowers was only a proxy for their more serious military arms race. Just as the US and USSR strove to match each other’s civilian prestige projects, they faced an even more urgent need to counter their opponent’s military advancements. This continuous one-upmanship extended to the nuclear arms race, and contributed to the proliferation of a bewildering variety of nuclear weapons and delivery systems. While the triad system was not strictly necessary to mounting an effective nuclear deterrent, for the superpowers – unlike smaller nuclear-armed states – it was a necessity to maintaining their prestige and international image. Modern Nuclear Forces In the aftermath of the Cold War the risk of nuclear war has declined considerable. That doesn’t mean that the US nuclear arsenal is worthless – the American nuclear force still provides the deterrence that is the ultimate guarantee of US safety. However, it is hard to argue that the size and variety of US nuclear forces is strictly necessary in today’s world. To its credit, the United States has aggressively reduced its nuclear forces since the end of the Cold War: today the US fields roughly [1,800](http://www.fas.org/blog/ssp/2011/06/aggregatedata.php)deployed warheads out of a total inventory of [8,500](http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html), down from a 1960 high of over 30,000. However, despite these reductions the US and Russia still maintain large numbers of nuclear weapons deployed across their triad systems. China, the only other major power to maintain a full triad, also deploys a large number of weapons, though much less than Russia or the US. US Deployed Nuclear Forces: Under the terms of the New START Treaty, this number is required to drop to [1,550](http://en.wikipedia.org/wiki/New_START)by 2017. Currently, deployed US strategic nuclear weapons are distributed among the following delivery systems: – [1,152](http://www.fas.org/blog/ssp/2011/06/aggregatedata.php) warheads are deployed on 288 SLBMs. The US Navy’s current SLBM, the UGM-133 Trident II, carries 4 independently targeted warheads, explaining the discrepancy between the number of warheads and launch vehicles. Importantly, the Trident II’s 4 warheads is a treaty-imposed (SORT) limitation – the UGM-113 is physically capable of carrying up to [14](http://www.designation-systems.net/dusrm/m-133.html) reentry vehicles. The US SLBM force is currently deployed on 14 Ohio class submarines. – [500](http://www.fas.org/blog/ssp/2011/06/aggregatedata.php) warheads on 450 LGM-30G Minuteman ICBMs. Unlike its SLBMs, the US largely refrains from fielding ICBMs carrying multiple warheads, despite the fact that the START II treaty banning MIVR missiles never entered force. The US ICBM force is currently deployed in three clusters in North Dakota, Montana, and one split between Wyoming, Colorado, and Nebraska. – Less than [150](http://www.fas.org/blog/ssp/2011/06/aggregatedata.php) aircraft-delivered warheads. While the US possessed roughly 300 nuclear bombs, most are in storage. Only about 60 aircraft are currently tasked with carrying these weapons, making US aircraft-delivered weapons of negligible importance in an actual full-scale nuclear war. It is important to remember that despite the limited size of the American strategic bomber fleet the US’s aircraft-delivered nuclear arsenal is still capable of killing most of humanity. Russian Deployed Nuclear Forces: Despite the disclosure requirements in the New START Treaty, determining the exact composition of deployed Russian nuclear forces is difficult. New START documentation lists [1,537](http://www.state.gov/t/avc/rls/164722.htm) strategic offensive arms, likely comprised of: – Roughly 160 SLMBs mounting roughly 576 warheads [2]. All Russian SLBMs are modern and highly capable, and are capable of hitting targets in the continental US from Russian territorial waters. Russian SLBMs typically carry more warheads than their American counterparts: the RSM-54 Sineva (NATO reporting name SS-N-23 Skiff) carries 10 MIRVed warheads, and the RSM-56 Bulava (NATO reporting name SS-NX-32), currently under development, will carry up to 10 warheads. – Roughly 295 ICBMs mounting roughly 1,007 warheads. Russian ICBMs are advanced and capable of immediate launch in a crisis. Unlike US LGM-30 Minutemans, Russia fields mobile ICBMs capable of being transported throughout the country, making a counterforce strike against Russian ICBMs extremely difficult. Russia continues to [mount the maximum number of warheads possible](http://www.fas.org/blog/ssp/2011/06/aggregatedata.php) on their ICBMs. -At most 844 airborne nuclear weapons on roughly 76 strategic bombers. Because Russia’s currently deployed weapons fall under New START’s 1,550 limit, Russia is not treaty bound to reduce its deployed forces by 2017. Chinese Deployed Nuclear Forces: Four decades of arms control treaties have forced the US and Russian governments to be reasonably transparent about their nuclear forces. Chinese nuclear forces are much more secretive, meaning that estimates attempting to quantify the Chinese nuclear triad are very inexact: -China currently fields 10 to 14 SLBMs [3]. However, the current weapon, the JL-1, is short ranged and is not capable of reaching the continental United States from the western Pacific Ocean [4]. A more capable SLBM, the JL-2, is close to entering service. -54 to 62 DF-3, Df-4, DF-5 ballistic missiles [5] that are nearing obsolesce. All of these missiles are liquid fueled, making them unable to be launched with little warning. Only the DF-5 is capable of striking targets in the continental United States.[6] China also fields fewer than 30 modern DF-31 and longer range DF-31A missiles [7]. -China is estimated to currently possess roughly 150 nuclear gravity bombs [8]. People’s Liberation Army Air Force strategic aircraft are much less capable than their US or Russian counterparts, and are incapable of intercontinental operations. While the US and Russia are no longer at each other’s throats, every additional nuclear missile deployed increases the risk of a misunderstanding or accident leading to an unintended holocaust. This risk is real, and the costs of even a limited nuclear war would be truly unimaginable. While the US and Russia’s efforts to diplomatically reduce their deployed nuclear weapons are laudable, they aren’t enough. The US should take further steps to reduce its nuclear forces. Eliminating ICBMs Despite its troubled road through the US Senate, the New START treaty did demonstrate that there is still enthusiasm for arms reduction in the US and Russia. However, this isn’t enough. While still valuable, strategic arms treaties are an extremely conservative way to reduce the ever present threat of excessive nuclear arms. The United States should take the more dramatic step of eliminating one leg of its nuclear triad. This would be an unprecedented advance in arms control, and would uproot the stasis of gradual treaty arms reduction. In addition to reducing the size of the US nuclear arsenal, such a dramatic action would win the United States enormous international goodwill and respect. This would also fit into the US government’s idealistic aspirations – only two years ago President Obama [proclaimed](http://www.huffingtonpost.com/2009/04/05/obama-prague-speech-on-nu_n_183219.html) that “I state clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons.” Eliminating a leg of the US nuclear triad is a laudable contribution to this worthy and attainable goal. But which leg should the US eliminate? At Slate, defense reporter Fred Kaplan has [convincingly argued](http://www.slate.com/id/2285080/) that Russia and the US should begin phasing out ICBMs: “Is anybody thinking about the idea of phasing out the ICBMs? These are the weapons that, over the decades, have spurred first-strike temptations to begin with. They are at once the most accurate and the most vulnerable nuclear weapons. That is, they are capable of destroying, and being destroyed by, the other side’s ICBMs. In other words, their very existence creates temptations of pre-emptive strike in the event of a crisis. They are the weapons, in fact, that generated the nuclear arms race of the 1960s to 1980s. Now that the Cold War is kaput and the notion of first-strike scenarios more improbable than ever, let’s get rid of them—rather than plan to build more of them—while the climate is clear.” This argument makes sense. ICBMs are destabilizing, the counterforce mission’s dubious deterrence value makes them irrelevant to US security, and no one believes in first strike scenarios anymore anyway. Giving up American ICBMs would not decrease the US’s second strike capabilities, and would preserve America’s ability to credibly deter potential adversaries. But why limit our aspirations to only one leg of the nuclear triad? SLBMs are the obvious choice to preserve: their invulnerability and second strike capability is the basis of MAD and the nuclear peace. However, unfortunately for nuclear idealists there are also good reasons for preserving US airborne nuclear weapons. Nuclear warheads carried by strategic bomber aircraft make up only a small fraction of the US nuclear arsenal – under New START, the US fields less than [300](http://www.fas.org/blog/ssp/2011/06/aggregatedata.php) aircraft-launched nuclear bombs, most in storage. However, aircraft-delivered nuclear weapons offer flexibility unavailable to other delivery systems. Unlike ballistic missiles, manned bomber aircraft can be recalled or redirected, giving policymakers an extra margin of safety in a crisis. Similarly, bomber aircraft can be deployed without inadvertently starting a nuclear war. Arguably the greatest nuclear threat of the 21st century comes from small rouge nations possessing a handful of warheads like North Korea or potentially Iran, rather than great powers like Russia or China. US deterrence strategy towards these states relies on the threat of massive nuclear retaliation for destructive actions. However, ICBMs or SLBMs are not suited for this mission, because when a ballistic missile is launched it is not immediately obvious where it’s being targeted (while a missile’s target can be determined by its ballistic trajectory, this trajectory is not apparent until several minutes into the missile’s flight. A nervous observer a credible incentive to launch a retaliatory strike as soon as a potential enemy launch is detected, before the target is apparent). Even a justifiable US nuclear launch against a rouge state in a crisis (laying aside the arguable morality of any retaliatory nuclear strike) could easily be misinterpreted by China, Russia, or any other nuclear power as a preliminary strike against them, giving them enormous incentive to launch their own missiles against the US before they could be destroyed on the ground. While this scenario is unlikely, the inherent panic and confusion of any crisis scenario where the US is seriously deliberating a nuclear strike against a rogue state makes it much more likely. However, aircraft-launched weapons have much less room for misinterpretation – an aircraft’s destination is visible to anyone with the technological resources to detect it, and an nuclear airstrike’s slow speed compared to a ballistic missile make a panicked misunderstanding less likely. Given that the technology required to manufacture nuclear weapons is likely to become available to more and more small states in the next century, deterring rouge states like North Korea and Iran, rather than superpowers, is likely to be the primary mission of the US nuclear deterrence in the future. This justifies the preservation of US air-delivered nuclear weapons and strategic bombers. Just as the US will continue to rely on its SLBM force to deter advanced powers like Russia and China, the strategic nuclear bomber force will deter small nuclear-armed states. As Fred Kaplan points out, eliminating US ICBMs would not meaningfully compromise the American nuclear deterrent: while eliminating ICBMs would sacrifice much of the counterforce mission, the US would retain an iron-clad second-strike capability in the form of SLBMs and flexible nuclear response capability in deployed strategic and tactical bomber aircraft. However, as New START’s tumultuous road through the US Senate illustrates, even mild nuclear disarmament in not popular in some circles of American government. The USAF shares this opposition to nuclear cuts, especially to its ICBMs. Air Force Secretary Michael Donley emphasized this point in a [recent speech](http://defensetech.org/2011/09/19/air-force-wants-to-keep-everything/) before the Air Force Association, strenuously arguing against nearly all potential cuts to Air Force funding and mission and reiterating “as the U.S. nuclear arsenal gets smaller and the number and diversity of nuclear-armed powers increases, the flexibility inherent in our nuclear triad becomes even more important. We must maintain the nuclear triad.” However, like most criticism of cutting or eliminating entirely US ICBMs, this isn’t a compelling argument. Yes, the nuclear triad is more flexible than a nuclear force based on only two legs. However, unless proponents of the triad can explain how much marginal safety ICMBs contribute to the US nuclear deterrence and whether this marginal gains outweighs their costs, this isn’t a serious argument.

### 1AR---AT US ICBMs PIC [HW]

#### 1] Can’t solve the aff ---causes second-gen prolif from countries like soko and japan which increases miscalc and accidents---1AC egeland proves that only full elimination creates a nuclear taboo and ensures no one in the future arms.

#### 2] They don’t assume a world where only the US has nukes – makes the likelihood of usage/threats/overaggression

#### 2] Perm do the counterplan---

#### Eliminate is a change or reduction.

WERCA 11. Wisconsin Employment Relations Commission Arbitrator 11 (Arbitration LOCAL 2492 - MARATHON COUNTY ADMINISTRATIVE, TECHNICAL AND PROFESSIONAL EMPLOYEES UNION, AFSCME, AFL-CIO WISCONSIN COUNCIL 40 AND MARATHON COUNTY Case 334 No. 70449 MA-14966)

“The trigger for layoff is not by a complete elimination of the position.” Article 6(B) contains no reference to the layoff triggering mechanism being related to the elimination of a position. “It simply states ‘whose position is being eliminated.”’ This language is not clear and when a contract term is ambiguous the law favors an interpretation which would avoid a harsh, absurd or nonsensical result. The Union argues that, in the face of this ambiguous language, the Arbitrator should interpret the term “eliminated” to mean “that when a position is so drastically changed from full-time to part-time status that it connotes an elimination of that position within the meaning of the contract.” The fact that the parties negotiated a meet and confer provision in the CBA (Article 6(B) - Reduction in Work Hours). Because of this, it is apparent that the parties were aware of the lack of clarity of the word “eliminated” and negotiated the meet and confer language to cover the event of a reduction in an employee’s work hours.

#### Eliminate is to set aside.

Maryland Court of Appeals 71 (260 Md. 504, 273 A.2d 164, BARTHOLOMEY v. STATE OF MARYLAND, No. 106, September Term)

The appellant seeks to overcome this testimony by giving a definition from Webster's New Collegiate Dictionary of the word "eliminate" as "to get rid of: expel; to set aside as unimportant: ignore; to expel from the living body; to cause to disappear by combining two or more equations." In the context, however, it is clear to us that [523\*523](https://scholar.google.com/scholar_case?case=4127750184152950964&q=%22the+word+eliminate%22&hl=en&as_sdt=2006#p523) the appellant understood and used the word "eliminate" as meaning that he shot and killed both Sheriff Graham and Deputy Sheriff Kelly.

#### Nuclear arsenals refer only to ICBMs – new 2NR definitions encourage sandbagging and are unfair because the 1AR was premised on their 1NC

Ernest 18

(Nwuzoh Ikechukwu, 3-22, https://www.informationhood.com/top-10-countries-with-nuclear-arsenals/)

Certain countries in the world are in possession of nuclear arsenals known as Inter Continental Ballistic Missile (ICBM).

#### AT Paltrow

#### A] Yes SLBM accidents – they don’t account for new developments that compress response times and heighten miscalc

Browne et al. 2/4/20 (Ryan Browne, Barbara Starr, Zachary Cohen, CNN reporters, US military deploys new type of nuclear weapon seen as key to countering Russia, CNN politics, Feb 4 2020

WASHINGTON — The US military deployed a new submarine-launched low-yield nuclear weapon, something the Pentagon sees as critical to countering the threat posed by Russia’s arsenal of smaller tactical nukes. Several former high-ranking administration officials, however, have said the weapons increase the potential for nuclear conflict. “The US Navy has fielded the W76-2 low-yield submarine-launched ballistic missile warhead,” John Rood, the under secretary of defense for policy, said in a statement Tuesday. The new nuclear weapon is a modification of the pre-existing W-76 warhead, which is used to arm submarine launched Trident II (D-5) missiles, so the new weapon does not add to the total number of nuclear weapons in the US stockpile. The nuclear launch codes and nuclear options in the so-called football for the President have now been updated to reflect this weapon, a US official confirmed to CNN. The new warheads, the first new US nuclear weapon in decades, were first produced in February of last year. The less powerful weapon was called for in the Trump administration’s 2018 Nuclear Posture Review, which warned that adversaries might believe they could use a smaller nuclear weapon against the US or its allies without fear of the US launching a nuclear retaliation due to American weapons being disproportionately more destructive. “Expanding flexible US nuclear options now, to include low-yield options, is important for the preservation of credible deterrence against regional aggression. It will raise the nuclear threshold and help ensure that potential adversaries perceive no possible advantage in limited nuclear escalation, making nuclear employment less likely,” the 2018 Nuclear Posture Review said. The plan called for modifying existing US warheads on submarine-launched ballistic missiles as part of a $50 million five-year program. Each submarine would only carry a few of these new missiles, armed primarily with strategic longer-range missiles. “The United States regularly consults with allies on its nuclear weapons systems, and has provided updates on its development of low-yield tridents since the 2018 Nuclear Posture Review,” a NATO official told CNN. Rood said that the low-yield weapon requirement identified in the review was intended to “address the conclusion that potential adversaries, like Russia, believe that employment of low-yield nuclear weapons will give them an advantage over the United States and its allies and partners.” He added that the new weapon “demonstrates to potential adversaries that there is no advantage to limited nuclear employment because the United States can credibly and decisively respond to any threat scenario.” Democratic House Armed Services Committee Chairman Adam Smith of Washington called the decision “misguided and dangerous”. “The deployment of this warhead does nothing to make Americans safer. Instead, this destabilizing deployment further increases the potential for miscalculation during a crisis,” he added. Russia is believed to maintain a large stockpile of “tactical” nuclear weapons, which are less powerful and destructive than those possessed by the US. The US does have some older tactical nuclear B61 “gravity” bombs, but these are seen as much more vulnerable than a submarine-launched weapon. The real difference is the ability to threaten “and penetrate targets deep in adversary territory that current aircraft deliverable low yield nuclear weapons cannot reach,” according to Vipin Narang, an associate professor of political science at MIT. Gen. John Hyten, the vice chairman of the Joint Chiefs of Staff, told CNN on Tuesday that submarines also offer a more rapid response option than aircraft. “More than defendability, it’s timeliness because with a submarine you can respond immediately, with a bomber you have to load the weapon and then you have to fly all the way to wherever the target is,” he said. Some have criticized the US pursuing the lower-yield weapon as some say it lowers the threshold for the use of nuclear weapons, arguing that leaders may feel less inhibited to use such weapons. “We write to respectfully request that Congress reject the Trump administration’s request for new, more usable, “low-yield” nuclear warheads for Trident missiles. There is no need for such weapons and building them would make the United States less safe. These so-called “low-yield” weapons are a gateway to nuclear catastrophe and should not be pursued,” a group of former officials, including former Secretary of State George Schultz and former Secretary of Defense William Perry, wrote in 2018. One issue is that mixing low and very high yield weapons on the same boat makes it impossible for Russia or any adversary to know what is headed its way, Narang told CNN. “They have to assume the worst, even if it is ‘only one or two missiles’ since the fully loaded SLBMs can carry multiple thermonuclear warheads,” he said, adding that the Russians have made clear they would not wait for an incoming missile to hit before retaliating. “So you have a system that you can never use because it buys you a strategic nuclear war. And if you can never actually use it, and the Russians know that, it cannot deter what you want it to,” Narang said. However, Hyten pushed back on criticism that low-yield weapons lower the threshold for using nuclear weapons, saying: “I don’t agree with that assessment.” “The total yield of our nuclear arsenal today is smaller than it was before” the deployment of this weapon, he added.

#### B] Just says ICBMs are *more likely* than subs or bombers – the risk still exists

#### C] No warrant for longer response times – AND, even if they do, it doesn’t solve misperceptions or information gaps that cause miscalc

#### D] Doesn’t solve accidental launch – that’s fully unintentional

#### E] They say undetectability – a] miscalc doesn’t have to be attacks *on* bombers – they can be other attacks that spur sub launch b] make miscalc *more likely* because being *closer* and *undetectable* makes launches easier and faster

#### Edelman and Roughead has ZERO UNDERLINED WARRANTS – just a bunch of random impacts highlighted – they do *not* get access to this impact.

### ---AT Heg Module

#### The liberal order is resilient – the US is not key

G. John Ikenberry 18, professor of Politics and International Affairs in the Woodrow Wilson School of Public and International Affairs at Princeton University, “Why the Liberal World Order Will Survive”, Carnegie Ethics and International Affairs, <https://scholar.princeton.edu/sites/default/files/gji3/files/why_the_liberal_world_order_will_survive.pdf>

In this essay I look at the evolving encounters between rising states and the post-war Western international order. My starting point is the classic “power transition” perspective. Power transition theories see a tight link between international order—its emergence, stability, and decline—and the rise and fall of great powers. It is a perspective that sees history as a sequence of cycles in which powerful or hegemonic states rise up and build order and dominate the global system until their power declines, leading to a new cycle of crisis and order building. In contrast, I offer a more evolutionary perspective, emphasizing the lineages and continuities in modern international order. More specifically, I argue that although America’s hegemonic position may be declining, the liberal international characteristics of order—openness, rules, multilateral cooperation—are deeply rooted and likely to persist. This is true even though the orientation and actions of the Trump administration have raised serious questions about the U.S. commitment to liberal internationalism. Just as importantly, rising states (led by China) are not engaged in a frontal attack on the American-led order. While struggles do exist over orientations, agendas, and leadership, the non-Western developing countries remain tied to the architecture and principles of a liberal-oriented global order. And even as China seeks in various ways to build rival regional institutions, there are stubborn limits on what it can do. Power Transitions and International Order There is wide agreement that the world is witnessing a long-term global power transition. Wealth and power is diffusing, spreading outward and away from Europe and the United States. The rapid growth that marked the non-Western rising states in the last decade may have ended, and even China’s rapid economic ascendency has slowed. But the overall pattern of change remains: the “rest” are gaining ground on the “West.” While there is wide agreement that the world is witnessing a global power transition, there is less agreement on the consequences of power shifts for international order. The classic view is advanced by realist scholars, such as E. H. Carr, Robert Gilpin, Paul Kennedy, and William Wohlforth, who make sweeping arguments about power and order. These hegemonic realists argue that international order is a by-product of the concentration of power. Order is created by a powerful state, and when that state declines and power diffuses, international order weakens or breaks apart. Out of these dynamic circumstances, a rising state emerges as the new dominant state, and it seeks to reorganize the international system to suit its own purposes. In this view, world politics from ancient times to the modern era can be seen as a series of repeated cycles of rise and decline. War, protectionism, depression, political upheaval—various sorts of crises and disruptions may push the cycle forward. This narrative of hegemonic rise and decline draws on the European and, more broadly, Western experience. Since the early modern era, Europe has been organized and reorganized by a succession of leading states and would-be hegemons: the Spanish Hapsburgs, France of Louis XIV and Napoleon, and post-Bismarck Germany. The logic of hegemonic order comes even more clearly into view with Pax Britannica, the nineteenth-century hegemonic order based on British naval and mercantile dominance. The decline of Britain was followed by decades of war and economic instability, which ended only with the rise of Pax Americana. For hegemonic realists, the debate today is about where the world is along this cyclical pathway of rise and decline. Has the United States finally lost the ability or willingness to underwrite and lead the post-war order? Are we in the midst of a hegemonic crisis and the breakdown of the old order? And are rising states, led by China, beginning to step forward in efforts to establish their own hegemonic dominance of their regions and the world? These are the lurking questions of the power transition perspective. But does this vision of power transition truly illuminate the struggles going on today over international order? Some might argue no—that the United States is still in a position, despite its travails, to provide hegemonic leadership. Here one would note that there is a durable infrastructure (or what Susan Strange has called “structural power”) that undergirds the existing American-led order. Far-flung security alliances, market relations, liberal democratic solidarity, deeply rooted geopolitical alignments—there are many possible sources of American hegemonic power that remain intact. But there may be even deeper sources of continuity in the existing system. This would be true if the existence of a liberal-oriented international order does not in fact require hegemonic domination. It might be that the power transition theory is wrong: the stability and persistence of the existing post-war international order does not depend on the concentration of American power. In fact, international order is not simply an artifact of concentrations of power. The rules and institutions that make up international order have a more complex and contingent relationship with the rise and fall of state power. This is true in two respects. First, international order itself is complex: multilayered, multifaceted, and not simply a political formation imposed by the leading state. International order is not “one thing” that states either join or resist. It is an aggregation of various sorts of ordering rules and institutions. There are the deep rules and norms of sovereignty. There are governing institutions, starting with the United Nations. There is a sprawling array of international institutions, regimes, treaties, agreements, protocols, and so forth. These governing arrangements cut across diverse realms, including security and arms control, the world economy, the environment and global commons, human rights, and political relations. Some of these domains of governance may have rules and institutions that narrowly reflect the interests of the hegemonic state, but most reflect negotiated outcomes based on a much broader set of interests. As rising states continue to rise, they do not simply confront an American-led order; they face a wider conglomeration of ordering rules, institutions, and arrangements; many of which they have long embraced. By separating “American hegemony” from “the existing international order,” we can see a more complex set of relationships. The United States does not embody the international order; it has a relationship with it, as do rising states. The United States embraces many of the core global rules and institutions, such as the United Nations, International Monetary Fund (IMF), World Bank, and World Trade Organization. But it also has resisted ratification of the Law of the Sea Convention and the Convention on the Rights of the Child (it being the only country not to have ratified the latter) as well as various arms control and disarmament agreements. China also embraces many of the same global rules and institutions, and resists ratification of others. Generally speaking, the more fundamental or core the norms and institutions are—beginning with the Westphalian norms of sovereignty and the United Nations system—the more agreement there is between the United States and China as well as other states. Disagreements are most salient where human rights and political principles are in play, such as in the Responsibility to Protect. Second, there is also diversity in what rising states “want” from the international order. The struggles over international order take many different forms. In some instances, what rising states want is more influence and control of territory and geopolitical space beyond their borders. One can see this in China’s efforts to expand its maritime and political influence in the South China Sea and other neighboring areas. This is an age-old type of struggle captured in realist accounts of security competition and geopolitical rivalry. Another type of struggle is over the norms and values that are enshrined in global governance rules and institutions. These may be about how open and rule-based the system should be. They may also be about the way human rights and political principles are defined and brought to bear in relations among states. Finally, the struggles over international order may be focused on the distribution of authority. That is, rising states may seek a greater role in the governance of existing institutions. This is a struggle over the position of states within the global political hierarchy: voting shares, leadership rights, and authority relations. These observations cut against the realist hegemonic perspective and cyclical theories of power transition. Rising states do not confront a single, coherent, hegemonic order. The international order offers a buffet of options and choices. They can embrace some rules and institutions and not others. Moreover, stepping back, the international orders that rising states have faced in different historical eras have not all been the same order. The British-led order that Germany faced at the turn of the twentieth century is different from the international order that China faces today. The contemporary international order is much more complex and wide-ranging than past orders. It has a much denser array of rules, institutions, and governance realms. There are also both regional and global domains of governance. This makes it hard to imagine an epic moment when the international order goes into crisis and rising states step forward—either China alone or rising states as a bloc—to reorganize and reshape its rules and institutions. Rather than a cyclical dynamic of rise and decline, change in the existing American-led order might best be captured by terms such as continuity, evolution, adaptation, and negotiation. The struggles over international order today are growing, but it is not a drama best told in terms of the rise and decline of American hegemony.

#### Empirics disprove their impact

Fettweis 18 Christopher J. Fettweis, an American political scientist and the Associate Professor of Political Science at Tulane University, “Chapter 1: Unipolarity and the System,” *Psychology of a Superpower: Security and Dominance in U.S. Foreign Policy,* Columbia University Press, 2018, accessed through Georgetown Libraries

If U.S. power is the only thing holding back the forces of global chaos, then we would expect to see some variation in violence as the relative capabilities of the United States wax and wane. During the 1990s, the United States cut back on defense by about 25 percent, spending $100 billion less in real terms in 1998 than it did in 1990.74 To those believers in the neoconservative version of hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace,” argued Kristol and Kagan at the time.75 The world grew dramatically more peaceful while the United States cut its forces, however, and it stayed just as peaceful even as spending rebounded after the 9/11 terrorist attacks. The incidence and magnitude of global conflict declined while the military budget was cut under President Clinton, kept declining (though more slowly) as the Bush administration ramped it back up, and stayed steady as Obama cut back again. U.S. military spending has varied during the New Peace from a low in constant dollars of less than $400 billion to a high of more than $700 billion, but war does not seem to have noticed.

The same nonrelationship exists between other potential proxy measurements for U.S. power and conflict. No connections exist between warfare and fluctuations in U.S. GDP, or alliance commitments, or forward military presence. Europe experienced very little fighting when there were 300,000 American troops stationed there, for example, and very little after 90 percent of those troops were removed. It is hard to find much correlation between U.S. actions and systemic stability. Nothing the United States actually does seems to matter to the New Peace.

#### The US is psychologically biased towards believing heg is good

Fettweis 18 Christopher J. Fettweis, Political Science Professor at Tulane University. [Psychology of a Superpower: Security and Dominance in US Foreign Policy, Columbia University Press]

THE ILLUSION OF CONTROL Could 5 percent of the world’s population enforce rules upon the rest? Would even a hegemonic United States be capable of producing the New Peace? Perhaps, but it also may be true that believers in hegemonic stability are affected by a common, nearly ubiquitous form of misperception. A variety of evidence has accumulated over the past forty years to support Ellen Langer’s original observations about the “illusion of control” that routinely affects observers. 85 Even in situations where outcomes are clearly generated by pure chance, like coin tosses and dice rolls, people believe that they can exert influence over events.86 As a result, actors—whether subjects in an experiment or leaders in a stateroom—overestimate their ability to control the external world. One of the earliest and strongest findings of this research is that such illusions are stronger when outcomes are positive. Psychologists and sociologists have long known that while actors are motivated to take responsibility when things are going well, their perceived agency shrinks in the face of bad news.87 People attribute failure to chance and success to themselves.88 This is related to, but not entirely identical with, the phenomenon that Anthony Greenwald labeled “beneffectance,” or the tendency of people to claim responsibility for desired, but not undesired, outcomes.89 Illusions of control over global stability and economic growth, which are manifestly desirable outcomes, should be quite powerful. The extensive research on the illusion has revealed two further findings that suggest Americans might be more susceptible to it than others. First, misperceptions of control appear to be correlated with power: individuals with higher socioeconomic status, as well as those who are members of dominant groups, are more likely to overestimate their ability to control events.90 Powerful people tend to be far more confident than others, often overly so, and that confidence leads them to inflate their own importance.91 Leaders of superpowers are thus particularly vulnerable to distorted perceptions regarding their ability to bring about preferred outcomes. U.S. observers had a greater structural predisposition than others, for example, to believe that they would have been able to control events in the Persian Gulf following an injection of “creative instability” in 2003. The skepticism of less-powerful allies was easily discounted. Second, culture matters. People from societies that value individualism are more likely to harbor illusions of control than those from collectivist societies, where assumptions of group agency are more common. When compared to people from other parts of the world, Westerners view the world as “highly subject to personal control,” in the words of Richard Nisbett.92 North Americans are particularly vulnerable.93 People in relatively powerful countries with individualistic societies are therefore at high risk for misperceiving their ability to influence events.94 For the United States, the illusion of control extends beyond the water’s edge. An oft-discussed public good supposedly conferred by U.S. hegemony is order in those parts of the world uncontrolled by sovereign states, or the “global commons.”95 One such common area is the sea, where the United States maintains the world’s only truly blue-water navy. That the United States is responsible for peace on the high seas is a central belief of hegemonic-stability theorists, one rarely examined in any serious way. The maritime environment has indeed been peaceful for decades: the biggest naval battles since Okinawa took place during the Falklands conflict in 1982, and they were fairly minor.96 If hegemony is the key variable explaining stability at sea, maritime security would be far more chaotic without the U.S. Navy. Perhaps, however, the reason so few other states are building blue-water navies is not because the United States dissuades them from doing so but because none feels that trade is imperiled. In earlier times, certainly during the age of mercantilism, zero-sum economics inspired efforts to cut off the trade of opponents on occasion, making control of the sea extremely important. Today the free flow of goods is critical to all economies, and no state would benefit from its interruption.97 Even in the few continued (or future) areas of maritime contestation, such as the South China Sea, riparian powers have vital interests in the unimpeded movement of goods. The Chinese worry about our ability to restrict trade through the area—what is sometimes referred to as their “Malacca Dilemma,” since a substantial portion of their trade (and all of their energy imports) transit the strait—just as much or more than we do about their ability to do so.98 Hegemonists often argue that without the U.S. presence, Iran would move to seal off the Strait of Hormuz, despite the obvious fact that doing so would be economic suicide for Tehran.99 Kori Shake spoke for many when she warned that, in the absence of compulsion, other countries might not choose policies that align with U.S. interests; however, we can be fairly confident that they would not take steps in diametric opposition to their own interests.100 In today’s interdependent order, what is good for one is often (if not always) good for all. Free trade at sea may no longer need protection, in other words, because it essentially has no enemies. The sheriff may be patrolling an essentially crime-free neighborhood.101 Robert Dahl famously defined power as the ability to get actors to do what they would normally not.102 If the states of the Pacific Rim, Persian Gulf, or anywhere else would be doing roughly the same things without the presence of the U.S. military, its power cannot be responsible for their actions. Oceans unpatrolled by the U.S. Navy appear to be just as stable as those with its carriers. U.S. leaders probably overestimate the degree to which they control the sea and the world at large. EGOCENTRIC AND SELF-SERVING BIASES IN ATTRIBUTION People commonly misperceive the role they play in the thinking process of others. Robert Jervis was the first to discuss the phenomenon now known as the “egocentric bias,” which has been put to the test many times since he wrote four decades ago. Building on what was known as “attribution theory,” Jervis observed that actors tend to overestimate their importance in others’ decisions. Rarely are our actions as consequential upon their behavior as we believe them to be.103 This is not merely ego gratification, though that plays a role; actors simply know much more about their own behavior and choices than they do about the internal deliberations going on in others’ heads. Because people are more likely to remember their contributions to an outcome, they naturally grant themselves more causal weight.104 They act with us in mind, or so we believe. Three further aspects of the egocentric bias suggest U.S. perceptions are particularly susceptible to its effects. First, once again the effect is magnified when the behavior of others is desirable. People generally take credit for positive outcomes and deflect responsibility for negative ones. This “self-serving bias” is one of the best established findings in modern psychology, supported by many hundreds of studies.105 Supporters of Ronald Reagan are happy to give him credit for ending the Cold War, for instance. Today, since few outcomes are more desirable than global stability and nonproliferation, it stands to reason that perceptions of the New Peace are prime candidates for distortion by egocentric and self-serving biases. When war breaks out, it is not the fault of U.S. leaders, but Washington is happy to take credit for peace. The connection between these biases and the self-esteem of actors is rather self-evident. Second, for some time psychologists debated whether self-serving biases were universal or whether their effects varied across cultures. Extensive research has essentially settled the matter: a direct relationship exists between cultural individualism and susceptibility to the bias, perhaps because individualistic societies value self-enhancement rather than self-effacement.106 Individuals from collectivist societies tend to have their egos rewarded in different ways, such as through contributions to the community and connections to others. People from Western countries are far more likely to take credit for positive outcomes than those from Eastern countries, in other words. U.S. leaders are particularly predisposed to believe that their actions are responsible for positive outcomes like peace. Third, self-perception appears to be directly related to egocentric attributions. Individuals with high self-esteem are more likely to believe that they are at the center of the decision-making process of others than those who think of themselves more modestly.107 Leaders of any unipolar state may well be more likely to hold their country in high regard and more vulnerable to exaggerated egocentric perceptions than their contemporaries in smaller states. It might not occur to the lead diplomat of other counties to claim, as did Madeleine Albright, that “if we have to use force, it is because we are America; we are the indispensable nation. We stand tall and we see further than other countries into the future.”108 Her predecessor as secretary of state, Henry Kissinger, said this two decades earlier: “Without our commitment to international security, there can be no stable peace. Without our constructive participation in the world economy, there can be no hope for economic progress. Without our dedication to human liberty, the prospect of freedom in the world is dim indeed.”109 American exceptionalism makes the U.S. security community even more vulnerable to this misperception than average. A classic case of egocentrism in action took place in Washington in December 1979, following the Soviet invasion of Afghanistan. Documents released from Russian archives make it clear that Moscow acted primarily to remove a troublesome puppet regime in its near-abroad.110 President Carter and his administration, however, interpreted the invasion as the first step in a grand design on the Persian Gulf.111 Despite the fact that the United States had made no effort to deter the Soviets in Central Asia, Carter assumed that they were testing U.S. mettle. His reaction—or overreaction, labeling the invasion the “greatest threat to peace since World War II”—turned a local crisis into a global one and scuttled détente.112 In more recent times, many in the U.S. security community believed that the United States played a decisive role in Vladimir Putin’s decisions regarding Crimea and eastern Ukraine. President Obama’s various critics argued that perceptions of American weakness inspired or even invited Russian aggression. The refusal to act in Syria in particular emboldened Moscow (even though in 2008, despite ample U.S. action in the Middle East, Moscow had proven sufficiently bold to send troops into Georgia). Other critics suggested that a variety of provocative U.S. behaviors since the end of the Cold War, especially the expansion of NATO and dissolution of the Anti-Ballistic Missile Treaty, poisoned U.S.-Russian relations and led to an increase in Kremlin paranoia and eventually to the invasion.113 So, either through weakness or bullying, we were responsible for their actions. Egocentric misperceptions are so ubiquitous and pervasive that they generate something of a law of political psychology: We are probably less influential in their decision making than we think we are. While it may be natural for U.S. policy makers to interpret their role as crucial in the maintenance of world peace, it is very likely that Washington exaggerates its importance in the decision making of others and in the maintenance of international stability. The effect of the egocentric bias may be especially difficult for the unipolar United States to resist because other countries do regularly take Washington’s position into account before acting. But U.S. leaders, and the people who analyze them, should keep in mind that they are still probably less important to calculations made in other capitals than they believe. As a result, hegemony and the New Peace may be epiphenomenal, each existing alongside the other without interacting. OVERESTIMATED BENEVOLENCE After three years in the White House, Ronald Reagan had learned something surprising: “Many people at the top of the Soviet hierarchy were genuinely afraid of America and Americans,” he wrote in his autobiography. Perhaps this shouldn’t have surprised me, but it did … I’d always felt that from our deeds it must be clear to anyone that Americans were a moral people who starting at the birth of our nation had always used our power only as a force for good in the world.… During my first years in Washington, I think many of us took it for granted that the Russians, like ourselves, considered it unthinkable that the United States would launch a first strike against them.114 Reagan is certainly not alone in believing in the essential benevolent image of his nation. People find it exceedingly difficult to imagine that anyone could interpret their actions in negative ways. Actors are well aware of their own motives and assume that their peaceful intentions are transparent. We all overestimate the extent to which others see us as benevolent. Hegemonic-stability theorists purport to understand the perceptions of others, at times better than those others understand themselves. Complain as they may at times, foreigners know that the United States is acting in the common interest. Objections to unipolarity, even though they are at times widespread, are not “very seriously intended,” wrote Kagan, since “the truth about America’s dominant role in the world is known to most observers. And the truth is that the benevolent hegemony exercised by the United States is good for a vast portion of the world’s population.”115 In the 1990s, Russian protests regarding NATO expansion—though nearly universal—were not taken seriously, since U.S. planners believed the alliance’s benevolent intentions were apparent to all. Sagacious Russians understood that expansion would actually be beneficial, since it would bring stability to their western border.116 President Clinton and Secretary of State Warren Christopher were caught off guard by the hostility of their counterparts regarding the issue at a summit in Budapest in December 1994.117 Despite warnings from the vast majority of academic and policy experts about the likely Russian reaction, the administration failed to anticipate Moscow’s position.118 The Russians did not seem to believe American assurances that expansion would actually be good for them. The United States overestimated the degree to which others saw it as benevolent. Psychologists have long understood the significant differences in perception between actors and observers.119 One is so widespread and common that it has come to be known as the “fundamental attribution error” in accounting for the choices made by others: actors attribute the undesirable behavior of others to dispositional rather than situational factors, even though they feel the opposite is true for their own actions. In other words, although we understand that our actions are highly dependent upon the situation in which we find ourselves, we believe that their behavior is a reflection of who they are, of their immutable character flaws.120 Early in the Cold War, to cite a brief example, Secretary of State Dean Acheson had no doubts that Soviet requests for bases on the Dardanelles in Turkey were clear evidence of their aggressive ambitions, while a very similar U.S. action—fortifying U.S. installations on the Panama Canal—was an understandable response to legitimate security concerns.121 Actors are quick to take responsibility for positive outcomes and refuse blame for negative. This effect is directly related to the intensity of the harm: when severe, we strongly deny our culpability.122 This is partially a defense mechanism. Actors also believe that any behavior leading to negative outcomes is inconsistent with their general character, which everybody more or less knows to be true.123 It should be unsurprising that U.S. observers fail to perceive the same amount of damage, either direct or collateral, caused by their policies as do others. Once again, the culture of the United States might make its leaders more vulnerable to this misperception. The need for positive self-regard appears to be particularly strong in North American societies.124 Western egos tend to be gratified through self-promotion rather than humility and independence rather than interdependence. Americans are more likely to feel good if they are unique rather than a good cog in society’s wheel. The strong need to be perceived as benevolent, though universal, may well exert stronger encouragement for U.S. observers to project their perceptions onto others. Foreign ungratefulness always surprises U.S. leaders. In 2003, Condoleezza Rice was dismayed to discover resistance to U.S. initiatives in Iraq: “There were times,” she said later, “that it appeared that American power was seen to be more dangerous than, perhaps, Saddam Hussein.”125 Both liberals and neoconservatives probably exaggerate the extent to which U.S. hegemony is everywhere secretly welcomed. Understandable disagreement with U.S. policies, rather than mere petulant resentment, motivates counterhegemonic beliefs and behavior. The international community always has to worry about the potential for police brutality, even if it occurs only rarely. The United States almost certainly frightens others more than its leaders perceive. A quarter of the 68,000 respondents to a 2013 Gallup poll in sixty-five countries identified the United States as the “greatest threat to world peace,” which was more than three times the total for the second-place country (Pakistan).126 One suspects that when post-Trump polls begin to arrive, they will show similar disquiet in the periphery. To review, if U.S. leaders and analysts are subject to the same forces that affect every human being, they overestimate the amount of control Washington has over other actors and its importance in their decision making. And they probably perceive U.S. benevolence to be much greater than do others. These common phenomena all influence U.S. beliefs in the same direction and may well increase the apparent explanatory power of hegemony beyond what the facts would otherwise support. The United States is probably not as central to the New Peace as either liberals or neoconservatives believe.

#### Pursuit of hegemony causes counterbalancing — pushes Russia and China into a military alliance.

Hawn, 18 — Jeff Hawn; Analyst at Stratfor, a geopolitical intelligence and advisory firm. (12-10-2018, "China, Russia and the formation of an 'Eastern Entente;'" https://thehill.com/blogs/congress-blog/foreign-policy/420664-china-russia-and-the-formation-of-an-eastern-entente; //GrRv)

Indeed, if one weighs Russia and China’s mutual interest versus their mutual animosities, an argument begins to form that the two Eurasian powers’ conflict with the West may be enough to overcome their history of distrust. First, and perhaps most important is that neither power poses an existential threat to the other. Russia is not looking to convert China to its government system and the same goes for China. Any competition between the two states is framed in the realist sense of great power competition over land and resources. The West meanwhile actively espouses its own democratic system as a superior form of government, and has spent the last three quarters of a century trying to spread its ideals across the world.Secondly, there is the issue of territorial integrity. While it is true that Russia and China share a massive land border, that border sits at the far frontier of both nations. In contrast, both China and Russia have American troops within easy striking distance of their centers of power. In Europe, American tanks stationed in the Baltic States sit about 385 miles from Moscow. In the Pacific, the US 7th Fleet is based in Japan in addition to thousands of American troops deployed in Korea. These military assets are well within striking distance of China’s seaboard, the heart of its economy, and home to the majority of its population. Both Russia and China view the U.S. and its allies as attempting to constrain their respective efforts to secure regions of strategic significance for them.China and Russia’s similarities do not end there. Both nations are former imperial powers that see themselves as the victims over extended periods of national humiliation forced on them by the Western powers. When that is taken into consideration, the two nations’ desire to cooperate begins to makes sense.So what do Russia and China have to gain from increased cooperation? Is their ultimate goal dominion over the United States, as some alarmists would have us believe? I do not believe so. Both states are the heirs to the most brutal school of realpolitik. Their goal in cooperating is to offset the U.S. global hegemony, and carve out spheres of influence that will boost their own security and economic growth.Neither nation will benefit from a complete U.S. retreat form the world stage, but both have much to gain if they can challenge U.S. supremacy. Indeed, there remain strong points of contention between Russia and China, especially the Central Asian states in Russia’s traditional backyard, which China has increasingly been playing in as part of its One Belt One Road initiative. However, it can be argued that in Central Asia we are seeing the most tangible result of Chinese and Russia entente. Both can benefit from the region’s development, while security and counter terrorism cooperation help to prop up friendly regimes, and keep the lid on potential jihadist threats a serious concern for both states. There are already strong signs that China and Russia are seeing the benefits of working together. The two nations militaries frequently hold joint exercises, most notably Vostok 2018 when 3,500 Chinese troops participated in the exercises. Economic investment has lagged behind, but both China and Russia have recently signaled a desire to boost the economic heft of their shared border region. The nascent Russian-Chinese Business Advisory Committee announced in September 2018 an ambitious goal of a cumulative $100 billion joint investment and development projects. There certainly will be tension between the two states. Vostok was marred by reports of Russian naval vessels being followed by a Chinese spy ship, and Russian state media printed several critical articles of the Chinese J-15, which is derived from Soviet technology purchased from Ukraine. These spats should not distract from the broader trend that is unfolding, both nations’ security dilemmas on their respective eastern and western flanks. Dilemmas made more pressing by U.S. sanctions and tariffs. The ability to, if not trust their neighbor, at least trust that for the moment their interests are aligned has helped the China- Russia entente build momentum. As the U.S. and Western animosity grows toward Russia and China, it will continue to push them to closer cooperation, and make rending their partnership far more difficult. Between 1972 and 1990, U.S. grand strategy called for counterbalancing these two powers. At the time both states had more to gain through engagement with the U.S. than they did with each other. Over the last two decades, that has reversed substantially. So perhaps the question should not be if China and Russia would form an alliance, but whether or not they already have, and how strong it can grow?

#### A Russia-China coalition causes war— cyber-attacks, Russian aggression, and Chinese expansionism.

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While Washington takes a wait-and-see approach, Moscow and Beijing could be coordinating to significantly thwart U.S. interests over the next 15 to 25 years. The two powers may never forge a formal military alliance, but they could still work together in ways that cause major headaches for the United States. Imagine, for example, that Russia and China coordinate the timing of hostile actions on their peripheries. If China made aggressive moves in support of its sovereignty claim in the South China Sea at the same time that Russia made further incursions into Ukraine, U.S. forces would struggle to respond effectively to either gambit. Nonmilitary collaboration between Russia and China could weaken the United States and even threaten its way of life. Both countries are likely to use their cyber and disinformation capabilities to, as the director of national intelligence put it in January, “steal information, to influence our citizens, or to disrupt critical infrastructure.” China currently does not exhibit Russia’s zeal for using such measures, particularly against the United States; but if U.S.-Chinese relations darken, Beijing could plausibly take a page from Russia’s playbook and mount coordinated, deniable cyberattacks or interference campaigns against the United States. China and Russia behave very differently in pursuit of their foreign policy objectives, but the combined effect of their actions is often greater than the sum of its parts. In Europe, for example, China has amassed economic influence through growing trade relationships and Belt and Road-related infrastructure investments not contingent on standards for democratic governance and human rights, particularly in eastern Europe, Greece, and Italy. This engagement will ultimately translate into political leverage, as it already has in many countries in Asia. Russia, for its part, appears intent on pursuing hybrid tactics that disrupt democratic processes. On their own, each of these activities is already worrisome for the United States and Europe. But a scenario in which each country’s actions amplify the other’s is not hard to imagine. China, for example, could eventually use its growing ownership of European ports and rail lines to slow a NATO response to Russian aggression. Likewise, Beijing could use the economic leverage it has accrued to quietly dissuade an already reluctant NATO member state such as Hungary or Turkey from responding to Russia’s hybrid tactics, which could ultimately serve to discredit NATO’s commitment to collective defense.

### 1AR---AT US Nuke Subs PIC

#### 1] Can’t solve cyberattacks---subs are still wired to retaliate against any hacking and that causes war---utilizes same command and control infrastructure

#### 2] Lack of warhead discrimination makes SLBMs destablizing---causes war

Narang '18 (Vipin Narang; Vipin Narang is associate professor of political science and a member of the Security Studies Program at the Massachusetts Institute of Technology., ; 2-8-2018; "The Discrimination Problem: Why Putting Low-Yield Nuclear Weapons on Submarines Is So Dangerous"; https://warontherocks.com/2018/02/discrimination-problem-putting-low-yield-nuclear-weapons-submarines-dangerous/, War on the Rocks, accessed 2-3-2020; JPark)

Although the aim of the low-yield SLBM and SLCM is to close this perceived “deterrence gap,” proponents of these capabilities have elided one key problem: how the adversary may perceive and react to their use. I call this the “discrimination problem.” Right now, all the SLBMs in the American inventory carry multiple — up to eight! — thermonuclear warheads. Mixing these missiles with one or several of the proposed low-yield warheads creates a very real problem: How will the adversary know which of the two is coming its way? It cannot. If the adversary sees a single SLBM headed toward it — even if that missile turns out to only be carrying a low-yield warhead — it must react as if it is facing the full brunt of American strategic nuclear use. It would be catastrophic—potentially nation-ending—to hope otherwise and be wrong. The new low-yield, or nonstrategic, nuclear weapons envisioned in the Nuclear Posture Review would not be the first in the American inventory. There are already four types of aircraft-delivered tactical nuclear weapons in the force posture (three variants of the B-61 gravity bomb and an air launched cruise missile). So why does the review call for additional low-yield options? In a word: Russia. The administration’s basic concern is that Russia may try to use a low-yield nuclear weapon on American or allied forces without the United States being able to successfully respond in kind. This forces America into the “suicide or surrender” dilemma of either not responding at all or escalating directly to the strategic thermonuclear level by retaliating against the adversary’s cities (or against all its nuclear forces directly). The perceived gap in American capabilities is because U.S. aircraft-delivered B61s are vulnerable to Russian air defenses, limited by the range of the aircraft on which they are deployed, and cannot deliver a retaliatory blow as swiftly as ballistic missiles can. Therefore, the Nuclear Posture Review argues, the United States needs a new capability that can penetrate Russian defenses and deliver a low-yield nuclear weapon from anywhere within minutes. The basing mode that achieves this, without requiring a host nation, is at sea. In the near term this would involve modifying existing SLBMs to carry a low-yield variant of an existing warhead (for a variety of reasons, I assume the W76), while working in the long term to deploy a nuclear SLCM. The theory is that fielding this capability will deter Russia from its so-called “escalate to deescalate” nuclear strategy (insofar as that even exists), which is premised on the notion that using nuclear weapons early in a conflict, but in a limited way, will lead the United States to back down. If deterrence fails, low-yield nuclear options deliverable from American submarines provide a flexible and tailored response option to defeat Russian aggression. Here’s why it would be so dangerous to deploy the low-yield SLBM in particular. America presently fields one type of ballistic missile on its 14 nuclear weapons-designated Ohio-class submarines: the Trident II D5 missile. Each Trident missile can carry up to 8 independently targetable warheads, some combination of the W76 thermonuclear warhead (100 kilotons) or the W88 thermonuclear warhead (455 kilotons). Currently, if an adversary were to detect a launch of a Trident missile from an American ballistic missile submarine, there would be no uncertainty about what is coming its way: a strategic nuclear launch of at least about a megaton of yield, perhaps 3.6 megatons. This is, without question, a strategic nuclear launch by the United States aimed at destroying the adversary’s high-value cities, or perhaps its strategic nuclear force itself (also known as a counterforce strike). By reserving the SLBM for strategic nuclear use — and only strategic nuclear use — there is no ambiguity about what a Trident launch means for both the United States and the adversary: all-out nuclear war. But if the United States starts deploying some Tridents with a single low-yield warhead and others with eight thermonuclear warheads, all on the same submarine, how will the adversary know what is coming its way? There is literally no way to tell which warhead yield is atop the missile — no early warning system can discriminate between the low-yield warhead and the strategic nuclear warheads at launch or in flight. Early warning systems can detect the point of launch and perhaps the type of missile fired. But not even the most sophisticated system can discriminate between a W76 or W88 warhead that is set to deliver hundreds of kilotons and a warhead that looks exactly the same but is set to deliver just 20 kilotons. The only thing an adversary sees is a Trident missile launch, which could now be anywhere from 20 kilotons of damage (designed to destroy a military base, for example) all the way up to 3.6 megatons (enough to destroy multiple cities and kill millions of civilians). Even if the early warning system could see that there was only a single warhead instead of eight, how confident are we that the adversary will believe their radars instead of fearing the worst? What does this mean? If the adversary detects even a single missile launch, it has no choice but to react as if the United States has decided to escalate to the strategic nuclear level. Even if the other side may hope or believe that the incoming warhead might just be a low-yield weapon, it must **assume the worst**, because the risks of guessing wrong include losing millions of people or potentially its entire nuclear force. It is unrealistic to assume and hope — in the thick fog of a nuclear war —that the adversary will wait until the warhead has landed, do a detailed yield assessment (even if 20 kilotons hits, how are they to know it wasn’t just because the second stage of a thermonuclear weapon fizzled?), and then choose not to respond because it was “only” 20 kilotons instead of 3.6 megatons. Think about it this way: if the United States detected that Russia had launched a missile off a submarine, that carried either a low-yield nuclear weapon or 8 strategic nuclear weapons, how would it react? Would it assume it is the low-realyield option and wait for it to hit the continental United States before reacting and retaliating? Of course not. Yet this is what America is hoping its adversaries will do. When it comes to waging a nuclear war, it is simply unrealistic to base a whole strategy on hoping that an adversary assumes the best-case scenario. The adversary’s most logical move is to respond as though full-scale nuclear war has started — which means that even if they were wrong, the end result and the consequences are the same. The use of a low-yield SLBM, supposedly built for a “small” nuclear conflict and to calibrate escalation, has now leapt to strategic nuclear war because of how the adversary is forced to react. Furthermore, mixing low- and high-yield nuclear weapons on Trident missiles, one of the key systems the United States would use in a counterforce mission targeting an adversary’s nuclear forces, poses a particular problem if an adversary is worried about the survivability of its arsenal (even Russia may worry about this given America’s persistent emphasis on counterforce and damage limitation capabilities). Such an adversary may experience “use-them-or-lose them” pressures at the sight of a single Trident launch (doubts about their early warning system could lead them to believe many more are headed their way). An adversary which fears that the United States is about to wipe out its arsenal may have no choice but to launch everything it has before even knowing what is actually incoming. This is certainly the case if the adversary is North Korea, it might be the case for China, and could plausibly be the case for Russia.

#### 3] No Japan prolif---operational and political obstacles.

Roehrig ‘17 Terence. Professor of National Security Affairs and the Director of the Asia-Pacific Studies Group @ the U.S. Naval War College. 2017. “Japan, South Korea, and the United States Nuclear Umbrella; Deterrence After the Cold War.” Columbia University Press.

WOULD JAPAN EVER DEVELOP ITS OWN NUCLEAR WEAPONS? The short answer to this question is “not likely,” though scholars disagree over the reasons.99 For years, analysts have spoken of a “nuclear allergy” in Japan resulting from World War II that prevented Japanese leaders from discussing nuclear weapons, much less consider acquiring them. Though constrained from discussing the issue publicly, Japan’s conservative leaders often discussed the issue privately, believing Japan must keep the option open.100 Yet for Japan to make the decision to go nuclear would require a drastic deterioration of its security environment accompanied by a collapse of the Japan-U.S. alliance. In many respects, a Japanese decision to head in this direction is what Campbell and Sunohara call “the ultimate contradiction.” Japan’s “standing as a non-nuclear nation is a virtual bedrock of the nonproliferation regime” yet “at the same time, suspicion and speculation have persisted that, given the right set (really the wrong set) of international and domestic conditions, Japan might seriously consider the nuclear option.”101 Japan clearly possesses the technology and infrastructure for a breakout through its extensive civil nuclear energy program should it desire to do so.102 Estimates of Japan’s necessary breakout time range from a few months to a year or two. The disaster that followed the March 2011 tsunami and nuclear catastrophe at Fukushima-Daiichi nuclear power plant raised the possibility that Japan might permanently shut down its nuclear reactors and scrap its nuclear energy industry entirely, removing its breakout capability. Yet in the end, Japan remains committed to its nuclear energy program and in August 2015 restarted its first nuclear power plant since shutting them all down in 2011. A few months after the disaster, former Defense Minister Shigeru Ishiba stated, “I don’t think Japan needs to possess nuclear weapons, but it’s important to maintain our commercial reactors because it would allow us to produce a nuclear warhead in a short amount of time. It’s a tacit nuclear deterrent.”103 Maintaining a civilian nuclear program even after the tragedy at Fukushima has a clear connection to maintaining some level of nuclear breakout capability and nuclear deterrent. Referring to the LDP’s determination to maintain a nuclear energy program, Narushige Michishita argued, “What they are saying in a tacit manner is that 98 percent of our program is peaceful, but we have the potential for something else.”104 Japan would face some serious operational and political obstacles should it seek nuclear weapons. Japan’s people are concentrated in several densely populated urban areas that makes them very vulnerable to a nuclear exchange. To have an effective deterrent, Japan would need many weapons, and given Japan’s lack of geographical depth, there are few places to deploy these systems, making them vulnerable to a first strike. Acquisition of the necessary weapons systems, especially strategic bombers and ballistic missiles, would violate the constitution and the EDOP.105 Some disagree that nuclear weapons are acceptable as a defensive system used only for retaliation, and there would likely be a highly divisive debate in Japan should any government head in this direction under any but the most dire circumstances. Even in the wake of what many would argue is an increasingly aggressive China, Prime Minister Abe had a difficult time obtaining public support for a constitutional reinterpretation of collective self-defense. Finally, “going nuclear” would also entail leaving the NPT and damaging Tokyo’s reputation as a nonproliferation stalwart. Economic sanctions would likely follow, as well as restrictions on Japan’s nuclear industry.106 For all these reasons, Japan would incur a heavy cost, domestically and internationally, should it move to acquire nuclear weapons. Every time Japanese leaders have examined this possibility, they have acknowledged this reality and chosen instead to rely on the U.S. defense commitment. As one study notes, “In the context of the gulf between Japanese public opinion, which is largely ill-disposed toward nuclear weapons and security hawks at the elite level eager to push back against this ‘nuclear allergy,’ the END [extended nuclear deterrent] offered and continues to offer a neat and practical solution.”107 Thus, Japan will continue to rely on the U.S. alliance and the nuclear umbrella while also slowly increasing its own conventional capabilities and leaving the door open for nuclear acquisition. In the end, Samuels and Schoff provide the most pointed analysis: “Although Japan’s nuclear hedging strategy is likely to continue in the near future, U.S. policy makers (and those throughout the region) should not be sanguine about this strategy continuing indefinitely. Japan’s choices will be determined ultimately by how well potential threats can be managed and by the strength of the U.S. commitment to extended deterrence.”108