# 1NC vs Bryce

## Off

### Spikes Theory

#### Interpretation – The aff may not read more than 2 theoretical pre-empts in the 1AC if the full text of the pre-empt is not disclosed on the NDCA wiki.

#### Violation –

#### Net benefits:

#### 1. Inclusion – Spikes exclude people with learning disabilities which not only deters them from the activity but also makes debate uneducational.

Lonam 15. Terrence Lonam, Associate Director for National Symposium for Debate (NSD), Director of Faculty Development for Texas Debate Collective (TDC), Assistant Debate Coach at Lake Highland Prep, 2017 B.A. Candidate @ University of Alabama for Major: Interdisciplinary Studies (Cultural Studies of Education), Minors: Public Policy, Social Innovation and Leadership April 21, 2015 “Miscellaneous Thoughts from the Disorganized Mind of Marshall Thompson” http://nsdupdate.com/2015/04/21/miscellaneous-thoughts-from-the-disorganized-mind-of-marshall-thompson/

First, I think that evaluating who is the better debater via who dropped spikes excludes lots of specific individuals, especially those with learning disabilities. I have both moderate dyslexia and extreme dysgraphia. Despite debating for four years with a lot of success I was never able to deal with spikes [due to moderate dyslexia]. I could not ‘mind-sweep’ because my flow was not clear enough to find the arguments I needed, and I was simply too slow a reader to be able to reread through the relevant parts of a case during prep-time. I was very lucky, my junior year (which was the first year I really competed on the national circuit) spikes were remarkably uncommon. Looking back it was in many ways the low-point for spike. They started to be used some my senior year but not anything like the extent they are used today. I am entirely confident, however, in saying that if spikes had had anywhere near the same prevalence when I started doing ‘circuit’ debate as they do now, I—with the specific ways that dyslexia/dysgraphia has affected me—would never have bothered to try to debate national circuit LD (I don’t intend to imply this is the same for anyone who has dyslexia or dysgraphia, the particular ways that learning disabilities manifest is often difficult to track). Now, the mere fact that I would have been prevented from succeeding in the activity and possibly from being able to enjoyably compete is not an argument. I never would have been able to succeed at calligraphy, but I would hardly claim we should therefore not make the calligraphy club about handwriting. Instead, what I am suggesting is that the values that debate cares about and should be assessing are not questions of handwriting or notation. We expect notation instrumentally to avoid intervention, but it is not one of the ends of debate in itself. Thus, if there is a viable principle upon which we can decrease this strategic dimension of spikes but maintain non-intervention I think we should do so. I was ‘good’ at philosophy, ‘good’ at argument generation, ‘good’ at research, ‘good’ at casing, ‘great’ at framework comparison etc. It seems to me that as long as I can flow well enough to easily follow a non-tricky aff it was proper that my learning disabilities not be an obstacle to my success. (One other thing to note, while I was a ‘framework debater’ who could never have been good at spikes because of my learning disability I have never met a ‘tricky debater’ who could not have succeeded in debate without tricks simply in virtue of their intelligence and technical proficiency; that is perhaps another reason to favor my account.)

#### 2. Clash – tons of theory spikes disincentivize debaters from engaging on substance since they can just go for one of the dropped spikes in order to preclude substantive debate. Either I have to spend a lot of time answering the spikes which creates a time tradeoff on substance OR I spend only a little time on the spikes in which case the 1AR can go all in on a single spike to moot neg substance. Either way both conclusions make debate unfair.

#### Voter for Inclusion which precludes questions of fairness and education. The impact spills over outside of this debate round and forecloses the possibility for debaters who are ostracized by multiple spikes to engage in the debate community. This marginalizes those with learning disabilities and makes the community exclusionary. Fairness is also a voter as a fair playing field is necessary to adjudicate the round in terms of which side did the better debating.

#### Drop the debater in order to discourage the use of multiple blippy spikes and check back in round exclusion. Also rectifies in round abuse and strat skew because the time it took to read this shell means I don’t have a fair shot on substance. Dropping the arg fails – only dropping the debater has the potential to act as deterrent by creating a norm.

#### And, it’s not what you do, it’s what you justify- theory is an issue of norms setting; even if no one was excluded this time, the fact that it could have is sufficient to warrant a loss. Competing interpretations is key to generating real world change as it establishes clear guidelines to follow.

#### No RVIS because a) creates chilling effect on checking back 1AC theory abuse when negs could lose round solely on theory b) denies the antecedent, you shouldn’t win just because you are fair, inclusive, or educational c) disincentivizes substance debate by making it a no risk issue for 1AR’s to collapse solely down to theory, mooting discussion of the aff

#### And they have to beat theory before they can access the spikes because I’m criticizing them in the first place.

### Indian Ocean DA

#### LAWs key to Indian Ocean Maritime Security

Ray 18, Trisha. "Beyond the ‘Lethal’ in Lethal Autonomous Weapons: Applications of LAWS in Theatres of Conflict for Middle Powers." (2018). Props to Birdman – I saw him read the cite (Trisha Ray is an Associate Fellow at ORF’s Technology and Media Initiative. Her research focuses on Geotech, the security implications of emerging technologies, AI governance & norms and lethal autonomous weapons systems. Trisha is also a member of the UNESCO’s Information Accessibility Working)//Elmer

Defence-in-depth through persistent presence in the **maritime domain LAWS** can help maintain persistent presence in areas that are difficult to monitor due to risks arising from climate, **vast or difficult terrain**, **or unexploded ordnance**, **enabling defence-in-depth even with complex geographies**. The Indian military is engaged in a diverse range of theatres: mountains to the north, deserts to the west, and **India’s island territories and oceanic borders**. The 2017 Joint Doctrine of the Indian Armed Forces highlights the centrality of all-terrain capabilities in securing India’s territory: “[U]ndertaking ‘Integrated Theatre Battle’ with an operationally adaptable force, to ensure decisive victory in a network centric environment across the entire spectrum of conflict in varied geographical domains, will be the guiding philosophy for evolution of force application and war fighting strategies.”[xxvii] An example of this complex geography is the Indian Ocean, which has both **connected India to global maritime routes, and also made the country vulnerable to sea-borne threats**. In the immediate maritime territory surrounding its coast, India faces the threat of **sea-borne terrorism** as epitomised in the 26/11 Mumbai attacks. In its wider Exclusive Economic Zone, the Indian Navy must contend with **piracy and naval incursions by hostile states**. For its part, Indonesia’s geography challenge is policing its 16,000 or so islands.[xxviii] Its coastline is the third-longest in the world.[xxix] Cognisant of the centrality of the maritime domain in Indonesia’s security, President Joko Widodo announced the ‘Global Maritime Fulcrum’ (GMF) policy during his speech at the 2014 East Asia Summit. In 2016, Jokowi elaborated: “Our strategic position between two oceans and as the **fulcrum of the global shipping route**, is an important factor **in maintaining security and safety of international shipping navigation,** **especially in the sea intersection that links West-East trade routes and North- South trade routes, where more than 60,000 ships trespass our seas every year**,”[xxx] The challenge presented by vast maritime territories—as well as other difficult-to-police terrains such as mountains and forests—**is maintaining a continuous presence**. A defending military force can only cover a portion of these territories at a time, giving an intruding actor multiple points of entry before they can be detected and countered. In the maritime sphere, **autonomous systems can enhance maritime domain awareness (MDA) and serve** as an effective **deterrent against incursions**. For instance, the Indian Navy inaugurated the Integrated Underwater Harbour Defence and Surveillance System (IUHDSS) in 2016.[xxxi] Currently operational in the port cities of Vishakhapatnam and Mumbai, this Israel-made multi-sensor system (radar, electro-optic cameras and sonar) can identify, track and generate warnings for underwater and surface threats near the coasts. However, the system cannot act against these threats. An autonomous system along the lines of the IUHDSS can deploy armed Unmanned Underwater Vehicles (UUVs) and UAVs to conduct additional reconnaissance of detected objects, issue verbal warnings where necessary, fire warning shots or otherwise engage the target without lethal force. If enough actionable information is available, the autonomous system could potentially use lethal force to destroy a vessel, after which manned vessels could be sent in to detain the passengers. In doing so, an autonomous IUHDSS-like system can one, deter intruding civilian vessels, as in Indonesia’s case with Chinese fishing vessels; or, two, provide the first layer of defence in case of an imminent threat while information is relayed via the chain of command. Another useful application of autonomous systems would be in detecting and eliminating mines. The Indonesian Navy, for instance, deployed a STERNA UAV in July 2018 to detect and assess underwater mines.[xxxii] In India, minesweepers are essential in maintaining the safety of its maritime routes. Currently, India only has two functional minesweepers for the entirety of its maritime territory. The Indian Navy could take a future-oriented approach and upgrade to an autonomous minesweeping system that can remove mines without endangering any human crew.

#### Secure Indian Ocean is key to India’s global leadership and preserves fishing resources

Jaishankar 16 Dhruva Jaishankar 9-12-2016 "**Indian Ocean region: A pivot for India’s growth**" <https://www.brookings.edu/opinions/indian-ocean-region-a-pivot-for-indias-growth/> (Former Brookings ExpertDirector, US Initiative - Observer Research FoundationNon-Resident Fellow - Lowy Institute)//Elmer

The Indian Ocean matters today, arguably **more than ever.** It is a major conduit for international trade, especially energy. Its littoral is vast, densely populated, and comprised of some of the world’s fastest growing regions. The Ocean is also a valuable source of fishing and mineral resources. And yet its governance and security are under constant threat of being undermined, whether by non-state actors such as pirates, smugglers, and terrorists, or by furtive naval competition between states. The Indian Ocean basin is of particular importance for India, as the region’s most populous country and geopolitical keystone. Although India has long been preoccupied by continental considerations, it has recently begun to re-evaluate its priorities. India’s Indian Ocean Region strategy—which in only just taking shape—conforms closely to global priorities for preserving the Ocean as a shared resource: an important channel for trade, a sustainable resource base, and a region secure from heightened military competition, non-state actors, and catastrophic natural disasters. Achieving these objectives will require further investments in capacity, greater transparency and confidence-building measures, and enhanced institutional cooperation. Strategic Crucible The Indian Ocean is important for three reasons. First, it enjoys a privileged location at the crossroads of global trade, connecting the major engines of the international economy in the Northern Atlantic and Asia-Pacific. This is particularly important in an era in which global shipping has burgeoned. Today, the almost 90,000 vessels in the world’s commercial fleet transport 9.84 billion tonnes per year. This represents an almost four-fold increase in the volume of commercial shipping since 1970.[1] The energy flows through the Indian Ocean are of particular consequence. Some 36 million barrels per day—equivalent to about 40 per cent of the world’s oil supply and 64 per cent of oil trade—travel through the entryways into and out of the Indian Ocean, including the Straits of Malacca and Hormuz and the Bab-el-Mandeb.[2] But the Indian Ocean is more than just a conduit for commerce. The Ocean’s vast drainage basin is important in its own right, home to some two billion people. This creates opportunities, especially given the high rates of economic growth around the Indian Ocean rim, including in India, Bangladesh, Southeast Asia, and Eastern and Southern Africa. However, the densely populated littoral is also vulnerable to natural or environmental disasters. Two of the most devastating natural disasters in recent memory occurred in the Indian Ocean rim: the 2004 tsunami that killed 228,000 people, and Cyclone Nargis that hit Myanmar in 2008 and took 138,300 lives.[3] Finally, the Indian Ocean is rich in natural resources. Forty per cent of the world’s offshore oil production takes place in the Indian Ocean basin.[4] Fishing in the Indian Ocean now accounts for almost **15 per cent of the world’s total** and has increased some 13-fold between 1950 and 2010 to 11.5 million tonnes. Aquaculture in the region has also grown 12-fold since 1980. Although global fishing is reaching its natural limitations, the Indian Ocean may be **able to sustain increases in production**. Mineral resources are equally important, with nodules containing nickel, cobalt, and iron, and massive sulphide deposits of manganese, copper, iron, zinc, silver, and gold present in sizeable quantities on the sea bed. Indian Ocean coastal sediments are also important sources of titanium, zirconium, tin, zinc, and copper. Additionally, various rare earth elements are present, even if their extraction is not always commercially feasible.[5] The challenges of securing the free passage of trade and energy, ensuring the sustainable and equitable exploitation of fishing and mineral resources, and managing humanitarian assistance and disaster relief (HADR) operations would be daunting enough even if the Indian Ocean was not so contested. Beginning in 2005, pirates operating mostly from Somalia began to hijack commercial ships with alarming regularity, with such incidents peaking in 2010. Following global attention and the growing notoriety of Somali piracy, a series of steps were taken by industry and various governments. These included naval operations, transnational coordination, and security measures taken by the shipping industry. These developments resulted in a sharp drop in incidents in 2012. Nonetheless, as late as 2012, maritime piracy was costing the global economy between $5.7 and $6.1 billion, the bulk of which was borne by industry.[6] Non-state actors such as pirates are not the only entities contesting the Indian Ocean. With an eye on securing trade routes, resource rights, and commercial interests, the naval forces of maritime states in the Indian Ocean region and beyond are becoming increasingly active. India’s Importance in the Indian Ocean The Indian Ocean holds particular **importance for India**, as the littoral’s most populous country. Indeed, for the rest of the Ocean’s littoral states, and even those outside the region, India’s leadership role will be important in **determining the strategic** future. India is geographically located at the Ocean’s centre, and has over 7,500 kilometres of coastline. “India is at the crossroads of the Indian Ocean,” Prime Minister Narendra Modi declared in a speech in Mauritius in 2015. “The Indian Ocean Region is at the top of our policy priorities.”[7] The Ocean has long been a key determining **factor of India’s cultural footprint,** with people, religion, goods, and customs spreading from India to Africa, the Middle East, and Southeast Asia and vice-versa. India’s approach after independence was initially defined by the British withdrawal from east of Suez and Prime Minister Indira Gandhi calls for a zone of peace.[8] Only after the late 1990s, under the BJP-led government of Prime Minister Atal Behari Vajpayee and the Congress-led government of Manmohan Singh, did the possibilities of openings in and around the Indian Ocean come to be seriously contemplated.[9] Today, 95 per cent of India’s trade by volume and 68 per cent of trade by value come via the Indian Ocean.[10] Additionally, 3.28 million barrels per day—or nearly 80 per cent of India’s crude oil requirement—is imported by sea via the Indian Ocean. Taking into account India’s offshore oil production and petroleum exports, India’s sea dependence for oil is about 93 per cent, according to the Indian Navy.[11] India is also the fourth-largest importer of liquefied natural gas (LNG), with about 45 per cent coming by sea.[12] Moreover, India is heavily dependent on the resources of the Indian Ocean. India captured 4.1 million tonnes of fish in 2008, placing it sixth in the world and its fishing and aquaculture industries employ some 14 million people.[13] Fisheries and aquaculture industries are also a major source of exports. India’s maritime exports grew 55 times in volume between 1962 and 2012 and fisheries exports now account for Rs. 16,600 crore or about $2.5 billion.[14] Mineral resource extraction is also important. In 1987, India received exclusive rights to explore the Central Indian Ocean and has since explored four million square miles and established two mining sites. In 2013, the Geological Survey of India acquired a deep sea exploration ship Samudra Ratnakar from South Korea, boosting its survey capabilities.[15] In 2014, the International Seabed Authority issued licenses for the Indian Ocean ridge, opening up new opportunities for deep seabed mining. This region is estimated to have massive reserves of manganese, as well as cobalt, nickel, and copper, all of which are scarce on Indian soil. However, such deep sea exploration will require further investments in remotely operated vehicles and processing facilities.[16] Finally, there is a **strong security dimension to India’s engagement** with the Indian Ocean, beyond traditional naval considerations. One of the worst terrorist attacks in recent Indian memory—the 2008 assault on Mumbai in which 164 people were killed—was perpetrated by terrorists arriving by sea. **Smuggling, illegal fishing, and human trafficking are all also major concerns.**[17] The revelations about the A.Q. Khan network have highlighted the need for greater vigilance concerning the proliferation by sea of weapons of mass destruction – and even possible interdiction.[18] And while piracy has declined noticeably in the Indian Ocean since 2013, due in part to the efforts of countries like India, it could once again prove a threat to Indian commerce.[19] India has also been playing a more active role in humanitarian and disaster relief operations. These have often focused on rescuing citizens of India from conflict zones, although India has helped citizens of many other countries in the process. A recent example in the Indian Ocean region is Operation Raahat in Yemen.[20] Indian efforts have also extended to disaster relief in other countries, including assistance to Indonesia and Sri Lanka following the 2004 tsunami, to Myanmar after Cyclone Nargis, to Bangladesh after Cyclone Sidr, and to Sri Lanka after Cyclone Roanu. Relative to other countries in the region, India has advantages in terms of capabilities. These include better maritime domain awareness, and military equipment in the form of transport aircraft, helicopters, and support vessels that can help deliver food, water, and medical supplies.[21] Securing Shared Interests An overview of the importance of the Indian Ocean and India’s priorities indicates a close **alignment between Indian and global interests**. The Indian Ocean can, as some have argued, be India’s ocean.[22] But that need not come at the expense of others. The shared interests relating to the region are essentially five-fold: (i) preserving freedom of navigation for commercial shipping, (ii) sustainably and equitably harnessing the Indian Ocean’s natural resources, (iii) establishing protocols for enhancing disaster prevention and relief as well as search and rescue operations, (iv) countering piracy, terrorism, smuggling, and illegal weapons proliferation, and (v) managing international naval competition. These overlap with India’s objectives, as outlined by Indian Prime Minister Modi in 2015 under the banner of SAGAR (Security and Growth for All in the Region). “Our goal,” he said, “is to **seek a climate of trust** and transparency; respect for international maritime rules and **norms by all countries**; sensitivity to each other`s interests; peaceful resolution of maritime issues; and **increase in maritime cooperation**.”[23] India’s Indian Ocean policy, he said, would be based on building up **India’s own capabilitie**s, helping regional partners with **capacity building**, **collective action**, sustainable development, and cooperation with non-Indian Ocean region actors to ensure greater transparency, **rule of law**, and the peaceful resolution of disputes. He also laid out the objective of integrated maritime security coordination between India, Sri Lanka, the Maldives, Seychelles and Mauritius, initiated in 2011 as a trilateral India-Sri Lanka-Maldives arrangement.[24] India’s security efforts in the Indian Ocean have already begun to take concrete shape with the transfer of the Indian-made patrol vessel Barracuda to Mauritius, the deployment of P-8I aircraft to Seychelles for surveillance of its exclusive economic zone, the agreements to develop connectivity infrastructure on Assumption Island in Seychelles and Agaléga in Mauritius.[25] In the near future, collective steps will need to be taken to prevent unnecessary—and possibly ruinous—maritime competition in the Indian Ocean. Greater Indian and international efforts must be made to ensure transparency concerning naval activity and the development of potential dual-use facilities, which can be used for both civilian and military purposes.[26] Indian leadership will also be necessary if international coordination and cooperation is to improve, whether on sustainable resource extraction, humanitarian measures, or Indian Ocean governance. Some institutions have already been established with these objectives in mind. India has thrown its weight behind the Indian Ocean Naval Symposium, which has 35 members and seeks to “increase maritime co-operation among navies” of the Indian Ocean littoral states. Meanwhile, the Indian Ocean Rim Association—which has traditionally emphasised maritime security, trade, cultural promotion, tourism, and fisheries, but has recently diversified into resource management and governance—involves 21 states.[27] (See Figure 1) But questions will need to be answered concerning the adequacy of these institutions for addressing the region’s many challenges, and relatedly more resources should be devoted to these efforts. For all the region’s stakeholders, this will require greater financial outlays, which in turn necessitates a greater appreciation of the importance of the Indian Ocean for collective interests. This is slowly changing. “We recognize that there are other nations around the world with strong interests and stakes in the region,” Prime Minister Modi said in Mauritius in 2015. “India is deeply engaged with them.”[28] By instilling an appreciation of the importance of the maritime domain, key steps can be taken to advance global interests in the Indian Ocean.

#### Successful India Rise solves Extinction

Kamdar 7, Mira. Planet India: How the fastest growing democracy is transforming America and the world. Simon and Schuster, 2007. (Bernard Schwartz Fellow at the Asia Society in 2008)//Elmer

**No other country matters more to the future of our planet than India**. There is no challenge we face, no opportunity we covet where India does not have critical relevance. **From combating global terror to finding cures for dangerous pandemics, from dealing with the energy crisis to averting the worst scenarios of global warming**, from rebalancing stark global inequalities to spurring the vital innovation needed to create jobs and improve lives—**India is now a pivotal player**. The world is undergoing a process of profound recalibration in which the rise of Asia is the most important factor. India holds the key to this new world. India is at once an ancient Asian civilization, a modern nation grounded in Enlightenment values and democratic institutions, and a rising twenty-first-century power. With a population of 1.2 billion, India is the world’s largest democracy. It is an open, vibrant society. India’s diverse population includes Hindus, Muslims, Sikhs, Christians, Buddhists, Jains, Zoroastrians, Jews, and animists. There are twenty-two official languages in India. Three hundred fifty million Indians speak English. India is the world in microcosm. Its geography encompasses every climate, from snowcapped Himalayas to palm-fringed beaches to deserts where nomads and camels roam. A developing country, India is divided among a tiny affluent minority, a rising middle class, and 800 million people who live on less than $2 per day. India faces all the critical problems of our time—extreme social inequality, employment insecurity, a growing energy crisis, severe water shortages, a degraded environment, global warming, a galloping HIV/AIDS epidemic, terrorist attacks—on a scale that defies the imagination. India’s goal is breathtaking in scope: transform a developing country of more than 1 billion people into a developed nation and global leader by 2020, and do this as a democracy in an era of resource scarcity and environmental degradation. The world has to cheer India on. If India fails, there is a real risk that **our world will become hostage to political chaos, war over dwindling resources, a poisoned environment, and galloping disease**. Wealthy enclaves will employ private companies to supply their needs and private militias to protect them from the poor massing at their gates. But, if India succeeds, it will demonstrate that it is possible to lift hundreds of millions of people out of poverty. It will prove that multiethnic, multireligious democracy is not a luxury for rich societies. It will **show us how to save our environment, and how to manage in a fractious, multipolar world**. India’s gambit is truly the venture of the century.

#### Collapse of Fishing causes Global Food Conflicts

Higgins-Bloom 18 Kate Higgins-Bloom 9-12-2018 "Food Fight" <https://foreignpolicy.com/2018/09/12/food-fight-illegal-fishing-conflict/> (commander in the U.S. Coast Guard)//Elmer

Humans have always depended on the sea. For as long as there have been fishermen, there have been conflicts over fish. And though it may seem anachronistic, the odds that a squabble over fishing rights could turn into a **major armed conflict are rising.** The return of great-power competition has actually increased the likelihood of a war over fish. The past 17 years of the fight against terrorism, and Washington’s renewed focus on developing high-end capabilities to prepare for great-power conflict, have led to a lack of preparation for a low-end, seemingly mundane but increasingly likely source of conflict in the world: food. As incomes rise around the world, so too **does the demand for food—especially protein**. The United Nations currently estimates that between mid-2017 and 2050, the number of humans on Earth will rise by 29 percent, from 7.6 billion to 9.8 billion. Most of that population growth will occur in Asia, Africa, and Latin America—areas where millions of people have recently risen from deep poverty to the middle class. Part of a middle-class lifestyle is a middle-class diet, which includes far more protein than poor people consume. As a result of that shift, **the global demand for protein will outpace population growth, increasing between 32 and 78 percent, according to some estimates**. Meeting that demand could require an additional 62 to 159 million metric tons of protein per year. To maintain political support at home, leaders must ensure access to the high-quality food that is part of a middle-class lifestyle. The supply of both wild and farmed fish will not keep up. The current annual global catch of seafood is 94 million metric tons. And all around the world, the wild populations of both migratory fish, such as tuna, and less mobile species, such as flounder, are being overfished. Scarcity has already forced Chinese fishing fleets further and further afield in search of their catch. Serious international efforts to manage the world’s wild fisheries are underway, but this work is stymied by widespread illegal, unreported, and unregulated (or IUU) fishing. Today, such harvests comprise somewhere from 20 to 50 percent of the global catch and inflict economic, social, and environmental damage on some of the world’s most vulnerable populations as fisheries collapse from overfishing and poor and rural fishing communities wrestle with the subsequent loss of income and, eventually, their social fabric. The classic example of this is fishermen in Central America turning to drug cartels for employment or poaching from closed fisheries, feeding the cycle of violence and environmental damage. The political leaders of rising powers will feel enormous pressure to secure the resources their citizens demand—even if it means violating international norms and rules. This pressure could sow the seeds of potential conflict in two distinct ways. The first is that some states will overplay their hand when using fishing fleets and fisheries enforcement **to exert influence** in contested waters. The second is that illegal fishing, driven by exploding domestic demand and collapsing supply, will be met with increasingly aggressive enforcement by America or its allies—which could quickly escalate and spill over **into actual conflict**.

#### Food Conflicts go Nuclear

FDI 12 (Future Directions International, a Research institute providing strategic analysis of Australia’s global interests; citing Lindsay Falvery, PhD in Agricultural Science and former  Professor at the University of Melbourne’s Institute of Land and Environment, “Food and Water Insecurity: International Conflict Triggers and Potential Conflict Points,” [http://www.futuredirections.org.au/workshop-papers/537-international-conflict-triggers-and-potential-conflict-points-resulting-from-food-and-water-insecurity.html)//Elmer](http://www.futuredirections.org.au/workshop-papers/537-international-conflict-triggers-and-potential-conflict-points-resulting-from-food-and-water-insecurity.html)/Elmer)

There is a growing appreciation that the conflicts in the next century will most likely be fought over a lack of resources. Yet, in a sense, this is not new. Researchers point to the French and Russian revolutions as conflicts induced by a lack of food. More recently, Germany’s World War Two efforts are said to have been inspired, at least in part, by its perceived need to gain access to more food. Yet the general sense among those that attended FDI’s recent workshops, was that the scale of the problem in the future could be significantly greater as a result of population pressures, changing weather, urbanisation, migration, loss of arable land and other farm inputs, and increased affluence in the developing world. In his book, Small Farmers Secure Food, Lindsay Falvey, a participant in FDI’s March 2012 workshop on the issue of food and conflict, clearly expresses the problem and why countries across the globe are starting to take note. He writes (p.36), “…if people are hungry, especially in cities, the state is not stable – riots, violence, breakdown of law and order and migration result.” “Hunger feeds anarchy.” This view is also shared by Julian Cribb, who in his book, The Coming Famine, writes that if “large regions of the world run short of food, land or water in the decades that lie ahead, then wholesale, bloody wars are liable to follow.” He continues: “An increasingly credible scenario for World War 3 is not so much a confrontation of super powers and their allies, as a festering, self-perpetuating chain of resource conflicts.” He also says: “The wars of the 21st Century are less likely to be global conflicts with sharply defined sides and huge armies, than a scrappy mass of failed states, rebellions, civil strife, insurgencies, terrorism and genocides, sparked by bloody competition over dwindling resources.” As another workshop participant put it, people do not go to war to kill; they go to war over resources, either to protect or to gain the resources for themselves. Another observed that hunger results in passivity not conflict. Conflict is over resources, not because people are going hungry. A study by the International Peace Research Institute indicates that where food security is an issue, it is more likely to result in some form of conflict. Darfur, Rwanda, Eritrea and the Balkans experienced such wars. Governments, especially in developed countries, are increasingly aware of this phenomenon. The UK Ministry of Defence, the CIA, the US Center for Strategic and International Studies and the Oslo Peace Research Institute, all identify famine as a potential trigger for conflicts and possibly even nuclear war.

## Case

### Deterrence Turn

### Miscalc Turn

#### Potential for accidents isn’t aff offense – it could cause mutual restraint that strengthens deterrence.

Horowitz '19 [Michael; 8/22/19; Professor of Political Science and the Associate Director of Perry World House at the University of Pennsylvania, PhD in Government from Harvard University; “When speed kills: Lethal autonomous weapon systems, deterrence and stability”, Journal of Strategic Studies, Vol. 42, Issue 42, p. 767-788]//GJ

Moreover, just as with non-LAWS, militaries will be wary of deploying LAWS they believe adversaries can easily counter or that are likely to malfunction. The potential for accidents on the part of LAWS, particularly if others deploy them, since LAWS might be particularly prone to accidents when interacting with other systems, could lead to mutual restraint in some cases. Each side might not deploy a LAWS if it believes the other side might deploy them, and that their system will be unpredictable if the other sides deploys its LAWS. This is related to the way the acquisition of chemical weapons by both sides led to stalemates in World War I and helped discourage battlefield use in World War II in the European theater.34 Both sides had chemical weapons capacity but did not use them because they knew the other side could respond in kind, and that it would lead to results that were, at best, a stalemate and, at worst, unpredictable (due to the way wind and other factors can rapidly shift the effect of a chemical weapons attack).

#### Information processing and hardened early warning stops spoofing and crisis miscalc – turns the case

Horowitz et al 19 [Michael C. Horowitz is Professor of Political Science and Associate Director of Perry World House at the University of Pennsylvania. Paul Scharre is Senior Fellow and Director, Technology and National Security Program at the Center for a New American Security. Alexander Velez-Green is a defense analyst based in Washington, DC. "A Stable Nuclear Future? The Impact of Autonomous Systems and Artificial Intelligence." https://arxiv.org/ftp/arxiv/papers/1912/1912.05291.pdf]

These challenges with existing automation of nuclear command and control illustrate the way that automation can become a double-edged sword. Shortening the time and steps needed to launch nuclear weapons can help buy more time for decision-makers to weigh ambiguous information and make an informed judgment before acting. On the other hand, in the event of accidents or misuse, there may be fewer steps and consequently fewer safeguards in place.

A critical question is thus how militaries will employ advances in AI to influence their early warning and NC2 systems. There may be many places where militaries could employ new forms of autonomous systems to bolster the reliability and effectiveness of early warning and NC2. Human-machine teaming could help offset automation bias and thus enable the use of more autonomous systems. More advanced automation in nuclear early warning systems could allow greater situational awareness, reducing the risk of false alarms. It could also play a valuable role in helping human decision-makers process large amounts of information quickly. In this regard, automated data processing may play a critical role in helping human nuclear early warning operators to identify threats – and false cues – in an increasingly data-saturated and complex strategic environment. Increased automation in NC2 could also help to reduce the risk of accidents or unauthorized use. And an expanded role for automation in communications could help ensure that command-and-control signals reach their targets quickly and uncorrupted in highly contested electromagnetic environments.

#### Miscalc is a neg warrant—LAWs provide routes for de-escalation

Leys, 18—JD Candidate, Yale Law School (Nathan, “Autonomous Weapon Systems and International Crises,” Strategic Studies Quarterly, Spring 2018, dml)

In this case, the United States would prefer not to launch military action against Russia. Regardless of the veracity of Russia’s claim of an accidental firing, the United States could call for a diplomatic resolution short of kinetic force (e.g. international inspections of the system, a withdrawal of air defense batteries in the area, etc.). Autonomy could afford the United States an off-ramp by providing a plausible cover: the potentially accidental nature of the violation of an ally’s sovereignty means a military response is neither legally required nor morally warranted.

In short, AWS could provide a face-saving alternative for leaders trying to de-escalate a crisis. The technical complexities of AI-enabled weapons and the possibility of malfunction add a new layer of fog to war. It may not be possible in such situations to determine whether an AWS malfunctioned or a redline was crossed—more importantly, it may not matter. AWS operating in conditions of uncertainty make it possible for a first shot to be fired, even if no person fires it. In an interesting twist on the debate about whom to hold responsible in the event of an AWS’s malfunction, the most life-saving answer in a crisis may be no one: If there is no one to blame, there is no one to bomb.63 On the other hand, national leaders may well hold the owners of the AWS system responsible regardless whether an attack was accidental. In this case, retaliation might seem desirable to maintain credibility.

### No Arms Race

#### No pre-emptive deployment – militaries will ensure robust checks in place

1AC Horowitz 19, Michael C. "When speed kills: Lethal autonomous weapon systems, deterrence and stability." Journal of Strategic Studies 42.6 (2019): 764-788. (Michael C. Horowitz is Political Science Professor, Director of Perry World House, and Richard Perry Professor at the University of Pennsylvania.)//Elmer

Another risk is that competitive dynamics mean countries will accelerate their weapons development cycles and deploy LAWS before fully testing them, due to a fear of falling behind. This would essentially resolve the trust dilemma in a way that makes accidents more likely.61 Given concern that LAWS could be more prone to accidents, such a development would be especially dangerous. This risk of an LAWS arms race causing countries to take short cuts in weapons development seems unlikely, however. Militaries **want weapons they can control** (excluding potential exceptions noted above), and they are unlikely **to approve of deploying weapon systems they view as less able** to accomplish a mission, or more **likely to put their own forces in danger**, than alternatives. Thus, the incentive to deploy effective systems will hedge at least somewhat against short-cuts in the weapons development process. Moreover, public awareness about the risks of AI could play a role in shaping how militaries consider deploying AI systems, even in a competitive scenario. **Fear of AI should lead most militaries to be more careful**, rather than less careful, in the testing and **development of LAWS**. The pressure to stay ahead will compete with the pressure to deploy effective systems.

#### No impact – states use caution, won’t give weapons full autonomy, no accidental war, and bans don’t solve because cheating is so easy even if everyone complied nobody would trust it – conclusion of their author

Horowitz et al 19 [Michael C. Horowitz is Professor of Political Science and Associate Director of Perry World House at the University of Pennsylvania. " When speed kills: Lethal autonomous weapon systems, deterrence and stability." https://www.tandfonline.com/doi/full/10.1080/01402390.2019.1621174]

Conclusion

This article assesses the growing integration of AI in military systems with an eye towards the impact on crisis stability, specifically how countries think about developing and deploying weapons, as well as when they are likely to go to war, and the potential for arms control.68 Contrary to some public concern and media hype, unless AI capabilities reach truly science fiction levels, their impact on national and subnational military behaviour, especially interstate war, is likely to be relatively modest. Fundamentally, countries go to war for political reasons, and accidental wars have traditionally been more myth than reality.69 The effects for subnational use of AI could be more significant, especially if military applications of AI make it easier for autocrats to use military force to repress their population with a reduced number of loyalists.

The commercial spread of machine learning in the private sector means some form of spillovers to military applications will be inevitable. The desire for faster decision-making, concern about the hacking of remotely piloted systems, and fear of what others may be developing could all incentivise the development of some types of LAWS. However, awareness of the potential risk of accidents regarding these systems, as well as the desire for militaries to maintain control over their weapons to maximise their effectiveness, will likely lead to caution in the development and deployment of systems where machine learning is used to select and engage targets with lethal force.

One of the greatest risks regarding applications of AI to military systems likely comes from opacity concerning those applications, especially as it interacts with the potential to fight at machine speed. Unlike missiles or bombers, it will be difficult for countries to verify what, if any, AI capabilities potential adversaries have. Even an international agreement restricting or prohibiting the development of LAWS would be unlikely to resolve this concern. Fear would still exist. Given that uncertainty makes disputes harder to resolve, this could have an impact.

These factors make international regulation potentially attractive, in theory, but challenging in application, because the very thing about LAWS that might make international regulations on LAWS attractive – their ability to enable faster and more devastating attacks, as well as the risk of accidents – may also make those regulations harder to implement and increase the risks if cheating occurs. But discussions at the CCW are ongoing, and may yet yield progress, or at the least agreement on considering safety and reliability issues when evaluating the development and use of autonomous systems. Humanity’s worst fears about an intelligent machine turning against it aside, the integration of machine learning and military power will likely be critical area of inquiry for strategic studies in the years ahead.

### Nuc LAWs Good

#### Nuclear LAWs K2 deterrence

**Lowther & McGiffin 19** (Adam Lowther and Curtis McGiffin, 08/23/2019. Dr. Adam Lowther is Director of Research and Education at the Louisiana Tech Research Institute (LTRI) where he teaches deterrence strategy, NC3 History, and Integrated Tactical Warning and Attack Assessment in several nuclear command, control, and communication courses for the U.S. Air Force. Curtis McGiffin is Associate Dean, School of Strategic Force Studies, at the Air Force Institute of Technology and an adjunct professor for Missouri State University’s Department of Defense and Strategic Studies where he teaches strategic nuclear deterrence theory and NC3 education. “America Needs a Dead Hand.” *Maxwell Air Force Base: Air Force Institute of Technology,* <https://www.maxwell.af.mil/News/Commentaries/Display/Article/1942374/america-needs-a-dead-hand/>) LD 21

America’s nuclear command, control, and communications (NC3) system comprises many component systems that were designed and fielded during the Cold War — a period when nuclear missiles were set to launch from deep within Soviet territory, giving the United States sufficient time to react. That era is over. Today, **Russian and Chinese nuclear modernization is** rapidly **compressing the time** U.S. **leaders will have to detect a** **nuclear launch**, decide on a course of action, **and direct a response**. // Technologies such as hypersonic weapons, stealthy nuclear-armed cruise missiles, and weaponized artificial intelligence mean America’s legacy NC3 system may be too slow for the president to make a considered decision and transmit orders. The **challenges of attack-time compression present a destabilizing risk** to America’s deterrence strategy. Any potential for failure in the detection or assessment of an attack, or any reduction of decision and response time, is inherently dangerous and destabilizing. // If the ultimate purpose of the NC3 system is to ensure America’s senior leadership has the information and time needed to command and control nuclear forces, then the penultimate purpose of a reliable NC3 system is to reinforce the desired deterrent effect. **To maintain the deterrent value of** America’s **strategic forces, the U**nited **S**tates **may need** to develop something that might seem unfathomable — **an automated strategic response system** based on artificial intelligence. // Admittedly, such a suggestion will generate comparisons to Dr. Strangelove’s doomsday machine, War Games’ War Operation Plan Response, and the Terminator’s Skynet, but the prophetic imagery of these science fiction films is quickly becoming reality. A rational look at **the NC3** modernization problem finds that it **is compounded by technical threats** that are likely to impact strategic forces. Time compression has placed America’s senior leadership in a situation where the existing NC3 system may not act rapidly enough. Thus, it may be necessary to develop a system based on artificial intelligence, with predetermined response decisions, that detects, decides, and directs strategic forces with such speed that the attack-time compression challenge does not place the United States in an impossible position. // **Threats Are the Problem //** The compression of detection and decision time is not a new phenomenon. In the 1950s, Soviet bombers would take hours to reach the United States. With the advent of the missile age, that time was compressed to about 30 minutes for a land-based intercontinental ballistic missile and about 15 minutes for a submarine-launched ballistic missile. These technologies fostered the development of both space-based and underwater detection and communication, as well as advanced over-the-horizon radar. Despite this attack-time compression, U.S. officials remained confident that America’s senior leaders could act in sufficient time. The United States believed the Soviets would be deterred by its ability to do so. // However, over the past decade **Russia has vigorously modernized its** nuclear **arsenal, with** a particular **emphasis on** developing **capabilities that are difficult to detect** because of their shapes, their materials, and the flight patterns they will take to U.S. targets. Examples of the systems include the Kaliber-M and  Kh-102 cruise missiles, Poseidon Ocean Multipurpose System Status-6 unmanned underwater vehicle, and the Avangard Objekt 4202 hypersonic weapon, **which** all **have the potential to negate the** United States’ **NC3** system **before it can respond**. This compression of time is at the heart of the problem. The United States has always expected to have enough time to detect, decide, and direct. **Time** to act **can no longer be taken for granted**, nor can it be assumed that the Russians or Chinese, for that matter, will act tactically or strategically in the manner expected by the United States. In fact, **policymakers should expect adversaries to act unpredictably.** Neither the American intelligence community nor Beltway intellectuals predicted the Russian invasion of Crimea, among other recent Russian acts of aggression. The Russians, to their credit, are adept at surprising the United States on a regular basis.

**US vulnerable to nuclear threats now – developing nuclear LAWs solves**

**Lowther & McGiffin 19** (Adam Lowther and Curtis McGiffin, 08/23/2019. Dr. Adam Lowther is Director of Research and Education at the Louisiana Tech Research Institute (LTRI) where he teaches deterrence strategy, NC3 History, and Integrated Tactical Warning and Attack Assessment in several nuclear command, control, and communication courses for the U.S. Air Force. Curtis McGiffin is Associate Dean, School of Strategic Force Studies, at the Air Force Institute of Technology and an adjunct professor for Missouri State University’s Department of Defense and Strategic Studies where he teaches strategic nuclear deterrence theory and NC3 education. “America Needs a Dead Hand.” *Maxwell Air Force Base: Air Force Institute of Technology,* <https://www.maxwell.af.mil/News/Commentaries/Display/Article/1942374/america-needs-a-dead-hand/>) LD 21

There is a fourth option. **The U**nited **S**tates **could develop an NC3 system based on a**rtificial **i**ntelligence. Such an approach could overcome the attack-time compression challenge. // DARPA’s Knowledge-directed Artificial Intelligence Reasoning Over Schemas program is an example of how an American NC3 system based on artificial intelligence might function. Fusing the contextual and temporal events of a nuclear attack into an analytic-based artificial intelligence capability may ensure rapid comprehension and in turn generate associated and prompt actionable responses. The biggest challenge for such a system is its ability to learn and adapt. Unlike the game of Go, which the current world champion is a supercomputer, Alpha Go Zero, that learned through an iterative process, in nuclear conflict there is no iterative learning process. Thus, a fully empowered “general” artificial intelligence system that learns may be far more difficult to design than a “narrow” artificial intelligence system that engages in limited analysis and decision-making. Artificial intelligence is perhaps best poised to assist humans when it comes to the dimensions of detecting a nuclear attack and deciding which planned option best meets the criteria designed by programmers. Here, artificial intelligence may, to a small degree, mitigate the tyranny of attack-time compression and accelerate wartime decision-making. However, when a president may have, at most, six minutes to make a decision, time compression still poses a fundamental problem. // **A**rtificial **i**ntelligence is already being used for target identification, controlling autonomous platforms, pattern recognition, and a number of other wartime tasks. It **is capable of processing vast amounts of information** very **quickly** and assessing the pros and cons of alternative actions in a thoroughly unemotional manner. According to Vincent Boulanin: // "Recent **advances** in artificial intelligence **could be leveraged in all aspects of the nuclear enterprise**. Machine learning could boost the detection capabilities of extant early warning systems and improve the possibility for human analysts to do a cross-analysis of intelligence, surveillance, and reconnaissance (ISR) data. Machine learning could be used to enhance the protection of the command and control architecture against cyberattacks and improve the way resources, including human forces, are managed. Machine learning advances could boost the capabilities of non-nuclear means of deterrence: be it conventional (air defence systems), electronic (jamming) or cyber." // However, artificial intelligence is no panacea. Its failures are numerous. And the fact that there is profound concern by well-respected experts in the field that science fiction may become reality, because artificial intelligence designers cannot control their creation, should not be dismissed. For the United States, every option presents significant risk and uncertainty. Reality, however, is progressing to a point where the United States must address the challenge we outlined above. Russia and China are not constrained by the same moral dilemmas that keep Americans awake at night. Rather, they are focused on creating strategic advantage for their countries. // **Conclusion // Technology is reducing** the **minutes available to** American **senior leadership in a future nuclear attack**. The United States can no longer ignore this situation nor wish it away. Whether America builds an NC3 system based on artificial intelligence, pursues one of the other options presented, or takes another path is not our primary concern. The challenge, as we see it, is that neither the current modernization path nor the approach offered by nuclear minimalists adequately accounts for the effects of shrinking decision time. // While the psychology of deterrence has not changed, we believe that time **compression is changing** the **risk**-reward **calculation of our adversaries. Nuclear deterrence** creates stability and **depends on an adversary’s perception** that **it cannot destroy the U**nited **S**tates **with a surprise attack, prevent a** guaranteed **retaliatory strike, or prevent** the United States from effectively **commanding and controlling** its **nuclear forces**. **That perception begins with an assured ability to detect, decide, and direct a second strike**. **In this area**, the **balance is shifting away from the U**nited **S**tates.

#### There’s no risk of errors---even if AI isn’t perfect, it’s great at admitting what it doesn’t know---human error is orders of magnitude worse

Patrick Tucker 20 {Patrick Tucker is technology editor for Defense One. 4-29-2020. “Artificial Intelligence Outperforms Human Intel Analysts In a Key Area.” https://www.defenseone.com/technology/2020/04/artificial-intelligence-outperforms-human-intel-analysts-one-key-area/165022/}//JM

In the 1983 movie WarGames, the world is brought to the edge of nuclear destruction when a military computer using artificial intelligence interprets false data as an imminent Soviet missile strike. Its human overseers in the Defense Department, unsure whether the data is real, can’t convince the AI that it may be wrong. A recent finding from the Defense Intelligence Agency, or DIA, suggests that in a real situation where humans and AI were looking at enemy activity, those positions would be reversed. Artificial intelligence can actually be more cautious than humans about its conclusions in situations when data is limited. While the results are preliminary, they offer an important glimpse into how humans and AI will complement one another in critical national security fields. DIA analyzes activity from militaries around the globe. Terry Busch, the technical director for the agency’s Machine-Assisted Analytic Rapid-Repository System, or MARS, on Monday joined a Defense One viewcast to discuss the agency’s efforts to incorporate AI into analysis and decision-making. Earlier this year, Busch's team set up a test between a human and AI. The first part was simple enough: use available data to determine whether a particular ship was in U.S. waters. “Four analysts came up with four methodologies; and the machine came up with two different methodologies and that was cool. They all agreed that this particular ship was in the United States,” he said. So far, so good. Humans and machines using available data can reach similar conclusions. The second phase of the experiment tested something different: conviction. Would humans and machines be equally certain in their conclusions if less data were available? The experimenters severed the connection to the Automatic Identification System, or AIS, which tracks ships worldwide. “It’s pretty easy to find something if you have the AIS feed, because that’s going to tell you exactly where a ship is located in the world. If we took that away, how does that change confidence and do the machine and the humans get to the same end state?” In theory, with less data, the human analyst should be less certain in their conclusions, like the characters in WarGames. After all, humans understand nuance and can conceptualize a wide variety of outcomes. The researchers found the opposite. “Once we began to take away sources, everyone was left with the same source material — which was numerous reports, generally social media, open source kinds of things, or references to the ship being in the United States — so everyone had access to the same data. The difference was that the machine, and those responsible for doing the machine learning, took far less risk — in confidence — than the humans did,” he said. “The machine actually does a better job of lowering its confidence than the humans do….There’s a little bit of humor in that because the machine still thinks they’re pretty right.” The experiment provides a snapshot of how humans and AI will team for important analytical tasks. But it also reveals how human judgement has limits when pride is involved. Humans, particularly experts in specific fields, have a tendency to overestimate their ability to correctly infer outcomes when given limited data. Nobel-prize winning economist and psychologist Daniel Kahneman has written on the subject extensively. Kahneman describes this tendency as the “inside view.” He cites the experience of a group of Israeli educators assigned to write a new textbook for the Ministry of Education. They anticipated that it would take them a fraction of the amount of time they knew it would take another similar team. They couldn’t explain why they were overconfident; they just were. Overconfidence is human and a particular trait among highly functioning expert humans, one that machines don’t necessarily share.