# Aff – Biotech – Starter Packet

## 1AC

### 1AC – Dual-Use

#### Meta-analysis shows scientific certainty of the dual-use threat.

Cummings '21 [Christopher L., Kaitlin M. Volk, Anna A. Ulanova, Do Thuy Uyen Ha Lam & Pei Rou Ng, “Emerging Biosecurity Threats and Responses: A Review of Published and Gray Literature” in *Emerging Threats of Synthetic Biology and Biotechnology*, pp 13–36]

Dual Use

was the most frequently mentioned threat, appearing in half of the analyzed articles. Dual use research of concern is defined as “life sciences research that, based on current understanding, can be reasonably anticipated to provide knowledge, information, products, or technology that could be directly misapplied to pose a significant threat with broad potential consequences to public health and safety, agricultural crops and other plants, animals, the environment, material, or national security,” (Lev and Samimian-Darash 2014). DiEuliis and Giordano (2018) further state that “any tool that imparts great capability also involves at least some risk, if not threat, that the power conferred by such capacity can be used to leverage or evoke a variety of ends.” This is at the center of the concern over dual use research. The majority of biotechnology research and modernization is legitimate and done with the goal of benefiting society – that is, to beneficial ends. However, the same knowledge and techniques gained from beneficial research can be used maliciously. For instance, CRISPR-Cas9 is being used to perform targeted gene editing as a treatment for cancer, increasing our ability to treat cancer and reducing our reliance on toxic chemotherapy drugs, but it could also be used to edit pathogens to increase their virulence. Indeed, the dual use applications and threats from CRISPR are prominently featured in the literature (Vogel and Ouagrham-Gormley 2018; Webber et al. 2015).

Much of the controversial dual use research in biotechnology involves gain of function (GOF) studies, a term used in 12% of articles. Duprex et al. (2014) considers GOF to be a “generic label for a broad class of experiments that lead to a genetically altered biological agent with new or enhanced functions.” Much of the concern over GOF studies includes research on the avian influenza virus and relatives of the smallpox virus (Evans et al. 2015; Duprex et al. 2014). These studies conferred new traits to the virus that increased its virulence in order to study transmission or vaccine creation, but also have a clear application for biological weapon (bioweapon) development. In this way, they are both GOF and dual use research. Publishing these sorts of studies is considered a biosecurity threat of its own because the information could allow a nefarious actor to create a bioweapon when they otherwise wouldn’t have had the knowledge to do so. We refer to this threat as “information access” and it is mentioned in 9% of articles. DiEuliss and Gronvall (20) touch on this threat while writing about the controversial publication of a study that synthesized horsepox from scratch. They state that “horsepox is not a significant disease for humans, but there is concern that publication of these experiments could lower barriers toward the synthesis and booting up of another orthopoxvirus, variola (smallpox) virus, which was a significant scourge in history.”

#### Scenario 1 is bioweapons.

#### Terror groups are trying to get them.

Langer '20 - Scoville Fellow working with Michael Nelson in the Technology and International Affairs Program [Ronit and Shruti Sharma, Nov 20, "The Blessing and Curse of Biotechnology: A Primer on Biosafety and Biosecurity," https://carnegieendowment.org/2020/11/20/blessing-and-curse-of-biotechnology-primer-on-biosafety-and-biosecurity-pub-83252]

SECURITY THREATS

Recent advances in synthetic biology, a technology that can be used to artificially create organisms in labs, carry the foreboding potential to develop biological weapons. Moreover, the emergence of the DIY community and the open-source nature of this movement have sparked concerns that terrorists could easily acquire the information needed to weaponize biotechnology, although none of these DIY groups have exhibited any nefarious intentions. Nefarious actors who previously acquired pathogens from a lab or from nature with the intention of developing a bioweapon can now either order DNA fragments online and assemble them to create dangerous pathogens or synthesize lethal pathogens from scratch using genomic information available online. Moreover, such actors can leverage vulnerabilities in the cyber defenses of labs and private companies to gain access to sensitive information that is not publicly available online.

To better understand the security threats emerging from recent developments in biotechnology, it is worthwhile to return to the aforementioned hypothetical Ebola scenario. Imagine for a moment that the researchers involved, in collaboration with an editor at an esteemed journal, decided that they would publish a redacted version of the methods and the results section of their research due to security concerns. A month after the paper was published, the lab noticed unusual activity on their servers. The lab immediately reported the incident to the university’s information technology department. The department contacted local law enforcement officials, and together they traced the hack to a suspected terrorist organization. The group was trying to gain access to the methodology that led to the accidental creation of a more virulent Ebola strain so as to launch a deliberate biological attack. Law enforcement put DNA synthesis companies on high alert for any orders that closely aligned with research on the Ebola virus or other high-risk pathogens. Thankfully, a company was able to flag an order and law enforcement was able to cooperate with local officials to shut down the unauthorized lab before it began creating and releasing harmful products.

In reality, individuals have at times tried to acquire deadly pathogens and other sensitive biological information. For example, two Canadians were arrested in the city of Buffalo, New York in 1984 after they were suspected of illegally acquiring and smuggling strains of botulism and tetanus to Canada. The Japanese cult Aum Shinrikyo made unsuccessful attempts in 1995 to acquire strains of Ebola from Central Africa to develop the group’s biological weapons program. More recently, two Chinese hackers were indicted in the United States for seeking to obtain intellectual property related to coronavirus treatments and vaccines. Similar incidents were reported in Spain; allegedly Chinese hackers were trying to steal data from Spanish labs conducting vaccine research.

In addition to strategically embedding members into research organizations to acquire these deadly pathogens, some terrorist organizations also have sought to rely on lab insiders to either develop biological weapons or grant access to organisms or sensitive information. For example, a Malaysian scientist tried to develop anthrax weapons for Osama bin Laden, the founder of al-Qaeda.

While most countries have national guidelines for handling safety and security threats, the examples described above highlight the global implications of such threats. It is therefore important to evaluate global best practices, treaties, and conventions that deal with such risks and devise strategies to update these safeguards to govern dual-use applications of emerging biotechnologies.

#### Biotech is inevitable, we need to understand it to prevent bio-attacks.

Trump '21 – PhD, a research social scientist for the U.S.  Army Corps of Engineers, and served as a Strategic Planner and public health subject-matter expert for FEMA Region 1’s Data Analytics Task Force [Benjamin D, Marie-Valentie Florin, Edward Perkins, and Igor Linkov," Biosecurity for Synthetic Biology and Emerging Biotechnologies: Critical Challenges for Governance” in *Emerging Threats of Synthetic Biology and Biotechnology*, p. 1-2]

Synthetic biology uses engineering-based modeling and building techniques to modify existing organisms and microbes or to construct them from scratch. The rate of development and research related to synthetic biology for both industry and academia has increased over the past two decades (Ahteensuu 2017), with applications in medicine (new vaccines, delivery of therapeutics, and treatments), energy (biofuels), environmental remediation, food production, and general industry (detergents, adhesives, perfumes) (Evans and Selgelid 2015; Gronvall 2015).

While synthetic biology heralds advances in these fields, its techniques could also be adapted for malicious purposes and used by terrorist organizations, rogue actors, or hostile nations to create dangerous pathogens, invasive organisms, or other disruptive biological agents (Yeh et al. 2012). Such potential makes synthetic biology a dual-use research area of concern (DURC) since the same techniques can be used to benefit or harm people, animals, environments, or nations (Getz and Dellaire 2018). Indeed, there have been 35 confirmed cases of biological weapons deployment between 1970 and 2014 (Franconi et al. 2018). Thus far, the use of advanced biotechnologies for weapons production has mostly been pursued by state-actors. However, synthetic biological weapons are expected to become a larger concern as the field advances and they become increasingly adopted by malicious sub-state or non-state actors (Gronvall 2018).

Synthetic biology raises the possibility that pathogenic bioweapons could be designed, developed, and deployed in new ways that diverge from the disease causing characteristics of naturally occurring pathogens (NAS 2018). Traditionally, only known pathogens found naturally in the environment, such as B. anthracis and Y. pestis, were developed as biological weapons because of the inherent infectious characteristics that readily enabled such organisms to serve as weapons. However, as synthetic biology continues to expand its capabilities to create and modify biological weapons, there is an increasing need for biosafety and biosecurity assurances for humans, animals, plants, and the environment. To cope with threats arising from synthetic biology’s dual-use nature, biosecurity is needed to prevent, detect, and determine the source of biological attacks.

Biological weapons created from synthetic biology represent a new and unique threat space. Potential threats from synthetic biology include increased pathogen transmissibility between and within species in addition to resistance to established treatments. Synthetic biology can be used to engineer normally benign microbes that produce toxic biological compounds or re-build extinct or hard-to-obtain pathogens from scratch (NAS 2018). The main biotechnologies of concern in the near future (over the course of the next decade or so) are projected to be oligonucleotide synthesis, DNA assembly (assembling multiple smaller fragments of oligonucleotides into the desired larger sequence), and genetic modification (editing, deleting, and inserting desired sequences into targeted sites of a genome). Harm may also arise through the purposeful use of these techniques to disrupt human and environmental systems. Malevolent use, but also negligent use (misuse) of synthetic biology techniques, require two circumstances: (a) the spread of information, techniques, or knowhow to utilize synthetic biology’s enabling technologies for irresponsible or nefarious purposes (“information hazard”), and (b) the ability to use such knowledge and tools to generate and disseminate harmful engineered organisms to vulnerable recipients. Creating effective biosecurity procedures and policies to protect humans, agriculture, technology, and the environment from such nefarious usages (or accidental or negligent damage from misuse) will require understanding the current state of synthetic biology. This includes knowing the platforms and technologies available for manipulation or construction (e.g., viruses, microbes, multi-cellular organisms, or cell-free systems) and planning for the future as the field overcomes identified bottlenecks or roadblocks. Biosecurity will require developing screening mechanisms for synthetic pathogens and biological attacks, as well as methods to assess how a synthetic pathogen could be dispersed during an attack, identify what the potential targets of the attack are, and identify who developed the bioweapon.

#### Bioterror causes extinction and is likely.

Pedersen ‘17—Pepperdine University [Christian, “Reflecting Back on the Ebola Outbreak and the Future of Bioterrorism,” Pepperdine Policy Review: Vol. 9, dml]

Terror groups like al-Qaeda and ISIL (the Islamic State of Iraq and the Levant) have expressed interested, and have even attempted, to use biological agents in terror plots (Biodefense, 2016). The technical and administrative knowledge of biology and chemistry can be acquired globally in medical schools, research programs, and laboratories, making it difficult to prevent potential practitioners of bioterrorism from acquiring the required scientific knowledge (Chiodo, 2015). While at one time the ability to mutate strands was restricted to advanced research laboratories, rudimentary high school laboratories now have the ability to develop deadly biological agents (Garrett, 2012). With relative easy, terror groups could engineer the flu virus, making it deadlier (Selk, 2017). By combining traits of multiple strains and maximizing the virus’ natural properties, it could become highly transmittable (Farmer, 2107). Genetically engineered viruses have the potential to kill more people than nuclear weapons, governments remain underprepared for that threat (Selk, 2017).

Terrorists could be drawn to the use of biological agents because of the difficulty of detection and the ease at which some biological agents can naturally spread through a population (Bioterrorism, 2006). There are essentially three ways which agents could be acquired by terrorist: they could be stolen, created in laboratory environments, or collected naturally. A gloomy reality is that as the advancement of new technologies reduce the costs of genetic sequencing, it will become easier and less expensive to create novel organisms (Garrett, 2012). Bioterrorist attacks can be planned to induce maximum damage and panic with a minimum risk of early detection. Potential agents of attack are categorized by risk (rated as an, A, B, or a C) depending on the agent’s availability, ease of dissemination and transmission, and potential impact (Bioterrorism, 2006). Category A agents are considered the most dangerous and threatening to National Security. Ebola is categorized as a Category A bioagent because of its ability to cause mass panic and disruption and the special public health actions required for treating those infected.

Through the EVD, “mother nature has created the perfect bioweapon” (Thiessen, 2014). Following the Paris terrorist attacks, the French have warned that terrorist organizations may attempt to steal biological agents (Talent & Graham, 2016). The British Ministry of Defense feared terrorists would try to acquire EVD and released a report outlining three separate scenarios in which terror groups could successfully weaponize the virus. (Quinn, 2015) These could be stolen from research facilities, laboratories, or government stockpiles. While the more exotic and devastating agents (such as small pox) must be cultivated in laboratory environments and are therefore more difficult to obtain, many biological agents are naturally occurring (Gottron, 2002). Examples of these naturally occurring, and easier to obtain agents include: human immunodeficiency virus (HIV), the hepatitis strands, yellow fever, and the Ebola virus (Gottron, 2002). Moreover, the Ebola virus is native to a continent where terrorist organizations like Boko Haram, Al-Qaeda, and the Islamic State are active (Thiessen, 2014). The 21-day incubation period allows potential jihadists more than enough time to infect themselves, then travel to infected population centers, developing the means of mass distribution (Thiessen, 2014).

In June 2001 – months prior to the September 11th attack in New York – Dark Winter, a senior level wargame, was run in conjunction with security think tanks and government agencies to simulate government responses to acts of bioterrorism (Dark Winter). The simulation demonstrated how a biological terror attack could result in mass civilian casualties, civil disorder, institutional breakdown and lack of faith in government – compromising national security (Dark Winter). Major challenges for policymakers included the many “fault lines” which existed between governmental agencies, the levels of government, private healthcare systems, and the public (Dark Winter). Breakdowns in centralized leadership and communication could threaten containment and control. It was revealed that the healthcare system in the United States had no surge abilities to prevent hospitals from becoming overwhelmed or to meet the heightened demand for vaccinations (Dark Winter). Finally, targeted communications and information management was recognized as a challenge, both in working with the media and in disseminating important information (Dark Winter). It became very clear after the exercise that the United States was unprepared for an act of bioterrorism. In 2010, nearly ten years after the Dark Winter exercise, a commission created to evaluate the national emergency response capabilities gave the nation a failing grade on its ability to respond to a bioterrorist threat (O’Grady, 2015).

#### Scenario 2 is biodiversity.

#### Biotechnology can either be used to save biodiversity or save it – it is a question of bioethics and regulation.

Gutmann '18 -President of the University of Pennsylvania and Christopher H. Browne Distinguished Professor of Political Science and Professor of Communication [Amy and Jonthan D Moreno, Apr 16, "Keep CRISPR Safe," https://www.foreignaffairs.com/articles/2018-04-16/keep-crispr-safe]

The goal of a gene drive is to spread or suppress certain genes in a wild population of organisms. It works by exploiting a quirk of nature. In sexually reproducing species, most genes have a 50 percent chance of being passed from parent to child, as offspring receive half their genes from each parent. As a result, genetic mutations normally spread only if they make an organism more likely to survive or breed. But some genes have evolved mechanisms that give them better than 50 percent odds of being passed on. That allows changes in those genes to proliferate quickly even if they have no effect on evolutionary fitness. Scientists can exploit this tendency by using CRISPR to insert genetic material into the “selfish” part of an organism’s genome, ensuring that the new trait will be passed on to most offspring, eventually spreading through large populations.

This process could be exploited both to improve public health and to promote economic development. Scientists could use gene drives to break disease transmission chains, eliminating the need to use costly and harmful insecticides. For example, researchers are looking at using the technology to inhibit the transmission of Lyme bacteria from mice to ticks, a move that could wipe out Lyme disease among humans, since humans can catch the disease only from tick bites. In agriculture, gene drives could immunize plants against many kinds of pathogens and curb or eliminate populations of invasive animals, such as mice, that destroy crops. Researchers are working to develop a house mouse that can give birth only to male offspring. If the altered mice were released into the wild, female mice would gradually disappear and the species would die off within the area in which the altered mice were introduced.

Gene drives could also reverse some worrying environmental trends. Many amphibian species, such as frogs, toads, and newts, have suffered catastrophic declines over the last few decades. If scientists introduced engineered genes that rendered amphibians immune to common pathogens, any species could recover.

But alongside these benefits come serious risks. A gene drive gone wrong could leave a species extinct or introduce dramatic and unintended effects. Most gene drives would likely be limited to a single place, such as an island or an isolated and containable area of land, at least at first. If a genetically modified animal or plant escaped, however, then the gene drive could spread uncontrollably. And if a modified organism mated with a member of another species, it could transmit the changes to new populations. Entire species could be wiped out and ecosystems upended.

These risks are dramatic, but they are also far off. In part because the research is at such an early stage, scientists disagree about how much and what kind of regulation and guidance will be required. So governments should follow the principle of regulatory parsimony, which dictates that they should impose only those restrictions necessary to maintain ethical standards and public safety. Doing so will maximize the scope of free scientific discovery in a way that is consistent with serving the public good. In the countries where much of the research is taking place, before imposing new restrictions, governments should rationalize the current system of regulation. In the United States, for example, the Department of Agriculture, the Food and Drug Administration, and the Environmental Protection Agency all share responsibility for different aspects of field trials and commercial products. They should harmonize their biological safety guidelines for gene-drive studies. On the international stage, the Cartagena Protocol on Biosafety, an agreement among most of the world’s countries that came into force in 2003, regulates genetically modified organisms, but the United States has not signed it.

In lieu of formal regulations on gene drives, scientists could agree to build safety measures into gene-drive systems, such as alterations that would cancel out previous drives or gene modifications designed to grow less frequent over time, so that successive generations would express the gene less and less once the original problem has been sufficiently ameliorated. Researchers will also need to be transparent about their work and consult local communities to gain consent before introducing gene drives into the wild.

#### Biodiversity loss is a threat multiplier, it outweighs and triggers their impacts

Torres 2016 -the founder of the X-Risks Institute, an affiliate scholar at the Institute for Ethics and Emerging Technologies [Phil, "Biodiversity loss: An existential risk comparable to climate change," Apr 11, thebulletin.org/biodiversity-loss-existential-risk-comparable-climate-change9329]

According to the Bulletin of Atomic Scientists, the two greatest existential threats to human civilization stem from climate change and nuclear weapons. Both pose clear and present dangers to the perpetuation of our species, and the increasingly dire climate situation and nuclear arsenal modernizations in the United States and Russia were the most significant reasons why the Bulletin decided to keep the Doomsday Clock set at three minutes before midnight earlier this year. But there is another existential threat that the Bulletin overlooked in its Doomsday Clock announcement: biodiversity loss. This phenomenon is often identified as one of the many consequences of climate change, and this is of course correct. But biodiversity loss is also a contributing factor behind climate change. For example, deforestation in the Amazon rainforest and elsewhere reduces the amount of carbon dioxide removed from the atmosphere by plants, a natural process that mitigates the effects of climate change. So the causal relation between climate change and biodiversity loss is bidirectional. Furthermore, there are myriad phenomena that are driving biodiversity loss in addition to climate change. Other causes include ecosystem fragmentation, invasive species, pollution, oxygen depletion caused by fertilizers running off into ponds and streams, overfishing, human overpopulation, and overconsumption. All of these phenomena have a direct impact on the health of the biosphere, and all would conceivably persist even if the problem of climate change were somehow immediately solved. Such considerations warrant decoupling biodiversity loss from climate change, because the former has been consistently subsumed by the latter as a mere effect. Biodiversity loss is a distinct environmental crisis with its own unique syndrome of causes, consequences, and solutions—such as restoring habitats, creating protected areas (“biodiversity parks”), and practicing sustainable agriculture. The sixth extinction. The repercussions of biodiversity loss are potentially as severe as those anticipated from climate change, or even a nuclear conflict. For example, according to a 2015 study published in Science Advances, the best available evidence reveals “an exceptionally rapid loss of biodiversity over the last few centuries, indicating that a sixth mass extinction is already under way.” This conclusion holds, even on the most optimistic assumptions about the background rate of species losses and the current rate of vertebrate extinctions. The group classified as “vertebrates” includes mammals, birds, reptiles, fish, and all other creatures with a backbone. The article argues that, using its conservative figures, the average loss of vertebrate species was 100 times higher in the past century relative to the background rate of extinction. (Other scientists have suggested that the current extinction rate could be as much as 10,000 times higher than normal.) As the authors write, “The evidence is incontrovertible that recent extinction rates are unprecedented in human history and highly unusual in Earth’s history.” Perhaps the term “Big Six” should enter the popular lexicon—to add the current extinction to the previous “Big Five,” the last of which wiped out the dinosaurs 66 million years ago. But the concept of biodiversity encompasses more than just the total number of species on the planet. It also refers to the size of different populations of species. With respect to this phenomenon, multiple studies have confirmed that wild populations around the world are dwindling and disappearing at an alarming rate. For example, the 2010 Global Biodiversity Outlook report found that the population of wild vertebrates living in the tropics dropped by 59 percent between 1970 and 2006. The report also found that the population of farmland birds in Europe has dropped by 50 percent since 1980; bird populations in the grasslands of North America declined by almost 40 percent between 1968 and 2003; and the population of birds in North American arid lands has fallen by almost 30 percent since the 1960s. Similarly, 42 percent of all amphibian species (a type of vertebrate that is sometimes called an “ecological indicator”) are undergoing population declines, and 23 percent of all plant species “are estimated to be threatened with extinction.” Other studies have found that some 20 percent of all reptile species, 48 percent of the world’s primates, and 50 percent of freshwater turtles are threatened. Underwater, about 10 percent of all coral reefs are now dead, and another 60 percent are in danger of dying. Consistent with these data, the 2014 Living Planet Report shows that the global population of wild vertebrates dropped by 52 percent in only four decades—from 1970 to 2010. While biologists often avoid projecting historical trends into the future because of the complexity of ecological systems, it’s tempting to extrapolate this figure to, say, the year 2050, which is four decades from 2010. As it happens, a 2006 study published in Science does precisely this: It projects past trends of marine biodiversity loss into the 21st century, concluding that, unless significant changes are made to patterns of human activity, there will be virtually no more wild-caught seafood by 2048. Catastrophic consequences for civilization. The consequences of this rapid pruning of the evolutionary tree of life extend beyond the obvious. There could be surprising effects of biodiversity loss that scientists are unable to fully anticipate in advance. For example, prior research has shown that localized ecosystems can undergo abrupt and irreversible shifts when they reach a tipping point. According to a 2012 paper published in Nature, there are reasons for thinking that we may be approaching a tipping point of this sort in the global ecosystem, beyond which the consequences could be catastrophic for civilization. As the authors write, a planetary-scale transition could precipitate “substantial losses of ecosystem services required to sustain the human population.” An ecosystem service is any ecological process that benefits humanity, such as food production and crop pollination. If the global ecosystem were to cross a tipping point and substantial ecosystem services were lost, the results could be “widespread social unrest, economic instability, and loss of human life.” According to Missouri Botanical Garden ecologist Adam Smith, one of the paper’s co-authors, this could occur in a matter of decades—far more quickly than most of the expected consequences of climate change, yet equally destructive. Biodiversity loss is a “threat multiplier” that, by pushing societies to the brink of collapse, will exacerbate existing conflicts and introduce entirely new struggles between state and non-state actors. Indeed, it could even fuel the rise of terrorism. (After all, climate change has been linked to the emergence of ISIS in Syria, and multiple high-ranking US officials, such as former US Defense Secretary Chuck Hagel and CIA director John Brennan, have affirmed that climate change and terrorism are connected.) The reality is that we are entering the sixth mass extinction in the 3.8-billion-year history of life on Earth, and the impact of this event could be felt by civilization “in as little as three human lifetimes,” as the aforementioned 2012 Nature paper notes. Furthermore, the widespread decline of biological populations could plausibly initiate a dramatic transformation of the global ecosystem on an even faster timescale: perhaps a single human lifetime. The unavoidable conclusion is that biodiversity loss constitutes an existential threat in its own right. As such, it ought to be considered alongside climate change and nuclear weapons as one of the most significant contemporary risks to human prosperity and survival.

#### Scenario 3 is food.

#### Biotech will ensure food security.

Langer '20 - Scoville Fellow working with Michael Nelson in the Technology and International Affairs Program [Ronit and Shruti Sharma, Nov 20, "The Blessing and Curse of Biotechnology: A Primer on Biosafety and Biosecurity," https://carnegieendowment.org/2020/11/20/blessing-and-curse-of-biotechnology-primer-on-biosafety-and-biosecurity-pub-83252]

Scientific developments in biotechnology can offer solutions to address global challenges such as combating the spread of infectious diseases, reducing hunger, and remediating environmental degradation.

Biotechnology has the potential to create novel diagnostics, vaccines, drugs, and other medical countermeasures needed to detect, prevent, and treat infectious diseases. For example, the coronavirus pandemic has highlighted the promising role that biotechnology can play in this way. Researchers around the globe are actively working to combat the pandemic. They have been using different technologies to develop cheap diagnostics, repurpose existing antivirals, discover new drugs, and create safe and effective vaccines. In addition, biotechnology can be used to create genetically engineered organisms that can be deliberately introduced into the environment for purposes such as mosquito control. As an example, advances in genome engineering technologies—such as clustered regularly interspaced short palindromic repeats (CRISPR) and CRISPR-associated protein 9 (Cas9)—have enabled the development of gene drives, a technology that allows desired genetic alterations to spread faster through a population over many generations. This technique can be used to cure vector-borne human diseases such as malaria and dengue fever by either making mosquitoes resistant to the parasites that cause these diseases or by completely wiping out disease-carrying mosquito populations.

Agricultural biotechnology can be used to create genetically modified crops for combating hunger and malnutrition. Traditional biotechnology techniques such as selective breeding, hybridization, and fermentation have been modifying living plants for improved yield or enhanced nutritional value from time immemorial. However, with improvements in knowledge about the role of individual plant genes, modern biotechnology techniques can be used to add, delete, or edit specific genes to produce a desired variety, thereby reducing the possibility of off-target effects. For example, golden rice, an engineered variety of rice, contains two extra genes to make it produce beta-carotene, a precursor to Vitamin A, that can help address nutrient deficiencies that lead to blindness, anemia, and weakened immune systems among children. Scientific advances can also help develop genetically modified crops that withstand natural calamities, pests, and diseases. Such varieties can increase crop yields, lessen the need to use pesticides and insecticides, lift farmers out of poverty, and ensure food security. Beyond that, biotechnology can help produce healthier and faster-growing animals and improve the quality and quantity of milk, eggs, and meat for human consumption.

#### That causes war.

Brinkman and Hendrix 2011   
Henk-Jan [Chief, Policy, Planning and Application in the Peacebuilding Support Office of the United Nations] and Cullen S. [Assistant Professor, The College of William & Mary, and Fellow, Robert S. Strauss Center for International Security and Law,]; Food Insecurity and Violent Conflict: Causes, Consequences, and Addressing the Challenges; World Food Programme, Occassional Paper 24; July

Rising food prices contribute to food insecurity, which is a clear and serious threat to human security. Interest in food security as a catalyst for political instability and conflict has grown rapidly since 2007–2008, when food protests and riots broke out in 48 countries as a result of record world prices. In February 2011, the food price index of the Food and Agriculture Organization of the United Nations (FAO) reached a new historic peak, and the rise in food prices contributed to the wave of protests across North Africa and the Middle East that toppled Tunisian president Zine El Abidine Ben Ali and Egyptian president Hosni Mubarak. Among major development organizations, the unchallenged consensus is that war and conflict are development issues: conflict ravages local economies, often leading to forced migration, refugee populations, disease, a collapse of social trust, and acute food insecurity. But is food insecurity itself a cause of conflict? Based on a review of recent research, the answer is a highly qualified yes. Food insecurity, especially when caused by higher food prices, heightens the risk of democratic breakdown, civil conflict, protest, rioting, and communal conflict. The evidence linking food insecurity to interstate conflict is less strong, though there is some historical evidence linking declining agricultural yields to periods of regional conflict in Europe and Asia. These links are highly context-specific: they are contingent on existing political institutions, levels of economic development, social safety nets and demographic pressures. Food insecurity is neither a necessary nor sufficient condition for acute political violence and conflict. Generally, the risk of violent conflict is higher where political regimes intermingle democratic and authoritarian institutions or when a youth bulge, low levels of development, deteriorating economic conditions, or high inequalities among groups are present. Fragile states (which have a high share of food imports), and the households within them (who must spend a large share of their income on food), are particularly vulnerable to higher food prices. Moreover, this vulnerability has increased over time. On the other hand, violent conflicts have also contributed to higher food prices and food insecurity, contributing to a vicious cycle. While the situation seems bleak, the contingent nature of food insecurity’s effect on conflict suggests that governments, international organizations (IOs), and non-governmental organizations (NGOs) can take positive steps to reduce food insecurity and break the relationship between food insecurity and conflict. Governments can act to shield their citizens from higher prices and volatility in world markets by initiating measures to stabilize food prices and by establishing social protection systems that mitigate the impact of high food prices on vulnerable groups. Unfortunately, the capacity of fragile states to do that is limited. The World Food Programme and NGOs can assist in times of acute crisis to provide relief. Finally, governments, IOs and NGOs can work to make food security a part of the post-conflict peacebuilding and reconstruction process. The challenges are great, but the potential social, economic, and political costs of inaction are even greater.

#### Transatlantic cooperation is necessary to unlock the potential of GMOs

Giddings '22- senior fellow at ITIF [L Val, Mar 11, "Prospects for Transatlantic Cooperation in Biotech Policy—A US Perspective," https://itif.org/publications/2022/03/11/prospects-transatlantic-cooperation-biotech-policy-us-perspective/]

A WORLD OF BIOLOGICAL POSSIBILITIES

Mutual self-interest provides a strong basis for transatlantic cooperation in biotechnology based on shared recognition of its vast potential to provide solutions to some of civilization’s most pressing problems. Thanks to explosive advances in our understanding of the many ways in which promiscuous nature has been manipulating DNA and RNA for the past billion years, it is widely anticipated that the 21st century will belong to biology.1 We are now at the point where our ability to innovate is constrained less by technical capability than by the limits of our imaginations. Multiple laboratories and companies on both sides of the Atlantic (and throughout the world) are pursuing promising applications, and experience confirms progress would be accelerated by cooperative approaches. But there are some considerable challenges, especially in agricultural and industrial contexts.

The most important rate-limiting factor in our ability to harness biological innovations to the challenges of feeding the world, sustaining human and environmental health, and addressing climate change, is the burden imposed by ill-considered regulations. Unless this bottleneck can be unblocked, the enormous potential for transatlantic scientific cooperation will not yield the necessary fruits.

DIVERGENT REGULATORY PATHS: PRECAUTION VS. OPENNESS TO INNOVATION

Existing policies, legislation, and regulations do little or nothing to advance human or environmental safety.2 Born out of understandable caution at the dawn of recombinant DNA technologies, today their most obvious impact is to obstruct and discourage research, development, and deployment of innovative solutions to various challenges.3 This is so despite an abundant record of production and consumption of new biotech products with enviable records of improved safety, superior sustainability, and widespread beneficial economic impacts.4 The benefits are so substantial that a pattern has emerged of farmers breaking the law to acquire and plant improved seeds in countries where governments have lagged in allowing access.5

It is one thing to implement policies and regulations ostensibly designed to ensure safety; it is quite another to ignore vast data and decades of experience around the world to maintain obsolete policies and regulations that add nothing to safety or sustainability, but only impede our ability to use the most innovative, precise, and safest tools to address our gravest challenges.6

In terms of regulatory policy and openness to biological innovations, the width of the Atlantic might be measured better in light years than miles or kilometers. As imperfect as regulations for the products of biotechnology are in North America, they are simply indefensible in Europe.7

The United States decided in 1986, after years of study and consultation, that no new laws were required to ensure the safety of crops and foods improved through biotechnology. This was based on the finding that they present no novel hazards, and foreseeable risks of their development and use fall into categories with which humans have considerable experience from millennia of conventional plant and animal breeding.8 The United States therefore decided to regulate these novel products under existing authorities administered by the Department of Agriculture, the Food and Drug Administration, and Environmental Protection Agency.9 While implementation of this policy, the “Coordinated Framework,” has been far from perfect, it has been sufficiently predictable and science-based to enable an explosion of innovation, new product development, and commercial activity. Consequently, the United States has led the world to the present day wherein crops improved through biotechnology are now the global standard for quality seeds, delivering improved yields, safety, sustainability, and economic productivity around the world, with the lion’s share of benefits accruing on behalf of small farmers in developing countries.10 Europe took a different approach.

It is one thing to implement policies and regulations ostensibly designed to ensure safety; it is quite another to ignore vast data and decades of experience around the world to maintain obsolete policies and regulations that add nothing to safety or sustainability.

The European Union decided to regulate seeds improved through biotechnology as a novel class governed under new regulations specifically focused on an arbitrary category known as “GMOs” (for “genetically modified organisms”). The conceit was that because they represented gene combinations produced by mechanisms supposedly “not found in nature” (but actually ubiquitous) they must present novel hazards, even though none has ever been identified. These putatively novel hazards, despite the lack of any concrete manifestations, allegedly required dedicated, specific, “precautionary” regulations. The resulting regulatory regime proved so burdensome it led to the general collapse of agricultural biotechnology in Europe, which had played a leading role in its discovery and invention. Permissions for field trials proved almost impossible to obtain, products could not be developed and brought to market, academic labs abandoned the field, and the industry relocated most of its assets and activities to the Americas. And Europe became the world’s largest importer of commodity foods improved through biotechnology, only recently surpassed by China.

OPPORTUNITY FOR TRANSATLANTIC COOPERATION

Many scientists in the EU (and around the world) knew from the beginning that this was the wrong approach, yet the EU pushed its model internationally, with aggressive diplomacy, leading to emulation by many countries in the developing world, with equally unhappy results to those seen in Europe.11 But a growing number of scientists, policymakers, and even “green” NGOs that had originally opposed GMOs, now recognize the counterproductive results of this approach and are working to avoid repeating the same mistakes with gene editing. This shines a spotlight on the most important and potentially fruitful opportunity for transatlantic cooperation in biotechnology: the revival of science-based regulatory regimes in which the degree of regulatory oversight is proportional to the hazards involved, and regulation that enables, rather than discourages the safe development of innovative products. A return to and reaffirmation of these first principles would provide fertile ground for cooperation and coordination globally. Regulatory reform (everywhere, not just in the EU and its emulators, though the need is greatest there) provides fertile ground for transatlantic cooperation and coordination. We have robust models of proven approaches.12 Without such cooperation, other progress in developing and deploying innovative solutions through biotechnology will be impeded or foregone.

As to national security risks, just as with other risks, novelty attributable to biotechnology is elusive. One can do very nasty things with conventional bioweapons, and they are easily magnified with recombinant DNA techniques. At the same time, defensive capacities are also buttressed by biotechnology, as demonstrated by the rapid development of mRNA vaccines against SARS-CoV-2. There has been some good work done in this area, but this topic is worth exploring at greater depth. The OECD has a track record of thoughtful analyses with such topics. One possibility would be to build on that foundation by establishing a joint OECD/NATO working group to serve as a forum.

#### A coordinated framework is necessary to check the dual-use aspects of biotech.

Cummings '21 [Christopher L., Kaitlin M. Volk, Anna A. Ulanova, Do Thuy Uyen Ha Lam & Pei Rou Ng, “Emerging Biosecurity Threats and Responses: A Review of Published and Gray Literature” in *Emerging Threats of Synthetic Biology and Biotechnology*, pp 13–36]

Biosecurity threats include biological weapons and accidental releases as demonstrated in the Sverdlovsk anthrax event, but they have also become more diversified and complicated as researchers develop and utilize advanced biotechnology techniques for the betterment of society across other sectors. Gene drives for mosquito population control, engineered algae for biofuel creation, and recreation of extinct pathogens for novel vaccine development have unique and potentially unknown associated risks. The envisioned coordinated biosecurity framework would allow for beneficial innovation to proliferate while simultaneously reducing anticipated and unanticipated risk of harm to humans, animals, agricultural, and the environment (Trump et al. 2020b; Wells et al. 2020).

### 1AC - Leadership

#### China is a posed to take the lead on biotech – risking planetary survival.

Darby '21 - is CEO of IQT, a not-for-profit investment firm working on behalf of the U.S. national security community [Christopher and Sarah Sewall, "The Innovation Wars America’s Eroding Technological Advantage," https://www.foreignaffairs.com/articles/united-states/2021-02-10/technology-innovation-wars]

China’s hunger for data extends to some of the most personal information imaginable: our own DNA. Since the COVID-19 pandemic began, BGI—a Chinese genome-sequencing company that began as a government-funded research group—has broken ground on some 50 new laboratories abroad designed to help governments test for the virus. China has legitimate reasons to build these labs, but it also has an ugly record of forcibly collecting DNA data from Tibetans and Uighurs as part of its efforts to monitor these minorities. Given that BGI runs China’s national library of genomics data, it is conceivable that through BGI testing, foreigners’ biological data might end up in that repository.

Indeed, China has shown great interest in biotechnology, even if it has yet to catch up to the United States. Combined with massive computing power and artificial intelligence, innovations in biotechnology could help solve some of humanity’s most vexing challenges, from disease and famine to energy production and climate change. Researchers have mastered the gene-editing tool CRISPR, allowing them to grow wheat that resists disease, and have managed to encode video in the DNA of bacteria, raising the possibility of a new, cost-effective method of data storage. Specialists in synthetic biology have invented a new way of producing nylon—with genetically engineered microorganisms instead of petrochemicals. The economic implications of the coming biotechnology revolution are staggering: the McKinsey Global Institute has estimated the value of biotechnology’s many potential applications at up to $4 trillion over the next ten to 20 years.

Like all powerful technologies, however, biotechnology has a dark side. It is not inconceivable, for example, that some malicious actor could create a biological weapon that targeted a specific ethnic group. On controversial questions—such as how much manipulation of the human genome is acceptable—countries will accept different degrees of risk in the name of progress and take different ethical positions. The country that leads biotechnology’s development will be the one that most profoundly shapes the norms and standards around its use. And there is reason to worry if that country is China. In 2018, the Chinese scientist He Jiankui genetically engineered the DNA of twin babies, prompting an international uproar. Beijing portrayed him as a rogue researcher and punished him. Yet the Chinese government’s disdain for human rights, coupled with its quest for technological supremacy, suggests that it could embrace a lax, even dangerous approach to bioethics.

THINKING BIGGER

Washington has monitored China’s technological progress through a military lens, worrying about how it contributes to Chinese defense capabilities. But the challenge is much broader. China’s push for technological supremacy is not simply aimed at gaining a battlefield advantage; Beijing is changing the battlefield itself. Although commercial technologies such as 5G, artificial intelligence, quantum computing, and biotechnology will undoubtedly have military applications, China envisions a world of great-power competition in which no shots need to be fired. Technological supremacy promises the ability to dominate the civilian infrastructure on which others depend, providing enormous influence. That is a major motivation behind Beijing’s support for high-tech civilian infrastructure exports. The countries buying Chinese systems may think they are merely receiving electric grids, health-care technology, or online payment systems, but in reality, they may also be placing critical national infrastructure and citizens’ data in Beijing’s hands. Such exports are China’s Trojan horse.

Despite the changing nature of geopolitical competition, the United States still tends to equate security with traditional defense capabilities. Consider microelectronics. They are critical components not only for a range of commercial products but also for virtually every major defense system, from aircraft to warships. Because they will power advances in artificial intelligence, they will also shape the United States’ future economic competitiveness. Yet investment in microelectronics has fallen through the cracks. Neither the private sector nor the government is adequately funding innovation—the former due to the large capital requirements and long time horizons involved and the latter because it has focused more on securing current supplies than on innovating. Although China has had a hard time catching up to the United States in this area, it is only a matter of time before it moves up the microelectronics value chain.

Another casualty of the United States’ overly narrow conception of security and innovation is 5G technology. By dominating this market, China has built a global telecommunications network that can serve geopolitical purposes. One fear is that Beijing could help itself to data running on 5G networks. Another is the possibility that China might sabotage or disrupt adversaries’ communications networks in a crisis. Most U.S. policymakers failed to predict the threat posed by Chinese 5G infrastructure. It wasn’t until 2019 that Washington sounded the alarm about Huawei, but by then, there was little it could do. U.S. companies had never offered an end-to-end wireless network, instead focusing on manufacturing individual components, such as handsets and routers. Nor had any developed its own radio access network, a system for sending signals across network devices that is needed to build an end-to-end 5G system like that offered by Huawei and a few other companies. As a result, the United States found itself in an absurd situation: threatening to end intelligence cooperation if close allies adopted Huawei’s 5G technology without having an attractive alternative to offer.

Digital infrastructure may be today’s battle, but biotechnology will likely be the next. Unfortunately, it, too, is not considered a priority within the U.S. government. The Department of Defense has understandably shown little interest in it. Part of the explanation for that lies in the fact that the United States, like many other countries, has signed a treaty renouncing biological weapons. Still, biotechnology has other implications for the Pentagon, from changing manufacturing to improving the health of service personnel. More important, any comprehensive assessment of the national interest must recognize biotechnology’s implications for ethics, the economy, health, and planetary survival.

#### They will cooperate with Russia – enabling Russian biotech to take off.

Lebedenko '22 - PhD Research in the Dept of Law @ the European University Institute [Svitlana, May 9, "The Rise of Sino-Russian Biotech Cooperation," https://www.fpri.org/article/2022/05/the-rise-of-sino-russian-biotech-cooperation/]

Biotechnology

Chinese-Russian technological alignment has been particularly apparent in the sector of biotechnology. Broadly, biotechnology refers to the manipulation of living organisms or their compounds to produce new products or services. Biotechnology is perceived to be “a key strategic technology for industrial growth” and is distinguished from other technological sectors for its capacity to alter the means of production across a variety of industrial sectors.[13] Examples of the sectors include pharmaceuticals, agriculture, and food processing, and extend to dual-use technologies.

Biotechnology is a strategic sector for China. The Made in China 2025 Initiative sets the goal of manufacturing high-tech products, including innovative medicines.[14] The plan introduced targets for Chinese pharmaceutical firms to advance in biotechnology innovation and increase exports.[15] About half of all industrial parks in China focus on the development of pharmaceuticals.[16] By 2018, China established 111 biotechnology science parks.[17] Although China still lags behind the U.S. in biotechnology innovation, analysts concede that it is rapidly progressing and closing this gap.[18] So far, China’s efforts have concentrated on creating the necessary infrastructure for biotechnology development.

In turn, Russia has rich natural resources, but over 80% of biotech products are imported, and Russia’s share in the global market of biotech products is below 0.1%.[19] Russian biotech is a sector that experienced massive brain drain after the break-up of the Soviet Union, with many scientists leaving for Western countries and Israel.[20] The persistent challenge for the Russian biotechnology industry, including the biopharmaceutical industry, is its critical dependency on imports. Between 1992 and 2014, the production of substances (active pharmaceutical ingredients) decreased by a factor of 20.[21] According to the Ministry of Industrial Policy of Russia, in 2015, the country imported 95% of active pharmaceutical ingredients required to produce finished pharmaceuticals.[22] In 2018, the share of foreign medicines on the Russian market constituted 70.2% by value and 39.4% by volume. In 2019, foreign medicines generated USD 19.6 billion in income, which was about 70% of the Russian pharmaceutical market.[23] By some accounts, this sum is larger than what Russia earns from its arms export.[24] Pharmaceutical imports exceed exports by 14 times.[25] By all formal indicators in life-science research and biotechnology, such as gross domestic product (GDP) expenditure on R&D, patents, and journal publications, Russia lags behind the United States, China, France, South Korea, Japan, Germany, and India.[26]

Yet, Russia sees biotechnology as a priority area for its future.[27] The first post-Soviet strategic document in this area was enacted in 2012 and entitled the State Coordination Program for the Development of Biotechnology in the Russian Federation until 2020 (BIO 2020). Around USD 18 million was invested in the development of biotechnology, with 22% directed to biomedicine and biopharmaceuticals research.[28] The results of the program are considered limited, except for some improvement in vaccine and monoclonal antibodies research.[29] The state programs in the pharmaceutical industry appear to be more specific and thus more practical.

For example, the State Program for the Development of the Pharmaceutical and Medical Industry until 2020 (PHARMA 2020), published in 2014, attempted to reduce Russia’s dependency on foreign medical technologies. Sanctions put added pressure on import substitution in this area.[30] As a result of this program, 50 new industrial sites were built, 130 new medicines entered the market (9 of which were classified as innovative), and 8 scientific-research centers of pre-clinical development were built or reconstructed.[31] In addition, PHARMA 2020 launched several biopharmaceutical projects, including those of Biocad and Generium,[32] some of the largest producers of the Sputnik V vaccine.[33]

Moscow approved PHARMA 2030 in December 2021. The main difference between PHARMA 2020 and PHARMA 2030 is a call for an upgrade from import substitution to an innovative model of production. In nine years, Russia aims to double the production of local medicines and medical equipment and increase their export. The program foresees investment in infrastructure to allow for deepening cooperation between production, science, and education.[34]

According to data from the Eurasian Economic Commission, Russia’s innovative companies include few active players: Generium, ChemRar, Biocad, and Pharmapark.[35] ChemRar, a high-tech center in the Moscow region, hosts a handful companies benefiting from its infrastructure and scientific-research institute. One of the objectives of the center is conducting R&D for its partners especially around innovative antibiotics. In 2020, ChemRar, with the help of the Russian Direct Investment Fund (RDIF), developed a specific medicine for anti-coronavirus treatment, Avifavir, which is currently supplied to 15 countries.[36] Avifavir is based on a known substance Favipiravir, originally developed in Japan to treat influenza, but ChemRar conducted clinical trials to confirm its effectiveness in treating COVID-19 specifically. Pharmapark, another Moscow-based company, is Russia’s top producer of the active pharmaceutical ingredient interferon alfa-2b and covers 80% of local demand of Russian producers of finished pharmaceuticals. Some of these companies are becoming instrumental in Sino-Russian biotech partnership.

When it comes to breakthroughs, what is notable about the Russian biopharma industry is the persistent Soviet legacy of production being subordinated to research institutes. By estimates, about 30 universities, mostly in Moscow and Saint Petersburg, have programs in biotechnology, and about 50 institutes of the Russian Academy of Science conduct biology research.[37] Consider the Russian COVID-19 vaccines as an example. The Sputnik V vaccine came out from the Gamaleya Institute, a state-owned research institute, not from industry. The Novosibirsk-based state-owned scientific center, Vektor State Research Center of Virology and Biotechnology, developed the EpiVacCorona vaccine.[38] Similarly, state-owned Chumakov Scientific Center for Research and Development of Immune-and-Biological Products of Russian Academy of Sciences developed the KoviVac vaccine.[39]

Arguably, Russia’s weak point is not in the development of biopharmaceutical innovation but in scaling-up of production. In the biotechnology sector, innovative projects are financially supported through Russian development institutes, such as Skolkovo, Russian Venture Company, and Rusnano.[40] Often, their resources only suffice for the development stage but not for substantially increasing production. For the latter, the Russian Foreign Direct Investment Fund plays a bigger role, but it would be limited without help from its international partners. This is where China’s resources find a good application.

Notwithstanding the respective limitations of national biotech industries, Russia and China’s cooperation has recently intensified and involved the use of the joint innovation infrastructure projects mentioned above. For example, Russian company Biocad,[41] together with Chinese manufacturer Shanghai Pharmaceuticals Holding (SPH), created a joint venture, SPH Biocad, based in China. SPH Biocad will commercialize Biocad’s portfolio of medicines (e.g., oncology and autoimmune treatment) in the Chinese market.[42] The joint venture received USD 400 million in funding, in which SPH holds 50.1% and Biocad 49.9%.[43] The long-term plan is to turn the joint venture from a generic producer into an innovative player.[44]

Another example of the use of the joint innovation infrastructure to advance biopharmaceutical cooperation is the Russia-China Investment Fund. In 2020, it invested in the creation of the Russian pharmaceutical holding Binnopharm Group.[45] In the same year, Binnopharm Group joined a group of companies involved in the production of the Sputnik V vaccine. With consolidated assets, Binnopharm Group became one of the top three largest pharmaceutical manufacturers in Russia and now owns the portfolio of over 450 registered medicines, the most among Russian companies.[46] Binnopharm Group plans to establish a new R&D center in Krasnogorsk (Moscow region) by integrating R&D centers of the enterprises that were merged and invest USD 33 million in the development of 100 new medicines by 2025.[47] The impact on biopharmaceutical innovation of this merger is yet to be seen. Evidently though, China has been behind the major projects aiming to help Russia create and improve the necessary infrastructure for the development of biopharmaceuticals industry. Infrastructure for innovation-based industries, such as biotechnology, is a key pillar, and China’s kind of investment in Russia is aimed to develop and upgrade the necessary innovation capabilities.

In addition to joint investments, China and Russia have launched bilateral research projects. The countries agreed to establish a joint laboratory for research on COVID-19. The National Fund of Natural Sciences of China and the Russian Fund of Fundamental Research will supervise the project.[48] In a similar vein, the Russian Vektor State Research Centre of Virology and Biotechnology have cooperated with the Ministry of Science and Technology of China on projects related to the human avian influenza (bird flu).[49] The exchange of vaccine technology and declarations to combine efforts in coronavirus research accelerated the formation of the institutional links between the Chinese and Russian innovation systems, especially in the biotechnology sector. It signals the countries’ commitment to an enduring innovation partnership.[50]

Conclusion

The processes addressed in this paper have been unfolding before the war in Ukraine. Western decoupling from China and Russia has been pushing the two countries towards deepening their cooperation. The accelerating Sino-Russian innovation cooperation projects confirm this assumption. While it can be premature to assess the levels of joint biopharmaceutical innovation, the implications of China’s engagement with the Russian biotech are not trivial. The nature of this engagement goes beyond investment projects, aiming to strengthen the institutional links between research organizations, manufacturers, and sovereign funds of the two nations. After February 24, 2022, Western sanctions and companies fleeing Russia will force Moscow to seek deeper cooperation with China in high-tech sectors. Russian biotech is not a self-sufficient industry and requires international partnerships to develop. But Russia is now limited in who it can partner with. Given the past trajectory of joint innovation partnership, naturally, China is now Russia’s ultimate bet when it comes to biotechnology development. Russian biotech future is in China’s hands. There are not currently signs that China will change its favorable position towards Russia; hence, Sino-Russian innovation partnerships will likely intensify.

#### Causes extinction---uncontrolled risks from emerging tech cause rapid shifts in strategic stability and misuse---American dominance is key.

Jain **’20** [Ash; 2020; Senior fellow with the Scowcroft Center for Strategy and Security; Strategic Studies Quarterly; “Present at the Re-Creation: A Global Strategy for Revitalizing, Adapting, and Defending a Rules-Based International System,” <https://www.atlanticcouncil.org/wp-content/uploads/2019/10/Present-at-the-Recreation.pdf>]

The system must also be adapted to deal with new issues that were not envisioned when the existing order was designed. Foremost among these issues is emerging and disruptive technology, including AI, additive manufacturing (or 3D printing), quantum computing, genetic engineering, robotics, directed energy, the Internet of things (IOT), 5G, space, cyber, and many others. Like other disruptive technologies before them, these innovations promise great benefits, but also carry serious downside risks. For example, AI is already resulting in massive efficiencies and cost savings in the private sector. Routine tasks and other more complicated jobs, such as radiology, are already being automated. In the future, autonomous weapons systems may go to war against each other as human soldiers remain out of harm’s way.

Yet, AI is also transforming economies and societies, and generating new security challenges. Automation will lead to widespread unemployment. The final realization of driverless cars, for example, will put out of work millions of taxi, Uber, and long-haul truck drivers. Populist movements in the West have been driven by those disaffected by globalization and technology, and mass unemployment caused by automation will further grow those ranks and provide new fuel to grievance politics. Moreover, some fear that autonomous weapons systems will become “killer robots” that select and engage targets without human input, and could eventually turn on their creators, resulting in human extinction. The other technologies on this lisgt similarly balance great potential upside with great downside risk. 3D printing, for example, can be used to “make anything anywhere,” reducing costs for a wide range of manufactured goods and encouraging a return of local manufacturing industries.61 At the same time, advanced 3D printers can also be used by revisionist and rogue states to print component parts for advanced weapons systems or even WMD programs, spurring arms races and weapons proliferation.62 Genetic engineering can wipe out entire classes of disease through improved medicine, or wipe out entire classes of people through genetically engineered superbugs. Directed-energy missile defenses may defend against incoming missile attacks, while also undermining global strategic stability.

Perhaps the greatest risk to global strategic stability from new technology, however, comes from the risk that revisionist autocracies may win the new tech arms race. Throughout history, states that have dominated the commanding heights of technological progress have also dominated international relations. The United States has been the world’s innovation leader from Edison’s light bulb to nuclear weapons and the Internet. Accordingly, stability has been maintained in Europe and Asia for decades because the United States and its democratic allies possessed a favorable economic and military balance of power in those key regions. Many believe, however, that China may now have the lead in the new technologies of the twenty-first century, including AI, quantum, 5G, hypersonic missiles, and others. If China succeeds in mastering the technologies of the future before the democratic core, then this could lead to a drastic and rapid shift in the balance of power, upsetting global strategic stability, and the call for a democratic- led, rules-based system outlined in these pages.63

The United States and its democratic allies need to work with other major powers to develop a framework for harnessing emerging technology in a way that maximizes its upside potential, while mitigating against its downside risks, and also contributing to the maintenance of global stability. The existing international order contains a wide range of agreements for harnessing the technologies of the twentieth century, but they need to be updated for the twenty-first century. The world needs an entire new set of arms-control, nonproliferation, export-control, and other agreements to exploit new technology while mitigating downside risk. These agreements should seek to maintain global strategic stability among the major powers, and prevent the proliferation of dangerous weapons systems to hostile and revisionist states.

#### The US needs to step up its international biotech engagement to help guide China’s bioethics standards.

Fox '22 - Professor of Law, Herzog Endowed Scholar, and Director of the Center for Health Law Policy & Bioethics at the University of San Diego School of Law [Dov, Apr 25, "The Biotech Battlefield How to Contend With China’s Risky R&D," https://www.foreignaffairs.com/articles/china/2022-04-25/biotech-battlefield]

PLAYING WITH FIRE

Morally fraught experiments have flourished in China in recent years. In 2017, surgeons at Harbin Medical University defied international condemnation to attempt the first human head transplant. In 2018, a Shenzhen biophysicist implanted embryos edited through experiments that risked introducing destructive mutations into the human gene pool. And in 2019, China’s Institute of Zoology invited a Spanish biochemist to create human-monkey chimeras as organ transplant sources.

These boundary-pushing developments aren’t just the work of a few bad apples. Rogue scientists are the predictable product of a national system that reduces research oversight in Beijing to a “rubber stamp,” according to recent testimony before the World Health Organization by the Chinese medical ethicist Hu Qingli. Indifference is part of the problem. The Chinese Ministry of Health, for instance, ostensibly banned unauthorized stem cell therapies in 2012. But a decade later, pop-up stem cell clinics still hawk untested interventions to repair spinal cords and augment breasts. Corruption is another factor. Incidents of bribery at the China Food and Drug Administration, now known as the National Medical Products Administration, led to mass casualties from at least six tainted drugs meant to treat autoimmune disorders, erectile dysfunction, and other ailments.

Then there is China’s heavy-handed program of biometric surveillance and population control. In 2018, Beijing used Islamic terrorism as a pretext to launch the most technologically sophisticated regime of data mining and collection that the world has ever seen. Drones with facial recognition cameras hover over regions such as Xinjiang while police at checkpoints take mandatory iris scans, blood samples, and genetic tests from Uyghur Muslims. Beijing exports this digital security and mass surveillance architecture to dozens of other countries, including Egypt and Uganda, where they have been used to persecute sexual minorities and religious dissidents.

Even countries that use these tools to promote public health and safety unwittingly supply China with their citizens’ biometric information. According to a Reuters investigation, Shenzhen-based BGI Genomics is amassing and analyzing genetic data on women and fetuses from a noninvasive prenatal test that the firm developed in conjunction with the Chinese military. The kit is marketed in more than 50 countries, including Australia, Canada, Denmark, Germany, India, Pakistan, Spain, Thailand, and the United Kingdom. Roughly 8.4 million women have used it. One BGI study allegedly used a military supercomputer to “map the prevalence of viruses in Chinese women, look for indicators of mental illness in them, and single out Tibetan and Uyghur minorities to find links between their genes and their characteristics.”

China’s top-down approach to biotechnology also has serious implications for family planning. The country’s now lapsed one-child policy was supposed to bring economic prosperity. Instead, it yielded an epidemic of forced sterilizations, abortions, and female infanticide that produced the country’s current lopsided sex ratio and aging workforce. But that experience hasn’t stopped Beijing from experimenting with new forms of genetic control. A 1995 law aimed at “avoid[ing] new births of inferior quality and heighten[ing] the standards of the whole population” requires couples at risk of passing along infectious or hereditary diseases to use long-term contraceptives or postpone marriage until after child-bearing age.

In 2022, moreover, millions of Chinese parents will use state-subsidized “talent tests” to screen offspring for traits such as height, intelligence, memory, extroversion, musical ability, and athletic prowess. These policies of biological selection and enhancement extend beyond family planning. A 2016 Chinese government report, for instance, underscored the potential value of gene editing to boost troops’ combat effectiveness. Former U.S. Director of National Intelligence John Ratcliffe warned in a recent Wall Street Journal op-ed that the Chinese military is working to engineer “soldiers with biologically enhanced capabilities”—from superstrength to altitude sickness resistance.

INNOVATE OR PERISH

Chinese developments in biotechnology demand a U.S. response. The last national bioethics commission lapsed in 2017, and Washington has yet to authorize a replacement. A newly established commission should engage with universities and industries to set norms and expectations around bioethics. Good models for this kind of public-private collaboration already exist. Organizations such as the Secure DNA Project and the Morningside Group—independent coalitions dedicated to safely and fairly governing genetic synthesis and brain-computer interfaces, respectively—are examples of what scientists, ethicists, and others can accomplish together. Future interdisciplinary teams can act as gatekeepers to affirm moral standards and condemn transgressions—for instance, by determining who gets published in high-impact journals and invited to prestigious conferences.

These partnerships can also help bridge ideological differences on issues such as vaccine passports, gene-edited immunity, and challenge trials that pay people to test new therapies for COVID-19. These are debates that democratic societies are well equipped to handle. Four of the world’s biggest democracies—Australia, India, Japan, and the United States—have recognized the existential stakes of life sciences research and recently pledged to collectively tackle “the critical and emerging technologies of the future, beginning with biotechnology.” That work should include establishing a global medical ethics consortium built on international agreements such as the Universal Declaration on Bioethics and Human Rights, treaties such as the Biological Weapons Convention, and multilateral arrangements such as the T-12—a group of technologically advanced democracies.

Still, democratic societies can’t maintain bioethical standards alone. Going forward, the United States and other democracies must engage with authoritarian states, especially on areas of shared interest, including biodiversity, climate change, and highly infectious diseases. A natural starting point is oversight to ensure that Beijing actually implements its Biosecurity Law of 2021—legislation designed to guide Beijing’s policies on everything from bioterrorism to biotechnology. Washington should also focus on developing new treaty guidelines for human experimentation and genetic-information sharing.

THE OLYMPIC SPIRIT

China’s DNA-based approach to picking its 2022 Olympic competitors may look like a harbinger of a grim future. But the country’s athletic history also suggests a path for managing this new form of geopolitical competition.

Between 1988 and 1998, 52 Chinese Olympic athletes tested positive for banned performance-enhancing drugs, including a half dozen gold medal winners. In response to the resulting international outcry, the International Olympic Committee created the World Anti-Doping Agency. Chastened, China developed the world’s most rigorous anti-doping measures—mandating education, exams, and pledges among athletes and coaches. Violators got lifetime bans. The Chinese state also sought to repair its reputation, funding new research and pledging long-term commitments to international anti-doping efforts.

At the time, verification and transparency made it possible to hold China accountable for its ethics violations, and international pressure and the threat of meaningful sanctions drove Beijing to act more responsibly—in sports, anyway. Similar policies could work today in the field of bioethics, helping rein in China’s reckless behavior. In this way, Beijing’s revolutionary Olympic selection process could be the opening the world needs to thrash out the moral status of scientific advances just over the horizon.

#### By setting standards the US can get China to comply, the alternative is a world dominated by biotech used to enforce social Darwinism.

Cheng '18 [Yangyang, Apr 13, "China Will Always Be Bad at Bioethics," https://foreignpolicy.com/2018/04/13/china-will-always-be-bad-at-bioethics/]

This April, potential sperm donors at one of Beijing’s top hospitals found themselves facing a set of tough new standards. Listed as the first criteria, before any mention of infectious or hereditary diseases, was the requirement that potential donors have “a love for socialism and the motherland” and be “supportive of the leadership of the party.”

By itself, this would be just one more incident of political excess in a country where full-blown Chinese Communist Party ideology is making a fierce comeback. But unlike the demands that students dump “Western” textbooks or that singers parrot their love for President Xi Jinping, China’s bioethical standards are more than a curiosity for outsiders. They may shape the future of humanity.

Chinese scientists, in January, produced the world’s first cloned primates through somatic cell nuclear transfer, the same technique that created Dolly the sheep in Scotland in 1996. In the summer of 2017, the gene-editing technology CRISPR was successfully used for the first time to edit a gene associated with a disease in human embryos by an international team of scientists from the United States, China, and South Korea; that was just two years after Chinese scientists shocked the world by making the first such attempt. While the United States is just starting to look for the first patient for such studies, at least eight clinical trials are underway in China using CRISPR technology to treat cancer.

As China’s advances in biotechnology come closer to the secrets of life, they pose tantalizing prospects for the future. But when standards for research on the latest technological frontiers are being set by a government that has always prioritized power over ethics, there’s also plenty of cause for concern.

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It was not until 1998 that the Chinese Ministry of Health established an ethics committee and issued the first set of guidelines on medical ethics in China. Over the past two decades, China has made earnest efforts toward the ethical practice of biomedicine. After years of denial, the Chinese government acknowledged in 2006 its decades-long practice of harvesting organs from executed prisoners, and it has progressed toward a registry with volunteer donors. Nevertheless, many of the country’s rules and regulations, as in other fields, exist more on paper than in practice.

While the Chinese Communist Party has a branch office at every school and every hospital, the presence of ethics boards is optional. According to a presentation at the World Health Organization by one of China’s leading medical ethicists, Hu Qingli, only about half of Chinese provinces had set up ethics committees by the early 2010s; the same went for individual hospitals. Even when ethics boards exist, conflicts of interest are rife. While the Ministry of Health’s ethics guidelines state that ethical reviews are “based upon the principles of ethics accepted by the international community,” they lack enforcement mechanisms and provide few instructions for investigators. As a result, the ethics review process is often reduced to a formality, “a rubber stamp” in Hu’s words. The lax ethical environment has led many to consider China the “Wild East” in biomedical research. Widely criticized and rejected by Western institutions, the Italian surgeon Sergio Canavero found a home for his radical quest to perform the first human head transplant in the northern Chinese city of Harbin. Canavero’s Chinese partner, Ren Xiaoping, although specifying that human trials were a long way off, justified the controversial experiment on technological grounds, “I am a scientist, not an ethical expert.” As the Chinese government props up the pseudoscience of traditional Chinese medicine as a valid “Eastern” alternative to anatomy-based “Western” medicine, the utterly unscientific approach makes the establishment of biomedical regulations and their enforcement even more difficult.

The fragile bioethics system in China is further weakened by rampant corruption. In 2006, a large-scale investigation into the Chinese State Food and Drug Administration resulted in arrests and imprisonment of several of its highest officials for allegedly accepting bribes, including the administration’s Director Zheng Xiaoyu, who was ultimately executed. As with much of the anti-corruption effort in China, the crackdown started after dozens died due to unsafe drugs in highly publicized cases; the actual figures remain unknown.

And in medicine, as with much else in China, authorities will often evade laws that exist on paper if there are customers (or, in this case, patients) willing to pay. China long ago banned doctors from revealing the sex of embryos to patients, but the practice remains common and contributes to gender-based abortion. Another example is the clinical use of stem cells. The Chinese Ministry of Health classified stem cell treatments as “high risk” and banned its clinical usage without approval in 2009. However, a Nature investigation in 2012 revealed that despite increased regulatory clampdowns, stem cell clinics were still popping up across the country, charging patients thousands of dollars for unauthorized therapies.

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The willingness to overlook safety for financial gain hints at a greater challenge with bioethics in China — not just structural, but ideological. Authoritarian states naturally prioritize the strength of their own power, including the size of their economy, above all else; this runs contrary to, and inevitably undermines, the healing purpose of medicine.

China’s record attests to this. Claiming the “great rejuvenation of the Chinese people” as its ultimate mission, the Chinese government has conducted massive social engineering campaigns to control and “improve” its population. The one-child policy was carried out with forced abortions, compulsory sterilization, and female infanticide, leading to an aging population and severe gender imbalance. Faced with the resulting demographic crisis, the Chinese government has now turned to campaigns encouraging “the right quality” of women — namely younger, urban women with a college education — to have more children, while imposing constraints on reproduction for ethnic minorities and in particular the Uighurs. The Maternal and Infant Health Care Law of 1995, initially named the “Eugenics and Health Protection Law” with the explicit purpose to “prevent new births of inferior quality,” effectively mandated childlessness for people with genetic disorders, certain infectious diseases, and mental illness.

Communism bases much of its legitimacy on its claims of resting on a foundation of science — but its understanding of science centers far more on authority than skepticism. “Scientific” in China’s party editorials is virtually synonymous with “politically approved.” The party’s journals are filled with glowing evaluations of Mao Zedong’s “scientific” legacy. The constitution’s latest addition, Xi Jinping Thought, lists early in its 14-point manifesto “adopting science-based ideas” for development. The suggestion is that if a government is “scientific,” then the state’s grasp on power must be as absolute and above criticism as the laws of the universe — even when that power is used to persecute scientists and crush entire branches of research considered contrary to political ideology, as the Chinese government has repeatedly done.

When science is used in service of legitimizing an authoritarian system, the resulting research, however successful it might appear to be, inevitably abandons cosmopolitan ideals. The first two monkey clones born in a Chinese lab in January were named Zhong Zhong and Hua Hua; zhonghua means the Chinese nation and its people. The macaque twins were not just portrayed as the product of science, but of Chinese science.

This politicized approach to science also abets the trampling of ethical boundaries. Communism emphasizes the idea of “constant struggle,” not only between classes, but also against nature. China, like the Soviet Union before it, has already paid a harsh environmental cost for this approach to development policy. During the Great Leap Forward, sparrows were initially listed among the “four pests” to be extinguished, and the drastic reduction in sparrow population led to an increase in crop pests that worsened ongoing famine.

Most concerning of all is how the Chinese state’s understanding of science discounts the autonomy of an individual body for the collective notion of a strong national body. The legacy of social Darwinism still permeates China, evident in the government’s swift and brutal campaign this past winter to rid the city of Beijing of its migrant workers and their families, callously referred to in official documents as the “low-end population.”

But the justification of individual sacrifice for the greater good is contrary to any principle-based bioethics framework. When Jesse Gelsinger died at the University of Pennsylvania as the first casualty of gene therapy in 1999, the tragedy halted this type of experimental treatment on humans for several years in the United States, and it still serves as a somber reminder for the medical community. Had the death occurred in China, it would most likely have been either covered up or turned into propaganda depicting Gelsinger as a national martyr.

With the Chinese government’s intensifying explicit push for “civil-military fusion,” one should also take it at its word and assume any of its new technology will be dual-use — with military uses applying both to national defense and internal suppression. The Chinese government is already collecting DNA samples among other biometrics data in its far-west province of Xinjiang, where ethnic minorities like the Uighurs are already subject to systematic discrimination, and building up a massive surveillance state using artificial intelligence.

The introduction of AI into health care in China, spearheaded by Chinese tech giants including Tencent and Alibaba, can help with an overburdened hospital system, but it also raises serious privacy concerns in a state where data privacy is nonexistent. Biotechnology will become a powerful tool in the Chinese security state.

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In ninth-century China, Taoist alchemists searching for the elixir of life found a dark mixture that was highly combustible. They named it huoyao, “fire medicine.” In the pursuit of immortality, the Chinese invented gunpowder.

In the face of China’s advances in biotechnology today, the world must be vigilant. At the same time, paranoia can, and should, be avoided; the correct approach is principled engagement, not isolation. A secure future demands that all stakeholders come together in good faith to reach a collective agreement in the development and utilization of biotechnology.

The International Summit on Human Gene Editing in 2015 — co-hosted by the National Academy of Sciences and the National Academy of Medicine in the United States, the Royal Society in the United Kingdom, and the Chinese Academy of Sciences — and the National Academies of Science and Medicine’s 2017 report by 22 science and ethics experts from multiple countries laying out guidelines for human genome editing are both encouraging examples in the direction toward global governance and shared responsibility.

Biological threats recognize no human borders. Disparity in bioethics anywhere weakens bioethics everywhere. Liberal democracies must take advantage of the openness of their system to educate the public, live up to the highest ethical standards in protecting human rights and safeguarding the environment, and make such standards the bedrock of universal principles. China is most likely to abide by such standards when its membership in the global political and scientific community depends on it — in other words, when it has no other choice.

#### Biotech is the key test of international leadership.

Carlson '21 – affiliate professor in the Paul G Allen School of Computer Science & Engineering at the University of Washington and earned a doctorate in physics from Princeton [Rob, Chad Sbragia, and Kate Sixt, Sep 14, "BEYOND BIOLOGICAL DEFENSE: MAINTAINING THE U.S. BIOTECHNOLOGY ADVANTAGE," <https://warontherocks.com/2021/09/beyond-biological-defense-maintaining-the-u-s-biotechnology-advantage/>]

China, by contrast, has been integrating biotechnology into its strategic development and elevating biotechnology to a key component of national security. China’s military-civil fusion development strategy makes biotechnology a core priority for the People’s Liberation Army. This strategy has one goal: to bring together China’s civilian and military industrial bases in order to better project power. To that end, China has cornered supply chains in multiple sectors, including pharmaceuticals ingredients and other important chemicals.

Stephanie Rogers, the Defense Department’s acting principal director for biotechnology, recently declared that “the nation that leads the world in biotechnology will accrue enduring economic, societal, and defense gains.” Unfortunately, this awareness has yet to be reflected in government policy. Biotechnology security is national security — for the United States and for China. The Department of Defense should recognize biotechnology’s role as a foundational technology and make biotechnology development and supply chain security a priority.

Maintaining America’s Biotechnology Advantage

Biotechnology in the United States is a significant contributor to the economy. By one estimate, in 2017, U.S. biotechnology revenues exceeded $400 billion, or 2 percent of gross domestic product, substantially surpassing better-measured sectors such as mining. Bioeconomy revenues have grown at an average rate of 10 percent annually for two decades. Notably, U.S. biotechnology revenues alone were approximately equal to worldwide semiconductor revenues for 2017. Biotechnology now supplies critical medicines, and, as more than 90 percent of the corn and soy grown in the United States is genetically modified, biotechnology feeds the armed forces. Industrial biotechnology is responsible for upward of 20 percent of chemicals produced in the United States, suggesting a similar proportion of chemicals used in the military are also biologically derived. And these impressive figures may still be significant underestimates: Using a different methodology, the U.S. National Academy of Sciences recently concluded that the biotechnology industry contributes 5 to 7 percent of U.S. gross domestic product. Biotechnology, therefore, may already constitute an even larger share of the military supply chain.

As biotechnology continues to mature, its contribution to physical and economic security will become even more significant. Tools are now being deployed that enable the engineering and biomanufacturing of materials that will eventually not only displace petrochemicals but also surpass them in production scale and performance. Over the next ten to twenty years, biological production could soon supply up to 60 percent of physical inputs across the global economy, and biotechnology could have a “direct economic impact of up to $4 trillion a year.”

While the United States is arguably still leading in biotechnology, it risks losing this lead to China. In China, biotechnology is a national development and a security matter. China’s Innovation Driven Development Strategy emphasizes biotechnology’s essential role in the country’s economic development, while the Military-Civil Fusion Development Strategy seeks to ensure that biotechnology research is also oriented toward the country’s military and broader security goals. Chinese biotechnology revenues are reported to be of a similar size to those in the United States, although they are subject to even lesser clarity in reporting.

While China continues its licit and illicit acquisition efforts targeting the U.S. biotechnology sector, it is also shifting its attention to domestic innovation. In time, this will provide the People’s Liberation Army with new capabilities and increase both America’s and the Pentagon’s reliance on Chinese biotechnology products.

#### Who leads in the development and sale of technology will determine the future of the international order – it’s either democracy or autocracy, there is no in-between.

Beckly '22 - Associate Professor of Political Science at Tufts University, a Nonresident Senior Fellow at the American Enterprise Institute [Michael, March/April, "Enemies of My Enemy," https://www.foreignaffairs.com/articles/2021-02-14/china-new-world-order-enemies-my-enemy]

THE CLASH OF SYSTEMS

The history of international order building is one of savage competition between clashing systems, not of harmonious cooperation. In the best of times, that competition took the form of a cold war, with each side jockeying for advantage and probing each other with every measure short of military force. In many cases, however, the competition eventually boiled over into a shooting war and ended with one side crushing the other. The victorious order then ruled until it was destroyed by a new competitor—or until it simply crumbled without an external threat to hold it together.

Today, a growing number of policymakers and pundits are calling for a new concert of powers to sort out the world’s problems and divide the globe into spheres of influence. But the idea of an inclusive order in which no one power’s vision prevails is a fantasy that can exist only in the imaginations of world-government idealists and academic theorists. There are only two orders under construction right now—a Chinese-led one and a U.S.-led one—and the contest between the two is rapidly becoming a clash between autocracy and democracy, as both countries define themselves against each other and try to infuse their respective coalitions with ideological purpose. China is positioning itself as the world’s defender of hierarchy and tradition against a decadent and disorderly West; the United States is belatedly summoning a new alliance to check Chinese power and make the world safe for democracy.

This clash of systems will define the twenty-first century and divide the world. China will view the emerging democratic order as a containment strategy designed to strangle its economy and topple its regime. In response, it will seek to protect itself by asserting greater military control over its vital sea-lanes, carving out exclusive economic zones for its firms, and propping up autocratic allies as it sows chaos in democracies. The upsurge of Chinese repression and aggression, in turn, will further impel the United States and its allies to shun Beijing and build a democratic order. For a tiny glimpse of what this vicious cycle might look like, consider what happened in March 2021, when Canada, the United Kingdom, the United States, and the EU sanctioned four Chinese officials for human rights abuses in Xinjiang. The sanctions amounted to a slap on the wrist, but Beijing interpreted them as an assault on its sovereignty and unleashed a diplomatic tirade and a slew of economic sanctions. The EU returned fire by freezing its proposed EU-China Comprehensive Agreement on Investment.

In the coming years, the trade and technology wars between China and the United States that began during the Trump administration will rage on as both sides try to expand their respective spheres. Other countries will find it increasingly difficult to hedge their bets by maintaining links to both blocs. Instead, China and the United States will push their partners to pick sides, compelling them to reroute their supply chains and adopt wholesale the ecosystem of technologies and standards of one side’s order. The Internet will be split in two. When people journey from one order to the other—if they can even get a visa—they will enter a different digital realm. Their phones won’t work, nor will their favorite websites, their email accounts, or their precious social media apps. Political warfare between the two systems will intensify, as each tries to undermine the domestic legitimacy and international appeal of its competitor. East Asian sea-lanes will grow clogged with warships, and rival forces will experience frequent close encounters.

The standoff will end only when one side defeats or exhausts the other. As of now, the smart money is on the U.S. side, which has far more wealth and military assets than China does and better prospects for future growth. By the early 2030s, Xi, an obese smoker with a stressful job, will be in his 80s, if he is still alive. China’s demographic crisis will be kicking into high gear, with the country projected to lose roughly 70 million working-age adults and gain 130 million senior citizens between now and then. Hundreds of billions of dollars in overseas Chinese loans will be due, and many of China’s foreign partners won’t be able to pay them back. It is hard to see how a country facing so many challenges could long sustain its own international order, especially in the face of determined opposition from the world’s wealthiest countries.

Yet it is also far from guaranteed that the U.S.-led democratic order will hold together. The United States could suffer a constitutional crisis in the 2024 presidential election and collapse into civil strife. Even if that doesn’t happen, the United States and its allies might be rent by their own divides. The democratic world is suffering its greatest crisis of confidence and unity since the 1930s. Nationalism, populism, and opposition to globalism are rising, making collective action difficult. The East Asian democracies have ongoing territorial disputes with one another. Many Europeans view China as more of an economic opportunity than a strategic threat and seriously doubt the United States’ reliability as an ally, having endured four years of tariffs and scorn from President Donald Trump, who could soon be back in power. Europeans also hold different views from Americans on data security and privacy, and European governments fear U.S. technology dominance almost as much as they do Chinese digital hegemony. India may not be ready to abandon its traditional policy of nonalignment and back a democratic order, especially when it is becoming more repressive at home, and an order built around democracy will struggle to form productive partnerships with autocracies that would be important partners in any alliance against China, such as Singapore and Vietnam. Fear of China is a powerful force, but it might not be potent enough to paper over the many cracks that exist within the emerging anti-Chinese coalition.

If that coalition fails to solidify its international order, then the world will steadily slide back into anarchy, a struggle among rogue powers and regional blocs in which the strong do what they can and the weak suffer what they must. Some scholars assume—or hope—that an unordered world will sort itself out on its own, that great powers will carve out stable spheres of influence and avoid conflict or that the spread of international commerce and enlightened ideas will naturally maintain global peace and prosperity. But peace and prosperity are unnatural. When achieved, they are the result of sustained cooperation among great powers—that is, of an international order.

DOUBLING DOWN ON DEMOCRACY

History shows that eras of fluid multipolarity typically end in disaster, regardless of the bright ideas or advanced technologies circulating at the time. The late eighteenth century witnessed the pinnacle of the Enlightenment in Europe, before the continent descended into the hell of the Napoleonic Wars. At the start of the twentieth century, the world’s sharpest minds predicted an end to great-power conflict as railways, telegraph cables, and steamships linked countries closer together. The worst war in history up to that point quickly followed. The sad and paradoxical reality is that international orders are vital to avert chaos, yet they typically emerge only during periods of great-power rivalry. Competing with China will be fraught with risk for the United States and its allies, but it might be the only way to avoid even greater dangers.

To build a better future, the United States and its allies will need to take a more enlightened view of their interests than they did even during the Cold War. Back then, their economic interests dovetailed nicely with their geopolitical interests. Simple greed, if nothing else, could compel capitalist states to band together to protect private property against a communist onslaught. Now, however, the choice is not so simple, because standing up to China will entail significant economic costs, especially in the short term. Those costs might pale in comparison to the long-term costs of business as usual with Beijing—Chinese espionage has been estimated to deprive the United States alone of somewhere between $200 billion and $600 billion annually—to say nothing of the moral quandaries and geopolitical risks of cooperating with a brutal totalitarian regime with revanchist ambitions. Yet the ability to make such an enlightened calculation in favor of confronting China may be beyond the capacities of any nation, especially ones as polarized as the United States and many of its democratic allies.

#### Restraint will fail – the US needs to wield its power for good.

Brands '22 - The Henry Kissinger Distinguished Professor at Johns Hopkins University’s School of Advanced International Studies [Hal, Jun1, "The World Doesn’t Need a More Restrained America,"https://www.aei.org/op-eds/the-world-doesnt-need-a-more-restrained-america/]

It has been a bumpy year for the restraint coalition — that loose network of analysts, advocates and politicians calling for a sharply reduced US role in the world. Having reached peak influence with the withdrawal from Afghanistan, this group initially found itself marginalized by Russia’s war in Ukraine. Now, the restraint crowd is offering a renewed critique of US policy, one that will probably prove to be persistent, though not persuasive.

Restraint is a broad church. It features anti-interventionist academics, who often style themselves as non-ideological “realists,” alongside well-funded think tanks such as the Quincy Institute. It includes libertarians such as Senator Rand Paul who deplore the financial costs of US foreign policy and progressives who contend that American globalism is a cover for imperialism and neoliberalism. There are pacifists who believe that all wars are criminal, as well as nationalists such as Senator Josh Hawley who argue that being appropriately hawkish on China requires being more dovish on nearly everything else.

Some restrainers seek wholesale global retrenchment; others mainly decry ongoing US involvement in Europe and the Middle East. What unites them is a conviction that the overuse of US power has been catastrophic for America and the world.

This coalition seemed ascendant a year ago, when President Joe Biden denounced the “forever wars” while pulling out of Afghanistan. That decision, two analysts argued, marked Biden as a hard-nosed realist — and perhaps an ally in the struggle to reshape American diplomacy.

Yet the moment didn’t last. The collapse of the Afghan state even before the US finished withdrawing showed that, while waging wars is expensive, losing them can impose a serious cost. Then came Russia’s assault on Ukraine. As Vladimir Putin’s forces sought to restore the Soviet empire and murdered Ukrainian citizens, they revealed just how awful a world shaped by great powers other than Washington might be.

Indeed, Biden isn’t getting much praise from self-proclaimed realists today. While refusing to intervene militarily, Biden has otherwise backed Ukraine with money, weapons and other support. NATO — whose peaceful expansion allegedly forced Putin to order a campaign of aggression and murder — now appears likely to add two new members, Finland and Sweden. Biden has even invoked the rhetorical legacy of his cold war predecessors, declaring that Ukraine is a vital front in the struggle to save the free world.

In response, the restraint coalition has itself opened a new front, finding multiple reasons to attack Biden’s Ukraine policy.

First is cost. Sustaining a medium-sized country under a ferocious military assault is fantastically expensive. The latest US support package for Ukraine totals some $40 billion — money, Hawley complained, that could be better spent on giving US military personnel a generous raise. Some Republicans in Congress seem to agree — 57 representatives and 11 senators voted, unsuccessfully, against the aid package.

Second is risk. No one knows how the war in Ukraine will end. If the US helps Ukraine defend itself too successfully, the thinking goes, then perhaps a humiliated Russia will escalate wildly rather than accept defeat.

Finally, there is politics. With Biden having gone all-in on Ukraine, there’s little space for the restraint contingent on the left. But Hawley and other Republicans seeking to inherit Donald Trump’s political base clearly believe that there is a constituency for claims that supporting a vulnerable democracy equates to putting “America last.”

It is uncharitable to label such arguments “pro-Putin.” Forty billion dollars is real money, given that the Pentagon is struggling to find a 10th of that for urgent near-term improvements to America’s military posture in the Pacific. There is, undoubtedly, danger in a scenario where Putin worries that he is losing the war — and in consequence loses his head.

But the perpetual problem with restraint is the corresponding unwillingness to consider what happens after America pulls back. Suppose Washington does slash support to Ukraine and leave European security to the Europeans. What does that bring?

Judging by the past century — or even the past six months — the answer is not a stable Europe and a more solvent America. Rather, the result is likely to be a partially successful Russian war of conquest that creates pervasive insecurity in Europe; a continent that, lacking American leadership, is less united and confident in opposing Putin; and greater global instability that ultimately makes it harder to contain China, as well.

Similarly in the Middle East, reasonable people can debate the proper level of U.S. involvement, or what constitutes a reasonable risk to accept on a variety of issues, from containing Iran to opposing Putin’s ambitions in Ukraine. But recent events have reminded us that a world less influenced by the US will be one in which autocratic predation becomes more common. The Ukraine war has reminded the world about the stubborn persistence of evil. In doing so, it has also illuminated the virtues of American power.

### 1AC – Solvency

#### Plan: The United States federal government should substantially increase its security cooperation with the North Atlantic Treaty Organization in the area of biotechnology.

#### The plan sets standards and ensures interoperability.

Soare '21 [Simona R, Jun 11, "Innovation as Adaptation: NATO and Emerging Technologies," https://www.gmfus.org/news/innovation-adaptation-nato-and-emerging-technologies]  
\*EDT: emerging and disruptive technologies

The third driver is to foster the interoperability of military capabilities that are enabled by emerging technologies13 and to incentivize transatlantic defense cooperation on EDTs to avoid or bridge technology gaps between allies. This goes to the core of NATO’s mission to deter and defend against threats, but it is an enduring challenge. Streamlining standardization and testing, evaluation, verification, and validation procedures remains important. However, NATO should also double down on its efforts to ensure greater compliance with interoperability and baseline requirements for the security of critical infrastructure. Recent challenges in relation to national compliance with the 2019 NATO requirements for security of telecommunications infrastructure are a case in point, but there are wider and enduring challenges with hardware and communications interoperability.14 While the plans for the new Defence Innovation Accelerator promise to contribute to maintaining NATO’s technological edge, it also remains to be seen whether they will contribute sufficiently to building technology capacity among some of the smaller and more vulnerable allies. As they establish governance procedures and participation rules, allies need to mitigate the risk that the accelerator could contribute to a two-speed, two-tier alliance, dividing the technology haves from the technology have-nots.

The fourth driver is a desire to lead in setting global, normative EDTs governance. The Advisory Group on Emerging and Disruptive Technologies, for example, has emphasized that NATO “is exceptionally well placed to be a global driver of a values-based innovation agenda.”15 Democratic values are at the core of what defines security for transatlantic allies and the target of adversarial subversive measures. Consequently, embedding democratic values into the development, adoption, and use of EDTs by the allies is key to NATO’s mission. Thus, innovation efforts need to be closer linked to NATO’s democracy-centered tech diplomacy with like-minded global partners, some of whom could be invited to join the Defence Innovation Accelerator.

The fifth driver is organizational and procedural change, notably to build “a resilient innovation pipeline for the alliance”16 and a sustainable innovation ecosystem. This is a more challenging undertaking than it may first appear. Military organizations have historically innovated more coherently and efficiently than other public organizations.17 However, in the case of EDTs, this pattern is challenged. NATO and allied military organizations are not driving technological progress, are not the main agents of innovation, and depend on effective civilian-military collaboration for their own innovation efforts.

#### The US is key to NATO interoperability and unlocking the potential of smaller countries.

Soare '21 [Simona R, Jun 11, "Innovation as Adaptation: NATO and Emerging Technologies," https://www.gmfus.org/news/innovation-adaptation-nato-and-emerging-technologies]  
\*EDT: emerging and disruptive technologies

Pursuing Collaborative Innovation

Not all allies have the defense funding, technological capacity, skills, and military infrastructure to facilitate rapid defense innovation, including the adoption and scaling of emerging technologies. And not all that have such resources and knowledge are willing to share them in collaborative innovation processes. Leading allies—the United States, France, the United Kingdom, and the Netherlands—already have national-focused approaches to the adoption of EDTs. By contrast, for most Central and Eastern countries EDTs in defense are mainly a long-term prospect. Previous challenges in integrating cyber capabilities into NATO operations, persistent capability gaps among the allies, and slow standardization procedures are a good indication of the magnitude of the challenge, which is acknowledged at the highest levels of NATO decision-making.

As Secretary-General Stoltenberg has stated, a technological gap between the allies would undermine interoperability and weaken alliance cohesion. In the context of the NATO AI and big data strategies and the Defense Innovation Accelerator, allies should reflect on how to improve and facilitate technological transfers among themselves. This could enable smaller allies to specialize in niche EDTs capabilities, as has been the case with cyber, for example, and could prevent the emergence of new technological and capability gaps between the allies. The Biden administration’s focus on shared democratic values and the digital agenda, and its willingness to strengthen NATO and technology partnerships, constitute a window of opportunity for the alliance. It should be fully capitalized on to accelerate transatlantic collaborative defense innovation.

#### And, NATO is key to an accountable and strong response to emerging tech.

Jankowski '21 – Political Adviser and Head of the Political Section at the Permanent Delegation of the Republic of Poland to NATO [Dominik, " NATO and the Emerging and Disruptive Technologies Challenge” in *NATO in the Era of Unpeace: Defending Against Known Unknowns,* pp 99-102]

While the suggestion that EDTs will enable a new class of weapons that will modify the strategic landscape remains to be realised, a number of unresolved security puzzles underlying the emergence of these new technology areas have implications for NATO. As one looks to the future, new adversaries and new science and technology will emerge. The extent to which these EDTs may exacerbate or mitigate the global security and governance challenges that Russia currently poses to NATO Allies will remain an integral question as policy-makers navigate the complex global environment.

NATO is a natural forum for deliberations about EDTs, especially in a transatlantic context. It also has vast experience, going back to the Cold War, in working towards standardisation and interoperability among Allies. However, the results achieved have been mixed, which underscores the challenges the Alliance now faces – there are not only 30 Allies with disparate levels of capability, but also a backdrop of rapid technological advances where some of its competitors and adversaries may hold significant advantages.

In this context, NATO should concentrate on four core issues with regard to EDTs. First, as Andrea Gilli emphasizes, the Alliance should start a process on “NATO-mation.”29 In fact, the Alliance should serve as a primary transatlantic coordinating institution for information-sharing and cooperation between Allies on the security dimension of EDTs. NATO has an important role to play in the development of a common strategy based on an Alliance-wide EDTs threat assessment and an analysis of opportunities. Therefore, EDTs can serve as a unifying element for NATO’s work on future policies.

Second, NATO will need partners on its path towards achieving a comprehensive implementation strategy on EDTs. This will require connection with the private sector early and often, clearly communicating NATO’s priorities and requirements while providing accessible opportunities for industry, including non-traditional ones. Much of the innovative work being undertaken in the commercial sector is being carried out by companies that have never worked in the defence realm or have no wish to do so. Therefore, building new partnerships at NATO with the private sector will enable the Alliance to increase awareness, share data, and creatively tap into experiences and knowledge. Moreover, NATO and the EU should initiate a strategic dialogue to address fundamental issues of tech governance and data sharing in order to overcome the transatlantic tech policy divide.

Third, Allies should manage expectations and not overestimate the role of EDTs. EDTs are not a panacea to all of NATO’s problems, including the existing gaps in the still-needed conventional capabilities. Indeed, EDTs will not be a silver bullet to address NATO’s shortfalls. Therefore, Allies should first and foremost concentrate on two elements: overcoming the interoperability gap30 and revitalizing NATO’s once robust standardization programme.31

Fourth, Allies should consider using NATO as a body to coordinate efforts to find innovative ways to finance EDTs, including through an establishment of a NATO venture capital fund. A potential deep-tech investment in technologies with security and defence applications through a dedicated NATO structure could help Allies maintain their technological edge.

## Advantage – Dual-Use

### AO – Drug Resistance

#### Solves disease and drug resistance

Fischbach 2013 - UCSF Center for Systems and Synthetic Biology, University of California, San Francisco  
Michael A, Jeffrey A Bluestone, and Wendell A Lim, "Cell-Based Therapeutics: The Next Pillar of Medicine," Science Translational Medicine 03 Apr 2013: Vol. 5, Issue 179, pp. 179ps7

Today, biomedical science sits on the cusp of another revolution: the use of human and microbial cells as therapeutic entities (1). In principle, cells have therapeutic capabilities that are distinct from those of small molecules and biologics and that extend beyond the regenerative-medicine arena. Part drug and part device, cells can sense diverse signals, move to specific sites in the body, integrate inputs to make decisions, and execute complex response behaviors—all in the context of a specific tissue environment. These attributes could potentially be harnessed to treat infections, autoimmunity, cancers, metabolic diseases, and tissue degeneration as well as realizing tissue repair and regeneration. Indeed, pioneering clinical trials have highlighted the benefits of using cells as therapeutic agents (2–7). However, the complexity of cells and the challenge of controlling their actions in a therapeutic setting provide daunting scientific, regulatory, economic, and cultural obstacles to the establishment of cells as a widespread and viable pharmaceutical platform.

With our deep mechanistic understanding of cellular systems biology, researchers are poised to harness these intricate behaviors in new ways to generate an array of precisely regulated weapons against a broad range of diseases. However, a critical step that will enable the emergence of cells as the next therapeutic pillar is the development of cellular engineering as a foundational science. This will include mechanisms for editing and recoding genomes, the assembly of a toolkit of molecular parts and regulatory modules that behave predictably, and a systems-based theoretical framework that can provide strategies for tuning and optimizing cellular behaviors.

HOW WHOLE CELLS TRUMP THEIR PARTS

If small molecules and biologics are tools, then cells are carpenters—and architects and engineers as well. Of the three pillars, only cells sense their surroundings, make decisions, and exhibit varied and regulable behaviors (Table 1). Devices share some of these advantages; indeed, some abiotic therapeutic nanodevices mimic cellular behaviors, although these equally fascinating new therapeutic candidates will not be discussed here.

Cells naturally perform therapeutic tasks

The human body has three kinds of natural agents that perform the tasks we demand of therapeutics. The first two are small molecules (for example, neurotransmitters) and biologics (such as antibodies, growth factors, cytokines, and peptide hormones). Cells are the third—and the only ones that can perform complex biological functions. For example, macrophages engulf pathogens and recruit adaptive immune cells; hematopoietic stem cells give rise to myeloid and lymphoid lineages; chondrocytes produce a cartilaginous extracellular matrix; pancreatic β cells sense glucose and respond by producing insulin; and gut bacteria convert indigestible fibers into short-chain fatty acids that fuel intestinal epithelial cells.

Cell behavior is exquisitely selective

Most small molecules and biologics are always active; they do not have ON or OFF switches, and if they reach their target, they will bind it and exert a biological effect. In contrast, cells sense their environment and respond with an action only when in the presence of a specific array of molecular inputs. Thus, cells can have exquisite sensitivity and specificity, which impart a greater ability to limit off-target action. Engineering and controlling key cellular receptors and how their signals are processed could, in principle, allow customization of responses such that only therapeutically relevant signals trigger activation of a selected cellular behavior (8).

Cells are special delivery agents

PK and PD properties and metabolism determine where in the body small molecules and biologics distribute. The inability to limit their distribution to a single tissue or cell type often results in off-target effects, which can be serious enough to end a drug-development program, even at a costly late stage. For example, the insulin sensitization activity of rosiglitazone, a peroxisome proliferator-activated receptor (PPAR)–γ ligand, results from its activity in adipocytes, but the increased risk of myocardial infarction observed in some patients arises from the drug’s action in cardiac cells. Although rare, this outcome has had a chilling effect on drug sales and on the development of other PPAR-γ–targeted drugs. Cells are less likely to have off-target effects because they can selectively recognize and actively migrate toward specific signals and exert their effects in a highly targeted manner. One can imagine an ideal cellular agent that is engineered to produce a PPAR-γ ligand, but only in the local environment of adipocytes.

Cells can handle human genetic variability

Determining the right dose of a drug for a diverse patient population can be challenging. Common polymorphisms in genes that encode drug transporters or drug-metabolizing cytochromes P450 can tweak the transport of a small molecule in and out of cells or alter drug metabolism, respectively; as a result, the same dose of a small molecule can, in different individuals, result in widely varying amounts of the active metabolite reaching its target. For example, common polymorphisms in the gene that encodes organic cation transporter 1 (OCT1) lead to reduced uptake of the type 2 diabetes drug metformin, resulting in differences in the efficacy of metformin among individuals (9). In contrast, cells could potentially be engineered to automatically adjust to differences in host metabolism and transport by harboring a rheostat-like circuit that produces more of a molecule when needed and degrades the excess when a threshold concentration is exceeded. Thus, in principle, cells could yield therapeutic responses that are less variable in different individuals.

Cell behaviors can be engineered

To manage their disease, patients with autoimmune (type 1) diabetes (T1D) have to monitor their blood sugar, inject insulin, and limit their diets. Failure to control T1D can have grave consequences, including blindness, limb amputation, and death. Because T1D results from the autoimmune destruction of insulin-synthesizing pancreatic β cells, simply replacing these cells is not a viable therapeutic strategy. Instead, introducing a cell that has been engineered to perform an unnatural yet important task—for example, a T lymphocyte that has been modified to sense glucose and produce insulin—is a provocative alternative. Such a cell is potentially within the reach of synthetic biology and, if it relieved the insulin dependency of T1D patients, would represent a major therapeutic breakthrough. For the subset of T1D cases characterized by the presence of autoantibodies that recognize and destroy insulin, this cell might be engineered to produce an insulin derivative that recognizes and modulates the activity of insulin receptors but evades binding by insulin autoantibodies.

KILLER APPS FOR CELL THERAPY

Although small molecules and biologics will always have important therapeutic niches, there are applications for which cells are better equipped. This section explores critical unmet needs in human disease that cell-based therapeutics are uniquely well suited to address (Fig. 1). We focus on three specific cases, although there are arrays of other promising applications that are not discussed here, including stem cell and dendritic-cell therapeutics, which have been the subjects of numerous reviews (10–13). Two of these cases are built on recent pioneering examples of cell-based therapies that have demonstrated clinical efficacy: chimeric antigen receptor (CAR)–modified T cells and fecal transplantations.

Immune cells that seek and destroy cancer

The most effective new small-molecule (kinase inhibitors) and biologic (antibody) cancer therapies offer as little as 6 to 36 months of disease-free survival before cancer progression (14, 15). Therefore, one of the major challenges for cancer therapy is to block the growth of drug-tolerant or resistant cancer cells that underlie progression and to kill metastatic cells that have broken free of the primary tumor mass and intravasated into a blood or lymphatic vessel.

Combination therapies that prevent the outgrowth of resistant cells are one possible therapeutic avenue, but small molecules and biologics have a difficult time being sentinels. They cannot turn themselves on and off, and so they rely entirely on specific molecular recognition to determine whether or not they act. And because the target cell can evolve resistance mechanisms (14), the therapeutically useful lifetime of a small molecule or biologic is limited.

The job of detecting and destroying a shape-shifting cellular target may be better suited to a cell-based therapeutic. Recent clinical studies have shown the efficacy of using engineered T lymphocytes in treating chronic lymphoid leukemia (3, 4). The ex vivo-transformed T cells were modified to express a CAR in which the receptor extra-cellular targeting domain has been replaced by an single-chain antibody that recognizes a tumor-specific molecule. These and related studies: (7) (i) prove that it is possible to retarget immune cells to detect and respond to new, non-natural signals and (ii) establish T cells as a favorable chassis for engineering. Future versions of CAR-modified T cells may encode control circuits that enable them to be activated or deactivated in a small-molecule–dependent fashion and to produce a biologic that counteracts adverse side effects, such as cytokine storm (for example, an anti–IL-6 antibody).

Establishment of drug resistance is less likely to be a problem for a sentinel cell therapeutic than for small molecules and biologics. A therapeutic cell could be engineered to recognize multiple features of a target cell so that changing any one of them would not be enough to evade detection (in effect, a combination therapy). Given the ability of a cell-based therapeutic to adapt to an evolving pathogen, cells may be a natural choice for other surveillance jobs as well, including seeking and destroying activated cells from chronic infections, such as a latent Mycobacterium tuberculosis population.

#### Extinction

Casadevall 2012 - Department of Microbiology and Immunology and theDivision of Infectious Diseases of the Albert Einstein College of Medicine  
Arturo, "The future of biological warfare," Volume5, Issue5, Thematic Issue: Bioterrorism Research September 2012 Pages 584-587

Existential threats to humanity

In considering the importance of biological warfare as a subject for concern it is worthwhile to review the known existential threats. At this time this writer can identify at three major existential threats to humanity: (i) large-scale thermonuclear war followed by a nuclear winter, (ii) a planet killing asteroid impact and (iii) **infectious disease**. To this trio might be added climate change making the planet uninhabitable. Of the three existential threats the first is deduced from the inferred cataclysmic effects of nuclear war. For the second there is geological evidence for the association of asteroid impacts with massive extinction (Alvarez, 1987). As to an existential threat from microbes **recent decades have provided unequivocal evidence for the ability of certain pathogens to cause the extinction of entire species**. Although infectious disease has traditionally not been associated with extinction this view has changed by the finding that a single chytrid fungus was responsible for the extinction of numerous amphibian species (Daszak et al., 1999; Mendelson et al., 2006). **Previously**, the view that infectious diseases were not a cause of extinction was predicated on the notion that many pathogens required their hosts and that some proportion of the host population was naturally resistant. However, **that calculation does not apply to microbes that are acquired directly from the environment and have no need for a host**, such as the majority of fungal pathogens. For those types of host–microbe interactions **it is possible for the pathogen to kill off every last member of a species without harm to itself**, since it would return to its natural habitat upon killing its last host. Hence, from the viewpoint of existential threats environmental microbes could potentially **pose a much greater threat to humanity than** the **known pathogenic microbes**, which number somewhere near 1500 species (Cleaveland et al., 2001; Taylor et al., 2001), especially if some of these species acquired the capacity for pathogenicity as a consequence of natural evolution or bioengineering.

### AT: Current laws sufficient

#### Current laws are insufficient.

Sayler '22 - Analyst in Advanced Technology and Global Security [Kelley, Apr 6, "Emerging Military Technologies: Background and Issues for Congress," https://sgp.fas.org/crs/natsec/R46458.pdf]

International Institutions

Only the weaponization of biotechnology is prohibited under international law.145 Some international institutions have demonstrated interest in considering broader implications of biotechnologies. For example, since 1983, ASEAN has maintained a subcommittee on biotechnology that facilitates coordination of regional biotechnology projects. Similarly, since 1993, the OECD has maintained an Internal Co-ordination Group for Biotechnology that monitors developments in biotechnology and facilitates coordination among various sectors involved in biotechnology research (e.g., agriculture, science and technology, environment, industry). In addition, the United Nations Convention on Biological Diversity is charged with governing the development and use of genetically modified organisms.146 These entities are not, however, focused specifically on military applications of biotechnology. In terms of potential militarization, the 1972 Biological Weapons Convention requires review conferences, which every five years assess both the implementation of the treaty and ongoing developments in biotechnology. Annual meetings are held between review conferences to informally consider relevant topics, as well as to address national bilateral and multilateral efforts to enhance biosecurity. Some analysts have argued that an international framework should be established to consider the militarization of biotechnologies and discuss potential regulation of or limits on certain applications.147

### AT: No Bioterror Threat

#### Scientific consensus proves bioweapons are a threat.

Cummings '21 [Christopher L., Kaitlin M. Volk, Anna A. Ulanova, Do Thuy Uyen Ha Lam & Pei Rou Ng, “Emerging Biosecurity Threats and Responses: A Review of Published and Gray Literature” in *Emerging Threats of Synthetic Biology and Biotechnology*, pp 13–36]

Bioweapons were the second most frequently mentioned threat, appearing in 28% of the articles analyzed. Franconi et al. (2018) define bioweapons as “deadly pathogens – bacteria or viruses – or toxins that can be deliberately released in order to cause harm to people or animals and plants.” Generally, when a bioweapon is used by a state sponsored entity it is considered an act of biowarfare, while the use of a bioweapon by a non-state sponsored entity or individual is considered an act of bioterrorism (Jamil 2015), the latter of which was mentioned in 17% of articles. Unaltered organisms can and have been used as bioweapons in the past, such as in the 2001 anthrax attacks. Biotechnology opens the door to creating enhanced or novel pathogens and new avenues for toxin production. Cross (2018) identifies three ways in which biotechnology can be used to create bioweapons: (1) “recreating pathogenic viruses such as Ebola, SARS, or smallpox,” (2) “engineering bacteria to make them more dangerous, which could be easily accomplished by inserting genes to confer antibiotic resistance,” and (3) “engineering microbes to produce and release toxic biochemicals.” Researchers have already demonstrated capabilities in all three of these avenues. Horsepox, a close relative of smallpox, has been synthesized from mail-ordered DNA (Noyce et al. 2018), avian influenza has been engineered to allow for airborne transmission between mammals (Linster et al. 2014), and botulinum toxin has been produced using yeast cells (Fonfria et al. 2018). These three cases are also prime examples of dual use research, as they were carried out for beneficial purposes (vaccine development, study of transmission, and enhanced therapeutics, respectively) but also provide a clear avenue towards weaponization.

Bioweapons and bioterrorism are mainly concerned with the deliberate release of an engineered pathogen or toxin with the purpose of causing harm, but the literature also identified accidental releases of modified organisms as a threat. Accidental releases are often cited as a concern for biosafety and not biosecurity. Pastorino et al. (2017) delineates the two terms in a laboratory setting as follows:

“Laboratory biosafety” is the term used to describe the containment principles, technologies, and practices that are implemented to prevent unintentional exposure to pathogens and toxins or their accidental release. “Laboratory biosecurity” refers to institutional and personal security measures designed to prevent the loss, theft, misuse, diversion, or intentional release of pathogens and toxins.”

### AT: Too Many Barriers

#### Elementary school students could build a bioweapon.

Trump '21 – PhD, a research social scientist for the U.S.  Army Corps of Engineers, and served as a Strategic Planner and public health subject-matter expert for FEMA Region 1’s Data Analytics Task Force [Benjamin D, Marie-Valentie Florin, Edward Perkins, and Igor Linkov," Biosecurity for Synthetic Biology and Emerging Biotechnologies: Critical Challenges for Governance” in *Emerging Threats of Synthetic Biology and Biotechnology*]

Because emerging biotechnologies are dual-use, governance must weigh the risk of misuse with the potential for beneficial use in innovation and development. Unfortunately, biosecurity attempts are mired in uncertainty around both the actual capabilities of synthetic biology, as well as the motivations of actors given the increasing number of contexts in which synthetic biology is used. Modern governments are still relying on old rules to regulate a new technology, clearly an insufficient strategy for ensuring security in the coming decades.

Building an effective biosecurity strategy to encompass twenty-first century biotechnologies requires understanding the novelties that sciences like synthetic biology create in the biosecurity threat space, as well as the structural vulnerabilities these sciences can exploit and the likely causes of inadequate biosecurity practices. Synthetic biology’s novel biosecurity concerns arise from its broad scope, wider availability, complexity, and uncertainty over current and future capabilities. For example, critical developments such as gene editing via CRISPR gene editing vastly improve upon previous genetic engineering processes and may yield a revolution in human and environmental health research, but may also cause substantial and irreversible harms. One application of gene editing is the gene drive, which can rapidly propagate a certain set of genes or alleles through a population, circumventing Mendelian inheritance laws and increasing the chance that this set of genes is passed on. While gene drives are an exciting new technology, their ability to rapidly alter the genetic makeup of a population is cause for concern. Other potential negative consequences of gene editing may include the unconstrained diffusion of gene-edited material throughout the environment, the disruption of ecologies with genetically-modified organisms (in particular engineered gene drive systems), and off-target impacts from genome editing. These techniques could also be used maliciously, with an actor purposely targeting humans and/or the environment.

The publication and dissemination of a methodology for synthesizing horsepox in a laboratory setting was a recent application of gene editing (Noyce et al. 2018). Some critics say this information could support a nefarious actor to reconstitute and develop smallpox, or to synthetize other viruses. Additionally, the widely publicized recreation of the 1918 Spanish Influenza (Tumpey et al. 2005), which killed some 50 million people worldwide at the close of the First World War, could facilitate the synthesis process for actors wishing to cause harm. Even nonpathogenic approaches have been described as dual-use research, ranging from the disruption of local ecologies via gene drives to the manipulation or destruction of inorganic materials.

These and dozens of other cases demonstrate the increasing ease with which an actor can acquire information and apply existing tools to deploy advanced genetic engineering applications with limited to no oversight. In 1975, the U.S. National Institute of Health (“NIH”) established compliance measures for genome engineering that were enforced through funding restrictions; however, many synthetic biology innovators can now operate without NIH funding, approval, or even awareness, and NIH does not oversee research in other countries. Today, the financial costs, time limitations, and skill requirements needed to wield synthetic biology tools have scaled down such that some of these tools have become accessible even to elementary school students. Furthermore, the requisite baseline knowledge diminishes over time as synthetic biology processes become more streamlined. While such broad access to sophisticated genetic engineering knowledge and equipment can accelerate scientific breakthroughs, it also places the responsibility for biosecurity on a near infinite number of unsupervised actors across the globe.

### AT: No Food Wars

#### A litany of empirical studies prove food security are the largest determinant of conflict

Cuesta 2014 - Senior Economist at the World Bank [Jose, "Food Price Watch," May, www.worldbank.org/content/dam/Worldbank/document/Poverty%20documents/FPW\_May%202014\_final.pdf]

Dozens of violent episodes across the world were reported during the food price hikes of 2007 and 2008.55 And others have since followed. Casualties associated with such episodes—popularly known as “food riots” (yet somewhat arbitrarily defined, box 1)—in Argentina, Cameroon, Haiti and India, to cite a few, made world headlines. There have been violent episodes also associated with low prices, such as those involving coffee producers in Vietnam (or cotton producers in Burkina Faso).56 These episodes remind us about the close relationship between food insecurity and conflict. Furthermore, the world has grown accustomed to seeing a different angle of the food-conflict nexus: foodrelated humanitarian disaster and famines were—and continue to be—associated with civil conflict and interstate wars, for example, the recent Somalia famine. But the other link, the food-to-conflict connection is hardly news, and, as the father of the Green Revolution and Nobel Laureate Norman Borlaug eloquently put it: “we cannot build world peace on empty stomachs and human misery.” The interrelated and bidirectional connection between food and war has also been emphasized in the works of Amartya Sen, Jean Drèze, and anthropologist Ellen Messner, who coined the term “food wars.”57 Food price shocks can be responsible for the origination and continuation of conflict and, more generally, political instability. Increasing empirical evidence shows that international food prices and the domestic pass through to local markets of these international prices has a significant role in all types of conflict, from interstate wars to civil wars, regime breakdowns, and communal violence.58 Food price shocks may cause spontaneous and largely urban sociopolitical instability, with urban food consumers as the primary protesters.59 In these cases, price shocks can trigger sociopolitical unrest, fueling preexisting grievances—including poverty and other disparities—and highlighting the lack of adequate social safety nets and other compensating policies.60 This is the case, for example, with protests in Guinea and Mauritania in 2007 and Haiti in 2008.61 Yet, some argue that poverty is not a precondition for such protests, and, in fact, some of these protests did not necessarily always engage the poorest or hungriest individuals nor countries (for example, protests organized by consumers’ associations in Senegal and trade unions in Burkina Faso in 2008).62 Either way, those shocks reduce a country’s capability of producing, purchasing, and providing access to food, thus increasing the risk of food insecurity and, consequently, the likelihood of protests and escalated conflict.63 But food prices are not the only cause or contributor to violent protests associated with food.64 More structural pressures, such as competition— intra or interstate—over natural resources such as land, water, fisheries, labor, or capital may well cause political instability and unrest. Farmers and farm workers become, in such cases, the main agitators, more likely developing into social movements than riots from price shocks in urban settings.65 This is the case, for example, in land grabs in Madagascar that in 2009 were reported to contribute to a coup that ousted then President Ravalomanana, or the violent protests concerning genetically modified food in the Philippines in 2013.66 Consequently, the attention given to conflict jeopardizing food security (by reducing agricultural production and forcing displacement of people) during the last decades needs to be expanded. A more encompassing view should also incorporate the fact that food insecurity in general, and food price shocks in particular, also contribute to instability and conflict. Monitoring food prices (table 3 and figure 2) responds not only to food security and welfare interests, but also to serious political instability and conflict motivations. As a result, a proper monitoring constitutes a first step in addressing the interactions between food insecurity and conflict.

## Advantage – Leadership

### AT: American Dominance Locked In

#### The biotech race is afoot.

Trump '21 – PhD, a research social scientist for the U.S.  Army Corps of Engineers, and served as a Strategic Planner and public health subject-matter expert for FEMA Region 1’s Data Analytics Task Force [Benjamin D, Marie-Valentie Florin, Edward Perkins, and Igor Linkov," Biosecurity for Synthetic Biology and Emerging Biotechnologies: Critical Challenges for Governance” in *Emerging Threats of Synthetic Biology and Biotechnology*]

The increasingly globalized, distributed, and dispersed nature of synthetic biology products and research worsens challenges arising from differing practices of biosecurity governance globally. Advanced biological research is no longer overwhelmingly dominated by Europe and the US, and this may introduce different approaches to, or priorities for, biosecurity. Russia’s Federal Research Programme for Genetic Technologies Development for 2019–2027, for instance, intends to “implement a comprehensive solution to the task of the accelerated development of genetic technologies, including genetic editing; to establish scientific and technological groundwork for medicine, agriculture and industry; to improve the system of preventing biological emergencies and monitoring in this area” (Ministry of Science and Higher Education of the Russian Federation 2019). Similarly, Saudi Arabia is funding research related to the development of microbial cell factories to produce fuels and chemicals, while the Singaporean government is investing considerable resources into the funding of life and environmental sciences researchat Nanyang Technological University, the National University of Singapore, and the Agency for Science, Technology and Research (A\*STAR). The Chinese Academy of Sciences is establishing an Institute of Synthetic Biology, which is tasked with the dual responsibilities of fostering roadmaps for the future development of Chinese synthetic biology while also establishing safety and security norms for researchers at Chinese institutions. There are no top-down efforts beyond existing mechanisms like the BWC or the CWC (The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction) that standardize global governance and usage of synthetic biology, and bottom-up efforts are not coordinated in their reach or messaging.

### AT: Not Revisionist

#### China’s unwillingness to stand up to Russia shows they’re revisionist and want to capture on any chance of western weakness.

#### They’re revisionist.

Beckly '22 - Associate Professor of Political Science at Tufts University, a Nonresident Senior Fellow at the American Enterprise Institute [Michael, March/April, "Enemies of My Enemy," https://www.foreignaffairs.com/articles/2021-02-14/china-new-world-order-enemies-my-enemy]

ENTER THE DRAGON

There has never been any doubt about what China wants, because Chinese leaders have declared the same objectives for decades: to keep the Chinese Communist Party (CCP) in power, reabsorb Taiwan, control the East China and South China Seas, and return China to its rightful place as the dominant power in Asia and the most powerful country in the world. For most of the past four decades, the country took a relatively patient and peaceful approach to achieving these aims. Focused on economic growth and fearful of being shunned by the international community, China adopted a “peaceful rise” strategy, relying primarily on economic clout to advance its interests and generally following a maxim of the Chinese leader Deng Xiaoping: “Hide your strength, bide your time.”

In recent years, however, China has expanded aggressively on multiple fronts. “Wolf Warrior” diplomacy has replaced friendship diplomacy. Perceived slights from foreigners, no matter how small, are met with North Korean–style condemnation. A combative attitude has seeped into every part of China’s foreign policy, and it is confronting many countries with their gravest threat in generations.

This threat is most apparent in maritime East Asia, where China is moving aggressively to cement its vast territorial claims. Beijing is churning out warships faster than any country has since World War II, and it has flooded Asian sea-lanes with Chinese coast guard and fishing vessels. It has strung military outposts across the South China Sea and dramatically increased its use of ship ramming and aerial interceptions to shove neighbors out of disputed areas. In the Taiwan Strait, Chinese military patrols, some involving a dozen warships and more than 50 combat aircraft, prowl the sea almost daily and simulate attacks on Taiwanese and U.S. targets. Chinese officials have told Western analysts that calls for an invasion of Taiwan are proliferating within the CCP. Pentagon officials worry that such an assault could be imminent.

China has gone on the economic offensive, too. Its latest five-year plan calls for dominating what Chinese officials call “chokepoints”—goods and services that other countries can’t live without—and then using that dominance, plus the lure of China’s domestic market, to browbeat countries into concessions. Toward that end, China has become the dominant dispenser of overseas loans, loading up more than 150 countries with over $1 trillion of debt. It has massively subsidized strategic industries to gain a monopoly on hundreds of vital products, and it has installed the hardware for digital networks in dozens of countries. Armed with economic leverage, it has used coercion against more than a dozen countries over the last few years. In many cases, the punishment has been disproportionate to the supposed crime—for example, slapping tariffs on many of Australia’s exports after that country requested an international investigation into the origins of COVID-19.

China has also become a potent antidemocratic force, selling advanced tools of tyranny around the world. By combining surveillance cameras with social media monitoring, artificial intelligence, biometrics, and speech and facial recognition technologies, the Chinese government has pioneered a system that allows dictators to watch citizens constantly and punish them instantly by blocking their access to finance, education, employment, telecommunications, or travel. The apparatus is a despot’s dream, and Chinese companies are already selling and operating aspects of it in more than 80 countries.

ACTION AND REACTION

As China burns down what remains of the liberal order, it is sparking an international backlash. Negative views of the country have soared around the world to highs not seen since the 1989 Tiananmen Square massacre. A 2021 survey by the Pew Research Center found that roughly 75 percent of people in the United States, Europe, and Asia held unfavorable views of China and had no confidence that President Xi Jinping would behave responsibly in world affairs or respect human rights. Another survey, a 2020 poll by the Center for Strategic and International Studies, revealed that about 75 percent of foreign policy elites in those same places thought that the best way to deal with China was to form coalitions of like-minded countries against it. In the United States, both political parties now support a tough policy toward China. The EU has officially declared China to be a “systemic rival.” In Asia, Beijing faces openly hostile governments in every direction, from Japan to Australia to Vietnam to India. Even people in countries that trade heavily with China are souring on it. Surveys show that South Koreans, for example, now dislike China more than they dislike Japan, their former colonial overlord.

Anti-Chinese sentiment is starting to congeal into concrete pushback. The resistance remains embryonic and patchy, mainly because so many countries are still hooked on Chinese trade. But the overall trend is clear: disparate actors are starting to join forces to roll back Beijing’s power. In the process, they are reordering the world.

The emerging anti-Chinese order departs fundamentally from the liberal order, because it is directed at a different threat. In particular, the new order flips the relative emphasis placed on capitalism versus democracy. During the Cold War, the old liberal order promoted capitalism first and democracy a distant second. The United States and its allies pushed free markets as far as their power could reach, but when forced to choose, they almost always supported right-wing autocrats over left-wing democrats. The so-called free world was mainly an economic construct. Even after the Cold War, when democracy promotion became a cottage industry in Western capitals, the United States and its allies often shelved human rights concerns to gain market access, as they did most notably by ushering China into the WTO.

But now economic openness has become a liability for the United States and its allies, because China is ensconced in virtually every aspect of the liberal order. Far from being put out of business by globalization, China’s authoritarian capitalist system seems almost perfectly designed to milk free markets for mercantilist gain. Beijing uses subsidies and espionage to help its firms dominate global markets and protects its domestic market with nontariff barriers. It censors foreign ideas and companies on its own internet and freely accesses the global Internet to steal intellectual property and spread CCP propaganda. It assumes leadership positions in liberal international institutions, such as the UN Human Rights Council, and then bends them in an illiberal direction. It enjoys secure shipping around the globe for its export machine, courtesy of the U.S. Navy, and uses its own military to assert control over large swaths of the East China and South China Seas.

The United States and its allies have awoken to the danger: the liberal order and, in particular, the globalized economy at its heart are empowering a dangerous adversary. In response, they are trying to build a new order that excludes China by making democracy a requirement for full membership. When U.S. President Joe Biden gave his first press conference, in March 2021, and described the U.S.-Chinese rivalry as part of a broader competition between democracy and autocracy, it wasn’t a rhetorical flourish. He was drawing a battle line based on a widely shared belief that authoritarian capitalism poses a mortal threat to the democratic world, one that can’t be contained by the liberal order. Instead of reforming existing rules, rich democracies are starting to impose new ones by banding together, adopting progressive standards and practices, and threatening to exclude countries that don’t follow them. Democracies aren’t merely balancing against China—increasing their defense spending and forming military alliances—they are also reordering the world around it.

### AT: Chinese Tech leadership inevitable

#### American tech leadership is what keeps China at bay – the plan is what makes the shift inevitable.

Beckly '22 - Associate Professor of Political Science at Tufts University, a Nonresident Senior Fellow at the American Enterprise Institute [Michael, March/April, "Enemies of My Enemy," https://www.foreignaffairs.com/articles/2021-02-14/china-new-world-order-enemies-my-enemy]

UNDER CONSTRUCTION

The architecture of the new order remains a work in progress. Yet two key features are already discernible. The first is a loose economic bloc anchored by the G-7, the group of democratic allies that controls more than half of the world’s wealth. These leading powers, along with a rotating cast of like-minded states, are collaborating to prevent China from monopolizing the global economy. History has shown that whichever power dominates the strategic goods and services of an era dominates that era. In the nineteenth century, the United Kingdom was able to build an empire on which the sun never set in part because it mastered iron, steam, and the telegraph faster than its competitors. In the twentieth century, the United States surged ahead of other countries by harnessing steel, chemicals, electronics, aerospace, and information technologies. Now, China hopes to dominate modern strategic sectors—including artificial intelligence, biotechnology, semiconductors, and telecommunications—and relegate other economies to subservient status. In a 2017 meeting in Beijing, Chinese Premier Li Keqiang told H. R. McMaster, then the U.S. national security adviser, how he envisioned the United States and other countries fitting into the global economy in the future: their role, McMaster recalled Li saying, “would merely be to provide China with raw materials, agricultural products, and energy to fuel its production of the world’s cutting-edge industrial and consumer products.”

To avoid becoming a cog in a Chinese economic empire, leading democracies have started forming exclusive trade and investment networks designed to speed up their progress in critical sectors and slow down China’s. Some of these collaborations, such as the U.S.-Japan Competitiveness and Resilience Partnership, announced in 2021, create joint R & D projects to help members outpace Chinese innovation. Other schemes focus on blunting China’s economic leverage by developing alternatives to Chinese products and funding. The G-7’s Build Back Better World initiative and the EU’s Global Gateway, for example, will provide poor countries with infrastructure financing as an alternative to China’s Belt and Road Initiative. Australia, India, and Japan joined forces to start the Supply Chain Resilience Initiative, which offers incentives for their companies to move their operations out of China. And at the behest of the United States, countries composing more than 60 percent of the world’s cellular-equipment market have enacted or are considering restrictions against Huawei, China’s main 5G telecommunications provider.

Meanwhile, democratic coalitions are constraining China’s access to advanced technologies. The Netherlands, South Korea, Taiwan, and the United States, for example, have colluded to cut China off from advanced semiconductors and from the machines that make them. New institutions are laying the groundwork for a full-scale multilateral export control regime. The U.S.-EU Trade and Technology Council creates common transatlantic standards for screening exports to China and investment there in artificial intelligence and other cutting-edge technologies. The Export Controls and Human Rights Initiative, a joint project of Australia, Canada, Denmark, France, the Netherlands, Norway, the United Kingdom, and the United States that was unveiled in late 2021, is intended to do the same for technologies that could support digital authoritarianism, such as speech and facial recognition tools. The United States and its democratic allies are also negotiating trade and investment deals to discriminate against China, putting in place labor, environmental, and governance standards that Beijing will never meet. In October 2021, for example, the United States and the EU agreed to create a new arrangement that will impose tariffs on aluminum and steel producers that engage in dumping or carbon-intensive production, a measure that will hit no country harder than China.

The second feature of the emerging order is a double military barrier to contain China. The inside layer consists of rivals bordering the East China and South China Seas. Many of them—including Indonesia, Japan, the Philippines, Taiwan, and Vietnam—are loading up on mobile missile launchers and mines. The goal is to turn themselves into prickly porcupines capable of denying China sea and air control near their shores. Those efforts are now being bolstered by an outside layer of democratic powers—mainly Australia, India, the United Kingdom, and the United States. These democracies are providing aid, arms, and intelligence to China’s neighbors; training together so they can conduct long-range missile strikes on Chinese forces and blockade China’s oil imports; and organizing multinational freedom-of-navigation exercises throughout the region, especially near Chinese-held rocks, reefs, and islands in disputed areas.

This security cooperation is becoming stronger and more institutionalized. Witness the reemergence of the Quadrilateral Security Dialogue, or Quad—a coalition made up of Australia, India, Japan, and the United States that had gone dormant shortly after its founding in 2007. Or look at the creation of new pacts, most notably AUKUS, an alliance linking Australia, the United Kingdom, and the United States. The overarching goal of all this activity is to maintain the territorial status quo in East Asia. But a more explicit aim is to save Taiwan, the frontline democracy most at risk of Chinese conquest. Japan and the United States have developed a joint battle plan for defending the island, and in November 2021, Peter Dutton, Australia’s defense minister, said it was “inconceivable” that his country would not also join the fight. The European Parliament, for its part, has adopted a comprehensive plan to boost Taiwan’s economic resilience and international recognition.

Viewed individually, these efforts look haphazard and reactive. Collectively, however, they betray a positive vision for a democratic order, one that differs fundamentally from China’s mercantilist model and also from the old international order, with neoliberal orthodoxy at its core. By infusing labor and human rights standards into economic agreements, the new vision prioritizes people over corporate profits and state power. It also elevates the global environment from a mere commodity to a shared and jointly protected commons. By linking democratic governments together in an exclusive network, the new order attempts to force countries to make a series of value judgments and imposes real penalties for illiberal behavior. Want to make carbon-intensive steel with slave labor? Prepare to be hit with tariffs by the world’s richest countries. Considering annexing international waters? Expect a visit from a multinational armada.

If China continues to scare democracies into collective action, then it could usher in the most consequential changes to global governance in a generation or more. By containing Chinese naval expansion, for example, the maritime security system in East Asia could become a powerful enforcement mechanism for the law of the sea. By inserting carbon tariffs into trade deals to discriminate against China, the United States and its allies could force producers to reduce their emissions, inadvertently creating the basis for a de facto international carbon tax. The Quad’s success in providing one billion doses of COVID-19 vaccines to Southeast Asia, an effort to win hearts and minds away from Beijing, has provided a blueprint for combating future pandemics. Allied efforts to prevent the spread of digital authoritarianism could inspire new international regulations on digital flows and data privacy, and the imperative of competing with China could fuel an unprecedented surge in R & D and infrastructure spending around the world.

Like the orders of the past, the emerging one is an order of exclusion, sustained by fear and enforced through coercion. Unlike most past orders, however, it is directed toward progressive ends.

### AT: Nathan ’22

#### Nathan is wrong.

Mearsheimer '22 [John, March/April, "A Rival of America’s Making? The Debate Over Washington’s China Strategy," https://www.foreignaffairs.com/articles/china/2022-02-11/china-strategy-rival-americas-making]

WHAT CHINA WANTS

Andrew Nathan focuses less on engagement than on how U.S.-Chinese strategic competition is evolving. He worries that I am “hyping” the China threat and “creating panic.” He does not say China is a paper tiger, but he leans in that direction. Specifically, he maintains that the country “suffers from major weaknesses” and is not going to become a regional hegemon, much less the most powerful state in the world.

I never said China was in fact going to dominate Asia or attain global primacy. Rather, I argued that as China grows more powerful, it will try to achieve those goals. In response, the United States and its allies will go to great lengths to contain China, as they did with imperial Germany, imperial Japan, Nazi Germany, and the Soviet Union. Whether China succeeds remains to be seen. Regardless, the ensuing competition between Beijing and Washington is likely to be more dangerous than Nathan seems to think.

Taiwan is a case in point. Nathan recognizes that as China tries “to push the United States away from its shores and weaken its alliances,” there will be “a real chance of conflict, especially over Taiwan.” But he sees Taiwan from a purely realist perspective, rejecting my argument that nationalism might help fuel a conflict over Taiwan on the grounds that my characterization makes “China sound irrationally aggressive.” In fact, Beijing views Taiwan as sacred territory and is deeply committed to making it part of China. Japan and the United States stand in the way, however, which antagonizes many Chinese and makes the likelihood of conflict over that island greater than realist logic alone would predict.

Then there is Nathan’s claim that “China suffers from major weaknesses” that will severely hamper its efforts to dominate Asia. China does confront several challenges, but Nathan overstates them. It does contain numerous minority groups, for example, but 92 percent of its population is Han Chinese, and there is little evidence that ethnic unrest is sapping Chinese power. Nathan claims that China operates in a multipolar world in which it faces “five powerful rivals.” But the European Union is not a country, India and Japan are not great powers, and Russia is not an adversary. The United States is China’s only great-power rival. Of course, China will have to contend with a U.S.-led balancing coalition that includes India and Japan, but that is a far cry from facing five great powers well positioned to stop it from achieving regional hegemony. Making the situation even more favorable to China is the fact that India, Japan, and the United States are thousands of miles apart, which will impair their ability to work together to contain China. Moreover, China is not as friendless as Nathan portrays it to be: the country has fostered increasingly friendly relations with two of its most powerful neighbors, Pakistan and Russia.

The most serious difficulty Nathan identifies is China’s aging population, but it is hard to know what its effects will be in the foreseeable future. Beijing will surely turn to automation to mitigate the problem, which anyway will take a few decades to have a significant impact. Also, many of China’s competitors are dealing with similar demographic challenges, including Japan, South Korea, and even the United States to some extent. Nathan argues that China’s economy is likely to slow down markedly moving forward, and he may be right, but it is difficult to know how much that economy will grow in the next few decades (and how the U.S. economy will perform over that same period). After all, few experts predicted China’s spectacular growth over the past 30 years. But even if the country’s economy grows more slowly than it has in recent years, it will still be enormously powerful and will provide Beijing with the military wherewithal to cause its neighbors and the United States much trouble.

### AT: Thornton ’22

#### Thornton is wrong.

Mearsheimer '22 [John, March/April, "A Rival of America’s Making? The Debate Over Washington’s China Strategy," https://www.foreignaffairs.com/articles/china/2022-02-11/china-strategy-rival-americas-making]

THE ODDS OF WAR

Susan Thornton disagrees with my categorization of engagement after the Cold War as a serious “strategic blunder,” arguing that the policy “lifted hundreds of millions of Chinese out of poverty,” which is “a major human achievement.” I agree, but that accomplishment has little to do with the security of the United States, which is the issue on the table. Thornton never explains why a policy that hastened the emergence of a formidable peer competitor was not, from the U.S. perspective, a colossal misstep.

Thornton recognizes that China and the United States are now engaged in an intense security competition—which makes one wonder why she has no reservations about the policy of engagement that got us here. It may be because she is not worried that the rivalry will lead to war, arguing that “there are a number of formidable restraints in place to keep the peace.” She maintains that in contrast I believe that the rivalry is “inexorably leading” to “an apocalyptic war.” But I did not say that war is inevitable. Indeed, I emphasized that war is unlikely. After describing the different ways fighting might break out, I wrote, “None of this is to say that these limited-war scenarios are likely.” To be clear, I recognize that there are significant barriers to armed conflict. Those barriers are not impregnable, however, as logic and history make clear.

It is worth remembering that great powers were heavily engaged with one another before the Napoleonic Wars, the Crimean War, the Franco-Prussian War, World War I, and World War II. In some cases, they were also important trading partners. Yet major war happened anyway. And despite what Thornton may wish, victory is still possible in modern war; not every conflict leads to “certain catastrophic losses for all,” as she says a U.S.-Chinese war would. War is always a real possibility when great powers struggle over regional hegemony. Helping China rise rapidly made a clash of this sort more likely—even if it is not inevitable.

### AT: Security Ks

#### America might have a sketchy past – but liberal democracy is better than any alternative. The alt would simply cede Europe to Putin.

Hamid '22 - Senior fellow at the Brookings Institution, and assistant research professor of Islamic studies at Fuller Seminary [Shadi, 3/6/22, "There Are Many Things Worse Than American Power," https://www.theatlantic.com/ideas/archive/2022/03/putin-kremlin-imperialism-ukraine-american-power/624180/]

If there was any doubt before, the answer is now clear. Vladimir Putin is showing that a world without American power—or, for that matter, Western power—is not a better world.

For the generation of Americans who came of age in the shadow of the September 11 attacks, the world America had made came with a question mark. Their formative experiences were the ones in which American power had been used for ill, in Iraq and Afghanistan. In the Middle East more broadly, and for much longer, the United States had built a security architecture around some of the world’s most repressive regimes. For those on the left, this was nothing new, and it was all too obvious. I spent my college years reading Noam Chomsky and other leftist critics of U.S. foreign policy, and they weren’t entirely wrong. On balance, the U.S. may have been a force for good, but in particular regions and at particular times, it had been anything but.

Blaming America first became all too easy. After September 11, U.S. power was as overwhelming as it was uncontested. That it was squandered on two endless wars made it convenient to focus on America’s sins, while underplaying Russia’s and China’s growing ambitions.

For his part, Putin understood well that the balance of power was shifting. Knowing what he knew, the Russian president wasn’t necessarily “irrational” in deciding to invade Ukraine. He had good reason to think that he could get away with it. After all, he had gotten away with quite a lot for nearly 15 years, ever since the Russian war against Georgia in 2008, when George W. Bush was still president. Then he annexed Crimea in 2014 and intervened brutally in Syria in 2015. Each time, in an understandable desire to avoid an escalatory spiral with Russia, the United States held back and tried not to do anything that might provoke Putin. Meanwhile, Europe became more and more dependent on Russian energy; Germany, for example, was importing 55 percent of its natural gas from Russia. Just three weeks ago, it was possible for Der Spiegel to declare that most Germans thought “peace with Russia is the only thing that matters.”

The narrative of a feckless and divided West solidified for years. We, as Americans, were feeling unsure of ourselves, so it was only reasonable that Putin would feel it too. In such a context, and after four years of Donald Trump and the domestic turmoil that he wrought, it was tempting to valorize “restraint” and limited engagements abroad. Worried about imperial overreach, most of the American left opposed direct U.S. military action against Bashar al-Assad’s regime in the early 2010s, even though it was Russian and Iranian intervention on behalf of Syria’s dictator that bore the marks of a real imperial enterprise, not just an imagined one.

Russia’s unprovoked attack on a sovereign nation, in Europe no less, has put matters back in their proper framing. The question of whether the United States is a uniquely malevolent force in global politics has been resolved. In the span of a few days, skeptics of American power have gotten a taste of what a world where America grows weak and Russia grows strong looks like. Of course, there are still holdouts who insist on seeing the United States as the provocateur. In its only public statement on Ukraine, the Democratic Socialists of America condemned Russia’s invasion but also called for “the U.S. to withdraw from NATO and to end the imperialist expansionism that set the stage for this conflict.” This is an odd statement considering that Russia, rather than the United States, has been the world’s most unabashedly imperialist force for the past three decades. But many on the anti-imperialist left aren’t really anti-imperialist; they just have an instinctive aversion to American power.

America’s low opinion of its own capacity for good—and the resulting desire to retreat or disengage—hasn’t just been a preoccupation of the far left. The crisis of confidence has been pervasive, spreading to the halls of power and even President Barack Obama, whose memorable mantra was “Don’t do stupid shit.” Instead of thinking about what we could do, or what we could do better, Obama was more interested in a self-limiting principle. For their part, European powers—content to bask under their U.S. security umbrella—could afford to believe in fantasies of perpetual peace. Europe’s gentleness and lethargy—coaxing Germany to commit even 2 percent of its GDP to defense seemed impossible—became something of a joke. One popular Twitter account, @ISEUConcerned, devoted itself to mocking the European Union’s propensity to express “concern,” but do little else, whenever something bad happened.

Suddenly, the EU has been aroused from its slumber, and the parody account was rendered temporarily speechless. This is no longer tepid concern, but righteous fury. Member states announced that they would send anti-tank weapons to Ukraine. Germany, for the first time, said that it would ramp up its military budget to 100 billion euros. On the economic front, the EU announced some of the toughest sanctions in history. My podcast co-host, Damir Marusic, an Atlantic Council senior fellow, likened it to a “holy war,” European-style.

Sometimes, unusual and extreme events mark the separation between old and new ways of thinking and being. This week, the Berlin-based journalist Elizabeth Zerofsky remarked that the current moment reminded her of the memoir The World of Yesterday, written by the Austrian novelist Stefan Zweig as World War II loomed. In it, he recalls the twilight of the Austro-Hungarian Empire with an almost naive fondness. On the first day of the Ukraine invasion, I happened to be speaking to a group of college students who had no memory of September 11. I told them that they may be living in history. Those students, like all of us, are bearing witness to one of those rare events that recast how individuals and nations alike view the world they inhabit.

The coming weeks, months, and years are likely to be as fascinating as they are terrifying. In a sense, we knew that a great confrontation was coming, even if we hadn’t quite envisioned its precise contours. At the start of his presidency, Joe Biden declared that the battle between democracies and autocracies would be the defining struggle of our time. This was grandiose rhetoric, but was it more than that? What does it actually mean to fight such a battle?

In any number of ways, Russia’s aggression has underscored why Biden was right and why authoritarians—and the authoritarian idea itself—are such a threat to peace and stability. Russia invaded Ukraine, a democracy, because of the recklessness and domination of one man, Vladimir Putin. The countries that have rallied most enthusiastically behind Ukraine have almost uniformly been democracies, chief among them the United States. America is lousy, disappointing, and maddeningly hypocritical in its conduct abroad, but the notion of any moral equivalence between the United States and Putin’s Russia has been rendered laughable. And if there is such a thing as a better world, then anti-imperialists may find themselves in the odd position of hoping and praying for the health and longevity of not just the West but of Western power.

### AT: Afghanistan

#### Afghanistan withdrawal boosts cred

Tooze ’21 - Shelby Cullom Davis chair of History at Columbia University   
[Adam; Sep 8; “The new age of American power;” <https://www.newstatesman.com/world/north-america/2021/09/new-age-american-power>]

Since the withdrawal, there has been a lot of talk of the US’s lost credibility. But what credibility did it have to lose? Credibility is not about saying you are committed. It is not even about sending troops. It is about your antagonist believing that your public pronouncements are aligned with your interests, so that you will stick with them even when the going gets rough. The problem for the US in Afghanistan was that its reluctance to stay for the truly long haul was obvious.

### Heg Sustainable

#### Finance and military lock-in US dominance

Tooze ’21 - Shelby Cullom Davis chair of History at Columbia University   
[Adam; Sep 8; “The new age of American power;” <https://www.newstatesman.com/world/north-america/2021/09/new-age-american-power>]

In August 2021, the dismaying scenes at Kabul airport stirred a number of gloomy pronouncements about the decline of American power. The anguished tone of these reactions reflects not just the horror on the ground, but a sense of personal betrayal felt by the pundit class. For anyone with a historical imagination, the dishonourable retreat is the latest act in the grand drama of Western decline. The wreck in Central Asia set against China’s rising GDP makes for a bitter mix. China will supplant the US as the world’s ascendant power. The One Belt One Road initiative that already stretches from Shanghai to Karachi will subsume Afghanistan as well. We are headed for a post-American age.

Compelling though this declinist verdict may be, it is misleading. In two key ways, American power continues to define the world order.

The first is through finance. With respect to global money – not to be confused with trade or economic growth – the dollar still rules. Much of the world’s payments, credit and finance continues to rely on the US currency. Since 2001, Afghanistan’s backwater economy has been sucked into that system. The Taliban may have rejoiced at the conquest of Kabul, but when it tried to lay its hands on Afghanistan’s national exchange reserves, most of which are held by the New York Fed, the group discovered that it still resides in the US’s world – or at least Afghanistan’s money does.

The second dimension of American power is military. US planners have bungled the exit from Kabul, but that should not distract from the world-historic weight of US military might. The US has defined the global order since the 1940s, when it first emerged as a military hyper-power with a vast navy and an unparalleled nuclear-armed air force. It continues to do so. The withdrawal from Afghanistan does not surrender that pre-eminence. Instead, it is part of a broader realignment that began under Barack Obama.

The place to decipher its logic and direction is not Kabul airport or in the sound and fury of the op-ed pages, but in the budgets of the Pentagon and the strategies that direct them. Far from conceding a post-American world, the US military leadership is girding itself to meet new challenges. It is not oblivious to China’s economic growth but their intention is to break the link between GDP and military power by denying China strategic technologies and by sharpening America’s own technological edge.

## AT: CPs

### AT: Ban CP

#### Top-down bans fail – instead we need adaptive policies like the aff.

Hamilton '21 [R. Alexander Hamilton, Ruth Mampuys, S. E. Galaitsi, Aengus Collins, Ivan Istomin, Marko Ahteensuu & Lela Bakanidze, "Opportunities, Challenges, and Future Considerations for Top-Down Governance for Biosecurity and Synthetic Biology," in *Emerging Threats of Synthetic Biology and Biotechnology*, pp 37–58]

Claims about synthetic biology’s potential, like other emerging technologies, nonetheless tend to overstate its ‘enabling’ capacity. Likewise, the ease of producing biological weapons tends to be overstated. As a number of commentators note, biology is not yet easy to engineer (Jefferson et al. 2014) and, for the foreseeable future, the skills necessary to produce biological weapons are likely to remain only within the grasp of states (Piers Millet in Regalado 2016). However, the field’s emphasis on eliminating technical barriers and reducing the importance of tacit knowledge (Oye 2012) represents a powerful source of expectation for advocates and critics alike. For advocates, it represents the possible realization of modern biology’s full potential, one that could yield revolutionary advances in health, medicine, and industry in the twenty-first century. For critics, it represents a seemingly open-ended risk that requires exceptional precaution. For national governments, and international conventions responsible for establishing global biosecurity norms and obligations that are operationalized at the national level through legislation and other regulatory tools (McLeish and Nightingale 2007), a central question is how (if at all) does top-down biosecurity governance need to change in response to synthetic biology?

Regulatory considerations of this kind are both familiar and new (Hamilton 2015). In the 1970s, recombinant DNA technology similarly emerged as a source of significant and contrasting expectations, and questions were posed about the suitability of existing regulatory approaches in light of potentially novel risks. However, in the case of recombinant DNA technology, biosafety concerns – notably, concens about the possible unintended consequences of genetically modified organisms (GMOs) – were the primary focus of scientific deliberations at the Asilomar Conference and subsequent policy discussions. In the case of synthetic biology, a field that has emerged at a time of heightened concerns about (bio)terrorism, the possibility that synthetic biology could enable non-state actors to acquire (novel) biological agents that could be used as weapons has been an omnipresent source of concern. In 2009, synthetic biology came to the attention of the US Federal Bureau of Investigation (FBI) and in 2016 gene editing was listed as a potential weapon of mass destruction (WMD) by the US Intelligence Community (Ledford 2010; Clapper 2016).

To more fully understand the top-down governance challenges introduced by synthetic biology it is necessary to consider how synthetic biology’s novelties could disrupt or potentially undermine existing biosecurity regulations. In this chapter, we attempt to advance this discussion in several ways. First, we consider the scope and content of existing biosecurity regulations at the international and national levels. Second, we discuss several aspects of synthetic biology that present distinct regulatory challenges. Finally, we conclude with recommendations for strengthening current approaches to top-down biosecurity governance.

Taken together, we argue that although synthetic biology appears to be broadly (if indirectly) covered by existing international and national regulatory systems, several novelties underline the limitations of top-down governance approaches premised upon prohibiting access to specific ‘intrinsically dangerous’ scientific artifacts (McLeish and Nightingale 2007). Indeed, by some accounts, such restrictions may not only be ineffective, but may also make the world less safe. In an era of synthetic biology – characterized by technology convergence, increased access to bioengineering capabilities, and rapid growth in intangible life science knowledge – top-down governance must be increasingly adaptive, and hybrid forms of governance (incorporating a ‘mix’ of top-down and bottom-up approaches that leverage the self-governance potential of non-governmental actors) should be encouraged.

### AT: Ban CP

#### Bans solve neither advantage and drive the tech underground.

Trump '21 – PhD, a research social scientist for the U.S.  Army Corps of Engineers, and served as a Strategic Planner and public health subject-matter expert for FEMA Region 1’s Data Analytics Task Force [Benjamin D, Marie-Valentie Florin, Edward Perkins, and Igor Linkov," Biosecurity for Synthetic Biology and Emerging Biotechnologies: Critical Challenges for Governance” in *Emerging Threats of Synthetic Biology and Biotechnology*]

Synthetic biology is a transformative technology with the possibility to change the world to the same extent as – if not more than – the digital revolution. As is the case with previous scientific breakthroughs, the potential for its dual-use and misuse represents a global problem, and necessitates that the highest levels of policy makers pay it close attention. Although targeted countermeasures can go some way toward providing protection, preventative actions are likely to be more effective given the heightened uncertainty of the field’s future (Trump et al. 2020a). It is necessary that biosecurity policies and practices be updated to take into account both the unprecedented challenges associated with synthetic biology and the globalized, diffuse, and varied nature of its threat space.

Effective global biosecurity will not happen quickly, nor will it be enthusiastically adopted by all national governments and non-governmental organizations. Incentives to misuse synthetic biology with harmful consequences remain high for certain negligent actors, as are the incentives to dual-use by nefarious actors, and the coming years may see such events affecting human or environmental health. Successful biosecurity implementation must be adaptable to quickly incorporate uncertainty as well as new capabilities. Urgent steps are required to place such notions into practice before a major threat incident, which in addition to creating substantial damages could usher in policy changes that might limit or ban platforms of synthetic biology research entirely. Besides forgoing the benefits of the technology, such a ban could force development underground and further out of the reach of coordinated governance or risk assessment. By identifying the social, economic, institutional, and technological tripwires that influence a state’s trajectory towards biosecurity research of concern, now is the time to take steps to apply biosecurity to maximize technological benefits while minimizing the dual-use potential of synthetic biology by improving the framing, prioritization, and governance of biosecurity risks.

### AT: Funding CP

#### The CP disregards bioethics.

Hamilton '21 [R. Alexander Hamilton, Ruth Mampuys, S. E. Galaitsi, Aengus Collins, Ivan Istomin, Marko Ahteensuu & Lela Bakanidze, "Opportunities, Challenges, and Future Considerations for Top-Down Governance for Biosecurity and Synthetic Biology," in *Emerging Threats of Synthetic Biology and Biotechnology*, pp 37–58]

A laissez-faire governance approach cedes much of the regulatory power to existing or emerging bottom-up initiatives, placing trust in the capacity of technology producers, industry and users to play an active role in their own regulation. Under this approach, such non-governmental actors are encouraged to determine (at least in part) how safety and security practices are structured, implemented and enforced, while centralized government plays a role in setting minimum standards and intervening in the event of regulatory failures. This approach is generally intended to promote innovation and flexibility, as well as rapid adaption and response to emerging threats (Linkov et al. 2018a, b).

While laissez-faire governance is a promising approach that recognizes the important role that non-governmental actors can play in the regulatory process, there are also potential pitfalls. One such example, albeit focused on bioethics rather than biosecurity, can be traced to the use of germline editing in humans to produce the first CRISPR baby. In this case, despite broad international agreement that scientists should “hold off on editing human eggs, sperm or embryos until gene-editing technology (and the implications of the edits) are better understood.”Footnote13 (See also Cyranoski and Ledford 2018), a researcher in China took advantage of laissez-faire regulatory controls that resulted in multiple potential risks and unintended consequences. These included the possibility of long-term changes to the human germline; encouraging other scientists (including those working internationally) to pursue germline editing in humans (Cyranoski 2019a, b), and motivating Chinese regulators to introduce stricter regulatory controls on genetic research (ibid.).

As the above example suggests, one risk of laissez-faire governance is that an individual’s risk tolerance may not (intentionally or unintentionally) conform to existing norms and their actions may subsequently expose everyone to undue risk or irreversible harm, with implications for the laissez-faire state as well as other states. Additionally, the more a state relies on soft law, the more responsibility the government delegates to individuals, groups and organizations, not only to establish norms and follow them, but also to enforce them. In the case of synthetic biology, such bottom-up initiatives have played an important role in this rapidly developing field. Organizations such as the International Gene Synthesis Consortium (IGSC) have come to play an important role in the regulatory process by, for example, developing industry standards and guidelines (IGSC 2017). For better or worse, the success of such approaches will depend on the commitment of non-governmental actors to act in the best interests of society, valuing safety and security as a public good.

Ultimately, while a laissez-faire approach may effectively supplement aspects of centralized government regulation, it cannot be expected to fully replace it. This is because, as history has shown, individual researchers or individual members of industry will sometimes choose to value personal prestige or cost cutting over safety and security. Moreover, from the standpoint of non-governmental actors, including the DNA synthesis consortia noted above, regulation is not necessarily a bad thing. Indeed, by some accounts, the standards and codes of conduct produced by the DNA synthesis industry were motivated by a lack of top-down regulations that could provide a benchmark for not only mitigating potential biosecurity risks, but also liability issues and reputational costs in the event of an incident. For this reason, the US Government’s own DNA screening guidanceFootnote14 has been largely welcomed by industry.

### AT: Incentives CP

#### The perm solves best.

Trump '21 – PhD, a research social scientist for the U.S.  Army Corps of Engineers, and served as a Strategic Planner and public health subject-matter expert for FEMA Region 1’s Data Analytics Task Force [Benjamin D, Marie-Valentie Florin, Edward Perkins, and Igor Linkov," Biosecurity for Synthetic Biology and Emerging Biotechnologies: Critical Challenges for Governance” in *Emerging Threats of Synthetic Biology and Biotechnology*]

Still, the problem of how to incentivize private actors to invest in biosecurity remains. The answer will require the participation not only of bench scientists, but also of various overseers, gatekeepers, and watchdog groups involved in biotechnology research and development (for instance, the World Organisation for Animal Health’s Guideline for Responsible Conduct in Veterinary Research). One example of a potential approach is to train journal editors to recognize potential information hazards within article submissions. Additionally, funders responsible for reviewing grants could require that applicants include a review of potential information and security hazards which might occur over the course of the proposed work. In these and other examples, a fusion of top-down and bottom-up approaches is necessary in order to identify security threats and to raise awareness of biosecurity issues; meanwhile, bottom-up organizations can develop on-the-ground passive surveillance programs to monitor potential dual-use security threats.

An example of this collaboration is between the US Federal Bureau of Investigation (FBI) and iGEM. The FBI has funded iGEM and collaborated with the competition’s organizers in order to increase awareness of risk and to build an understanding of possible or developing threats. While no biosecurity policy or practice can completely eliminate all threats (especially not without unilaterally preventing research and innovation that could greatly benefit society), a layered approach in which government, private organizations, and individual citizens collaborate will result in a more unified effort for biosecurity which could reduce gaps in oversight that might be exploited by actors looking to develop biological weapons.

### AT: States

#### States can’t solve bioterror.

Pedersen, 17—Pepperdine University (Christian, “Reflecting Back on the Ebola Outbreak and the Future of Bioterrorism,” Pepperdine Policy Review: Vol. 9, dml)

Terror groups like al-Qaeda and ISIL (the Islamic State of Iraq and the Levant) have expressed interested, and have even attempted, to use biological agents in terror plots (Biodefense, 2016). The technical and administrative knowledge of biology and chemistry can be acquired globally in medical schools, research programs, and laboratories, making it difficult to prevent potential practitioners of bioterrorism from acquiring the required scientific knowledge (Chiodo, 2015). While at one time the ability to mutate strands was restricted to advanced research laboratories, rudimentary high school laboratories now have the ability to develop deadly biological agents (Garrett, 2012). With relative easy, terror groups could engineer the flu virus, making it deadlier (Selk, 2017). By combining traits of multiple strains and maximizing the virus’ natural properties, it could become highly transmittable (Farmer, 2107). Genetically engineered viruses have the potential to kill more people than nuclear weapons, governments remain underprepared for that threat (Selk, 2017). Terrorists could be drawn to the use of biological agents because of the difficulty of detection and the ease at which some biological agents can naturally spread through a population (Bioterrorism, 2006). There are essentially three ways which agents could be acquired by terrorist: they could be stolen, created in laboratory environments, or collected naturally. A gloomy reality is that as the advancement of new technologies reduce the costs of genetic sequencing, it will become easier and less expensive to create novel organisms (Garrett, 2012). Bioterrorist attacks can be planned to induce maximum damage and panic with a minimum risk of early detection. Potential agents of attack are categorized by risk (rated as an, A, B, or a C) depending on the agent’s availability, ease of dissemination and transmission, and potential impact (Bioterrorism, 2006). Category A agents are considered the most dangerous and threatening to National Security. Ebola is categorized as a Category A bioagent because of its ability to cause mass panic and disruption and the special public health actions required for treating those infected. Through the EVD, “mother nature has created the perfect bioweapon” (Thiessen, 2014). Following the Paris terrorist attacks, the French have warned that terrorist organizations may attempt to steal biological agents (Talent & Graham, 2016). The British Ministry of Defense feared terrorists would try to acquire EVD and released a report outlining three separate scenarios in which terror groups could successfully weaponize the virus. (Quinn, 2015) These could be stolen from research facilities, laboratories, or government stockpiles. While the more exotic and devastating agents (such as small pox) must be cultivated in laboratory environments and are therefore more difficult to obtain, many biological agents are naturally occurring (Gottron, 2002). Examples of these naturally occurring, and easier to obtain agents include: human immunodeficiency virus (HIV), the hepatitis strands, yellow fever, and the Ebola virus (Gottron, 2002). Moreover, the Ebola virus is native to a continent where terrorist organizations like Boko Haram, Al-Qaeda, and the Islamic State are active (Thiessen, 2014). The 21-day incubation period allows potential jihadists more than enough time to infect themselves, then travel to infected population centers, developing the means of mass distribution (Thiessen, 2014). In June 2001 – months prior to the September 11th attack in New York – Dark Winter, a senior level wargame, was run in conjunction with security think tanks and government agencies to simulate government responses to acts of bioterrorism (Dark Winter). The simulation demonstrated how a biological terror attack could result in mass civilian casualties, civil disorder, institutional breakdown and lack of faith in government – compromising national security (Dark Winter). Major challenges for policymakers included the many “fault lines” which existed between governmental agencies, the levels of government, private healthcare systems, and the public (Dark Winter). Breakdowns in centralized leadership and communication could threaten containment and control. It was revealed that the healthcare system in the United States had no surge abilities to prevent hospitals from becoming overwhelmed or to meet the heightened demand for vaccinations (Dark Winter). Finally, targeted communications and information management was recognized as a challenge, both in working with the media and in disseminating important information (Dark Winter). It became very clear after the exercise that the United States was unprepared for an act of bioterrorism. In 2010, nearly ten years after the Dark Winter exercise, a commission created to evaluate the national emergency response capabilities gave the nation a failing grade on its ability to respond to a bioterrorist threat (O’Grady, 2015).

## AT: NATO Bad

### 2AC – DA

#### US abdication of NATO responsibilities greenlights Russian invasion of the Middle East

Shapiro 2019 - Distinguished Visiting Fellow at the Institute for National Security Studies in Tel Aviv Daniel, "The Most Dangerous Thing Trump Could Do Yet, and Its Nightmare Fallout for Israel," Jan 17, <https://www.haaretz.com/us-news/.premium-trump-leaving-nato-a-nightmare-for-israel-netanyahu-1.6846949>

Remove the United States from NATO - and forward-deployed U.S. forces from Europe, which would certainly follow - and the United States’ ability to respond to a Middle East crisis would be diminished.

Could U.S. support for Israel be shifted and coordinated instead through U.S. Central Command, based in the Persian Gulf? It has been proposed before as an efficiency measure. But Israeli generals have always resisted the proposal. Their worry is that they would find it challenging to enjoy the same level of intimacy they currently have with Europe-based U.S. commanders, with commanders who maintain a similar closeness with Arab militaries.

True, Israel is closer strategically today with the Arab Gulf states than at any time in its history, because of a focus on the common threat of Iran and the lower priority of the Palestinian issue. But those relationships are a long way from being normalized - and could still backslide.

Israeli security planners are, therefore, still most likely to want to maintain separation between their relationships with the U.S. military and with their Arab neighbors. Having observed the intense friendships formed between Israeli military commanders and their U.S. counterparts based in Europe, I can say that these ties will not be easily replaced.

The broader Middle East would also experience the effects of NATO’s demise in the form of further empowerment of Russia. That is happening already, but losing NATO would turbocharge those trends.

Already, Russia’s brutally decisive intervention in Syria, combined with successive U.S. administrations’ preference to reduce active U.S. military engagements in the region, have led many regional states to explore expanded security ties with Russia.

Israeli Prime Minister Benjamin Netanyahu meets more frequently with Putin than he does with Trump, and the IDF and Russian Air Force deconflict their operations in Syria. The leaders of Egypt, Saudi Arabia, and the United Arab Emirates, all close partners of the United States, have visited Moscow and explored acquiring advanced Russian weapons systems in addition to their American-supplied arsenals.

Should Russia decide to exert leverage, such as by constraining Israeli freedom of action against Iranian military targets in Syria, the United States would be ill-equipped to push back.

A U.S. withdrawal from NATO would unmistakably be understood as a major pullback from the United States’s leadership in global affairs. The effect of expanding Russian influence would be felt far beyond Europe and the Middle East.

#### That makes WWIII inevitable

Hanson 2016 - classicist and historian at the Hoover Institution, Stanford University   
Victor Davis, "The return of appeasement, collaboration and isolationism," Feb 18, tribunecontentagency.com/article/the-return-of-appeasement-collaboration-and-isolationism/

By the start of the Great Depression in 1929, America was mostly unarmed and determined never to get involved in European feuding again. Most Americans complained that the huge death toll of World War I had led to neither perpetual peace nor even a peaceful Germany. America’s isolationism and disarmament also helped prompt another global war. Had the U.S. kept its military strong after World War I, and had it entered into a formal alliance with its former World War I partners, Germany never would have risked a second war against the combined strength of a fully armed Britain, France and United States. Instead, Hitler assumed the U.S. either could not or would not offer much military help to his intended European targets. Why, then, did a relatively weak Nazi Germany between 1939 and 1941 believe that it could take on much of the world, and inspire Axis partners such as Italy and Japan to follow its suicidal lead? The answer is obvious. British and French appeasement, Soviet collaboration and American isolation had together convinced Hitler and his Axis allies that the victors of World War I were more eager to grant concessions at any cost than were the defeated. The world of 2016 is eerily beginning to resemble the powder keg of 1939 Europe. Iran, China and North Korea, along with radical Islamic terrorist groups, all have particular contempt for Western democracies. Almost daily, various aggressive nations or organizations seek provocation by shooting off intercontinental missiles, boarding American boats, sending millions of young male Middle Easterners into the West, and issuing unending threats. China is creating new artificial islands to control commercial routes to and from Asia. The European Union is largely unarmed. Yet it still trusts that it can use its vaunted "smart diplomacy" to reason with its enemies. Meanwhile, Vladimir Putin’s Russia cuts deals with Iran, Syria and most of the enemies of the West. Like Stalin before, Putin cynically assumes that his triangulations will turn aggressive powers exclusively against the West. Recently, he warned the West of a "new world war" starting in the Middle East. America is slowly withdrawing from involvement abroad, using the same isolationist arguments heard in the 1920s. Past interventions in the Middle East have worn on the nation. Ingrate nations did not appreciate American sacrifices. In tough economic times, some contend that defense spending should be diverted to more social programs. Appeasement, collaboration and isolationism always prove a lethal mix — past and present.

### 2AC – Europe

#### Retreat now is a victory for Putin, he’ll escalate in the future.

Economist '4/2 ["Why Ukraine Must Win," economist.com/leaders/2022/04/02/why-ukraine-must-win]

The other worry is Mr Macron’s: that NATO will provoke Russia. From the start of this war, when he spoke of “consequences…such as you have never seen in your entire history”, Mr Putin has hinted that Western involvement could lead to the use of nuclear weapons. Wisely, the West has therefore been clear that NATO will not fight against Russian forces—because, if they did, the war could spin out of control, with catastrophic results.

Yet backing away from Mr Putin’s nuclear-tinged threat entails risks, too. Limiting Ukrainian aid would abet Russia in imposing an unstable—and hence temporary—peace on Mr Zelensky. It would reward Mr Putin for his threats, setting up his next act of atomic aggression. By contrast, more powerful weapons and sanctions would mark a change in the degree of aid, but not its kind. And this week, facing Ukrainian success, Russia paused the campaign in the north, rather than escalate. For all those reasons, the best deterrence is for NATO to stand up to Mr Putin’s veiled threat, and make clear that a nuclear or chemical atrocity would lead to Russia’s utter isolation.

### 1AR – AT: Russian Aggression

#### NATO is the only tool to deter Putin

Burns 2018 - former under secretary of state and ambassador to NATO, teaches diplomacy and international relations at Harvard   
Nicholas, "What America Gets out of NATO," Jul 11, https://www.nytimes.com/2018/07/11/opinion/what-america-gets-out-of-nato.html

First, NATO’s formidable conventional and nuclear forces are the most effective way to protect North America and Europe — the heart of the democratic world — from attack. Threats to our collective security have not vanished in the 21st century. Mr. Putin remains a determined adversary preying on Eastern Europe and American elections. NATO is a force multiplier: The United States has allies who will stand by us, while Russia has none.

### 1AR – Russia partners with Hezbollah

#### Shapiro proves that Russia will partner with Iran and terror groups like Hezbollah if the US left NATO, that spirals into a global war

Cohen 2016 - Former U.S. State Department project officer involved in managing economic reform projects   
Josh, "Is Russia supporting Hezbollah," Feb 8, intersectionproject.eu/article/russia-world/russia-supporting-hezbollah

Adding a further degree of uncertainty to the story, neither the Israeli or Russian governments have acknowledged the report yet. This is not surprising, for a direct Russia-Hezbollah relationship could lead to any number of dangerous scenarios that might spiral out of control. For example, what happens if Israel strikes Russian arms shipments to Hezbollah and Russian troops are killed in the process? Alternatively, what if Russia defends an arms transfer to Hezbollah by shooting down an Israeli jet with one of its S-400 missiles recently deployed to Syria? Either one of these scenarios could lead to a rapid escalation that would draw the United States — still Israel’s closest ally despite the longstanding tensions between Netanyahu and Obama — into the fray. However, even if one of these worst case scenarios does not come to pass, at a minimum, Israel’s freedom for maneuver in Syria is diminished by the Russian presence. Whereas previously Israel owned the skies over Syria, the Israeli air force must now coordinate its activities with the Russians to avoid accidental clashes. Moreover, according to a report co-authored by Israeli Brig. Gen. Muni Katz and Nadav Pollak for the Washington Institute, simply working alongside the Russians will significantly upgrade Hezbollah’s military capabilities. “Hezbollah will be exposed to Russian military thought, which entails sophisticated operational concepts and advanced military planning skills,” the report notes, including “how to organize an effective command-and-control structure, how to choose different weapons for different scenarios, how to create additional targets after entering a battlefield, and how to maintain logistical routes.” The authors argue this will enhance Hezbollah’s offensive warfare and urban capabilities, which better positions the group to make good on Nasrallah’s pledge to launch strikes into northern Israel’s Galilee region in the next war. Hezbollah can also watch the weapons systems the Russians use, and according to the report, “can learn how to use its existing weapons more effectively, and examine systems it might want to procure in the future.”

### 1AR – Russian Expansion Impact

#### Russian aggression causes extinction

Shirreff 2016 - senior British army officer and former deputy supreme allied commander Europe  
Richard, "Putin's aggression in Europe should worry the US," Oct 21, www.cnn.com/2016/10/21/opinions/russia-aggression-nato-shirreff-opinion/

Since the formation of NATO in 1949 the defense of Europe and the free world has depended on the absolute certainty that whatever president is occupying the White House, the United States will come to the aid of a NATO member if attacked. Any doubt about the American commitment, and the credibility of NATO's doctrine of collective defense, is holed below the waterline. At a time when the West faces a greater threat from a resurgent Russia since the most dangerous crises of the Cold War, NATO, more than ever, needs to stand strong, united and credible. Russia's invasion of Crimea and Ukraine in 2014 may have already lit the fuse that could lead to the unthinkable: nuclear war with Russia in Europe. Consider the words and actions of President Vladimir Putin, who has described the breakup of the Soviet Union as the "greatest geo-strategic tragedy of the 20th century." In his speech on March 18, 2014, the day Crimea was admitted into the Russian Federation, Putin majored on the threat the West posed to Russia by its continued encirclement and warned about the possibility of pushback: "If you compress the spring to its limit, it will snap back hard: something you should remember," while claiming the right to protect the interests of Russian speakers everywhere, "even if it will worsen our relations with some states." Overnight, Putin became NATO's strategic adversary, starting a dynamic that could lead to a clash with NATO over the Baltic states of Latvia, Lithuania and Estonia (which have significant Russian-speaking minorities). Two years on and the threat is even greater. Indeed, the ratchet of tension clicks tighter on an almost weekly basis: Even this week we wake up to news of Russia sailing warships near the British coast in "a show of force and a show of capabilities," according to Peter Felstead, editor of Jane's Defence Weekly. Unprecedented levels of military activity on the borders and in the airspace of the Baltic states, Finland and Sweden have been matched by the rapid buildup of military forces in Russia's Western Military District on the borders of NATO. For example, in January, Russia announced the formation and deployment of three motor rifle divisions, about 60,000 troops, along the Russian frontier with the Baltic states. And the Russians have kept themselves busy with regular so-called snap exercises to test the readiness of their military, at least one of which was based on a scenario of invasion and occupation of the Baltic states. Putin's strategic aim is clear: to re-establish Russia's status as one of the world's great powers and to dominate the former republics of the Soviet Union -- imperialist intentions that might have been acceptable to great powers in the 19th century but which are an affront in 2016. If the opportunity presents itself, he may well activate long-held plans to march into the Baltic states. To paraphrase British Prime Minister Neville Chamberlain's 1938 comment on Czechoslovakia, why are events in these faraway countries of which we may know little important to Americans? First, because if Russia puts one soldier across the borders of the Baltic states it means war with NATO. Latvia, Estonia and Lithuania have been members of NATO since 2004 and are therefore protected under Article 5 of the Washington Treaty, the founding document of NATO, which states that an attack on one is an attack on all. A Russian attack on the Baltic states puts America at war with Russia -- meaning nuclear war, because Russia integrates nuclear weapons into every aspect of its military doctrine. And don't think Russia would limit itself to the use of tactical nuclear weapons in Europe. Any form of nuclear release by the Russians would almost certainly precipitate nuclear retaliation by the United States, and the dreadful reality of mutually assured destruction and the end of life as we know it would follow. Indeed, Russia is at war with America already. Russian hacking of Democratic Party email servers and, if confirmed, WikiLeaks publicizing of Clinton campaign emails to discredit the Democrats and propel Donald Trump -- arguably what Putin would classify as a "useful idiot" into the White House -- is classic maskirovka -- deception, aimed at undermining the intelligence and integrity of the enemy in a way that remains below the threshold of conventional warfare. In the words of Dmitri Trenin of the Carnegie Moscow Center, and a man with close connections to the Putin regime, the Kremlin has been at war since 2014. But although the clock may be ticking close to midnight, it is not too late. Maintenance of the peace we have enjoyed in Western Europe for nearly 70 years depends on effective deterrence. The bar of risk must be raised too high for Russia to consider any opportunistic move into the Baltic states. This requires forward basing of a credible military capability in the Baltic states and eastern Poland (rather than the token presence agreed at the NATO Warsaw Summit in July). NATO reserves able to move quickly and effectively to bolster defenses in the Baltics will send a powerful message. It also requires Canada and European members of NATO to recognize that military capabilities lost from cumulative disarmament over the past two decades must be regenerated. This means increasing defense spending, almost certainly above the 2% of gross domestic product agreed -- but often not acted upon -- by NATO members (less the United States, UK, Estonia and Greece). 2017 is 100th anniversary of the first occasion the United States intervened in one of Europe's wars. The region's security is a matter of American security, and it means continued and close engagement in Europe and a continuation of the strong leadership that America has given NATO from the start.

### 1AR – Global Deterrent

#### Remaining steadfast to treaty commitments against Russia is perceived by allies and enemies globally

Samp 17 – senior fellow @ CSIS, MA in International Affairs @ GW (Lisa, with Kathleen Hicks et al, “Recalibrating US Strategy Towards Russia,” Kindle Edition)

How the United States chooses to manage the Russia challenge will shape the geopolitical land- scape for decades to come. U.S. allies, partners, and adversaries in the Middle East, Asia, and elsewhere will be watching to see how the United States responds to the evolving challenges posed by Russia and will calibrate their behavior accordingly. In the rush to make deals with Russia to se- cure lesser objectives, the United States may well find itself sacri- ficing a more fundamental goal: advancing a global order that benefits our people, our econo- my, and our constitutional values. Standing resolutely by our allies and our treaty commitments is central to upholding that order. We must meet Russia's efforts to challenge it with the steel of our determination rather than mush that cedes our hard-won gains.

### AT: Encirclement

#### Russian aggression is pre-emptive---not caused by the US

Murray 15 – Professor of Political Science @ Alberta

(Robert, “Time for a New Western Strategy in Ukraine,” http://www.e-ir.info/2015/02/10/time-for-a-new-western-strategy-in-ukraine/)

The debate of whether or not to arm Ukraine seems to be transcending the prototypical liberal-conservative divide, with voices like realist international politics scholars John Mearsheimer and Stephen Walt joining the chorus of others who see arming Ukraine as an unnecessary escalation.

The problem with the logic presented by Mearsheimer, Walt and others is twofold. First, opponents to arming Ukraine still believe a diplomatic solution is likely to occur which would be an optimal outcome rather than risking escalation by providing arms to Ukraine which would, invariably, lead to more violence. There is no question diplomacy would be ideal but there is no indication that Russia is interested and until Russia is forced to believe they may not keep getting what they want, they will resist any attempts to negotiate an end to what Putin sees as a welcome and necessary conflict. Second, there seems to be an unusual narrative that has emerged where observers like Mearsheimer and Walt see Russia as having been backed into a corner due to EU and NATO expansion, and are framing ongoing events in Ukraine as a response to western expansionism. Framing Russia as responding to, rather than initiating, aggression excuses Russia’s behaviour and bizarrely victimizes Russia in the situation. Even if the logic that Russia felt backed into a corner due to NATO and EU expansionism held validity, it would be limited to an argument about Crimea as a Russian strategic asset and not Eastern Ukraine.∂ There has also recently been talk of using peacekeepers from either the UN or the OSCE as a means of halting violence and allowing time for a diplomatic solution to be sought. The risk here for western states is that by inserting peacekeepers, western leaders would accept an legitimize the Russian gains to date as it would be highly unlikely that negotiations initiated by peacekeeping would see Russia accept any territorial loss.∂ All of this is not to say that arming Ukraine is a good idea. By arming the Ukrainians, the west actually sacrifices even more control of the situation and places its trust in a regime that has proven it may not always heed the advice of its western friends. Further, the extent to which the Ukrainians would have to be armed to pose any significant challenge to the Russians would be so extreme that the success of such a strategy is highly questionable.∂ So where does this leave the west in its options moving forward? The Germans insist diplomacy is still the way to go, a message Merkel preached in both Washington and Ottawa yesterday. The doctrine of “strategic patience” only reminds both Putin and the United States’ western allies that the Obama Administration is not going to do much of anything except keep hoping for sanctions to work while using strong rhetoric that fools no one.∂ At some point we need to think seriously about what a reasonable end to the conflict would be. It is incredibly unlikely that Crimea and Eastern Ukraine will return to Kiev’s control, and thus any efforts to find a diplomatic solution should be predicated on partitioning Ukraine but also containing Russia from further advances. Containment, however, is not simply an abstract academic theory where states hope Russia will not expand. In order for containment to work, Russia needs to know and believe that western states are willing and able to go all in if Putin contemplates upping the ante.∂ Without a healthy dose of deterrence to complement so-called diplomatic efforts, we are doomed to see more of the same in Eastern Europe.

#### Encirclement didn’t cause annexation---this is ahistorical and an excuse for brutal Russian aggression

Kirchik 14 – Fellow at Foreign Policy Initiative

(James, “NATO Expansion Didn’t Set Off the Ukraine Crisis” Foreign Policy, <http://www.foreignpolicy.com/articles/2014/04/08/nato_expansion_didnt_set_off_the_ukrainian_crisis>)

NATO Expansion Didn't Set Off the Ukrainian Crisis Russia hasn't been "encircled" by the West -- Vladimir Putin simply wants to be able to invade his neighbors at will. Russia's invasion and annexation of Crimea has produced a great deal of handwringing in the West, with much of the ire directed at NATO. The North Atlantic Treaty Organization's slow, 15-year process of expansion into the former Warsaw Pact nations, critics allege, sparked a tragic, three-stage process: It humiliated Russia, led to the country's encirclement, and provoked its aggressive behavior toward neighbors. NATO, they say, is a relic of the Cold War, serving no purpose other than to antagonize America's potential partners in the Kremlin. Blaming NATO's enlargement for Russian belligerence has been a feature of European security debates since the end of the Cold War, and a reliable excuse for explaining away every disagreement between Moscow and the West. "Wasn't consolidating a democratic Russia more important than bringing the Czech Navy into NATO?" New York Times columnist Tom Friedman scoffed after Russia invaded Georgia in 2008, in a column aptly entitled, "What did we expect?" Returning to this complaint after last month's invasion of Ukraine, Friedman declared that NATO expansion "remains one of the dumbest things we've ever done and, of course, laid the groundwork for Putin's rise." Fellow New York Times columnist Ross Douthat derided NATO expansion as a "neoconservative" project (pursued, oddly enough, by Bill Clinton) "to effectively encircle" Russia. And no less a figure than the late George F. Kennan concluded that "expanding NATO would be the most fateful error of American policy in the post cold-war era." Tempting as it may be to castigate NATO for the deterioration of relations with Russia, nothing could be further from the truth: It was, and remains, the Russian regime's ideology, rhetoric, and conduct that provided the impulse for NATO expansion, not the other way around. Far from representing a historic error, the enlargement of NATO into Central and Eastern Europe has been one of the few unmitigated success stories of American foreign policy, as it consolidated democracy and security on a continent once scarred by total war. Faulting NATO for Russia's bad behavior betrays a fundamental misunderstanding of post-Cold War European politics, misrepresents the organization's role as a defensive alliance, and confuses aggressor with victim. First, a little history is in order. Russia's hostile actions towards neighbors hardly ended with the collapse of Soviet communism. On the contrary, Moscow continued to bully its former republics and satellites throughout the early and mid 1990s, even before the first round of NATO enlargement (to the Czech Republic, Hungary, and Poland in 1999). In 1992 and 1993 -- after Russia formally recognized the independence of Estonia, Latvia, and Lithuania -- Moscow cut off energy supplies to these small, reborn democracies in an attempt to pressure them into keeping Russian military forces and intelligence officers on their sovereign territory. From 1997 to 2000, according to former U.S. Ambassador to Lithuania Keith C. Smith, Russia halted oil shipments to the country no less than nine times after it refused to sell refineries to a Russian state company. To this day, the Russian Foreign Ministry maintains that the Baltic republics -- which Russia militarily conquered, occupied, and subjugated for nearly five decades -- "voluntarily joined the Soviet Union in 1940." The Balts didn't become part of NATO until 2004. Given this history, is it any wonder why these countries -- or any other country victimized by Soviet-imposed tyranny -- would want to join the alliance? Is it NATO's fault for saying OK? Critics of NATO expansion like to point out that, in exchange for earning Soviet acceptance of German unification, the United States and its allies promised not to expand the Atlantic alliance. This is a myth, stemming from a selective Russian interpretation of the diplomacy at the tail end of the Cold War. In February of 1990, with hundreds of thousands of Soviet troops still stationed in East Germany, then-German Chancellor Helmut Kohl and his foreign minister, Hans-Dietrich Genscher, traveled to Moscow to meet with former Soviet leader Mikhail Gorbachev. A day earlier, President George H.W. Bush had sent Kohl a letter suggesting that East German territory be given a "special military status" -- the specifics of which would be determined later -- within NATO, implying that the alliance would indeed continue to expand. Hoping to earn speedy Soviet authorization for the removal of their troops and the unification of Germany, however, Genscher told Gorbachev that, "NATO will not expand itself to the East." But the Germans were not speaking for Washington, never mind the NATO alliance. Furthermore, as historian Mary Elise Sarotte has pointed out, Genscher's concession was never made in writing, and nor did Gorbachev "criticize Mr. Kohl publicly when he and Mr. Bush later agreed to offer only a special military status to the former East Germany instead of a pledge that NATO wouldn't expand." Ultimately, a legally binding agreement not to expand NATO beyond its pre-1990 borders never materialized, and Russia's latter-day claim that it was deceived by the West has no basis in fact. Russia's cries of Western betrayal are really just a smokescreen. Far from threatening Russia, NATO has repeatedly gone out of its way to be conciliatory. A 1997 agreement outlining relations between the two former adversaries stipulated that the NATO states had "no intention, no plan, and no reason" to deploy nuclear weapons on the territory of its new members. These "three no's" were intended as an expression of goodwill and a reaffirmation of NATO's founding principle: that it is a defensive alliance with no designs on Russian territory. In the spirit of transparency, the organization founded the NATO-Russia Council in 2002 to facilitate cooperation between Moscow and member states. Not only did Western leaders repeatedly and explicitly make clear that NATO posed no threat whatsoever to Russia's security, some even suggested that Russia ultimately join the very military alliance that had been established to contain it during the Cold War. "We need Russia for the resolution of European and global problems," Polish Foreign Minister Radek Sikorski said in 2009. "That is why I think it would be good for Russia to join NATO." This hardly constitutes "cram[ming] NATO expansion down the Russians' throats," as Friedman alleges. Regardless, Sikorski was rebuked immediately by then-Russian envoy to NATO and now Deputy Prime Minister Dmitry Rogozin, who retorted that "Great powers don't join coalitions, they create coalitions. Russia considers itself a great power...For the moment, we don't see any real change in the organization, we only see the organization getting ready for the wars of past Europe." With its invasion of Crimea, the first forcible annexation of European territory since World War II, it is Russia, and not NATO, that has returned the continent to "the wars of past Europe." More significant, however, was what this terse exchange revealed about the debate over NATO expansion: It has never really been about the enlargement of a defensive military alliance, but rather the nature of the Russian regime itself. If Russia had followed a democratic path (like the former communist states which joined NATO) and ceased posing a threat to its neighbors, there would have been nothing preventing it from becoming a suitable candidate for membership. After all, if the foreign minister of Poland, a nation historically terrorized by Russia and which is once again rearming itself in light of Crimea, proposed that Russia join NATO, who could possibly oppose it? As Swedish Foreign Minister Carl Bildt aptly pointed out on Twitter recently, it was the "historic failure of Russia that a quarter of a century after fall of Soviet Union the new generations in its neighbors see it as an enemy," while, in contrast, "A generation or two after 1945 Germany is surrounded by countries that, after all the horrible pain and suffering, see it as a friend." Russia's hostility to NATO enlargement stems from the same root as all of its conflicts with the West: the zero-sum worldview and neo-imperialist agenda of President Vladimir Putin. . In 2005, he declared the breakup of the Soviet Union to be "a major geopolitical disaster of the 20th century." And if there was any remaining doubt that he intends to reconstitute the empire, Putin erased it with his furious March 18 speech to Russia's Federation Council in which he essentially reserved the right to invade and annex any territory where ethnic Russians claim to feel oppressed. To say that NATO expansion "laid the groundwork for Putin's rise," as Friedman does, gets the situation exactly backwards. Putin's ascent was almost entirely the product of domestic factors, namely, the economic chaos of the 1990s and the popular desire for a firm response to the insurgency in Chechnya. NATO expansion barely registered on the minds of ordinary Russians. With Russia amassing tens of thousands of troops on Ukraine's eastern border and stoking ethnic conflict in the hopes of providing a pretext for gobbling up even more territory, lending credence to Moscow's complaints about NATO expansion is intellectually irresponsible and geopolitically dangerous. In the midst of negotiations to deescalate the crisis, Russian Foreign Minister Sergei Lavrov has demanded that Ukraine essentially dismember itself into autonomous regions (the easier for Russia to meddle in the country's eastern provinces, which are heavily populated with ethnic Russians) and "firm guarantees" forswearing NATO and EU membership. Given that Russia has already invaded and annexed Ukrainian territory, and that it has shown no sign of discontinuing its aggressive behavior on the country's borders, these ultimatums constitute nothing less than a threat to use additional force if its demands are not met. Rather than firmly rebut these outrageous attempts to violate the sovereignty of an independent country, Secretary of State John Kerry has stated that Russia has "legitimate concerns" in Ukraine. This despite the fact that according to a new poll, 66 percent of ethnic Russian citizens there feel no pressure or threat from the new government in Kiev, a direct refutation of Moscow's relentless propaganda to the contrary. The assertion by Russia (and its Western apologists) that NATO constitutes a threat has always been a ruse. As was the case during the Cold War, it is Russia that threatens its neighbors today, not vice-versa. Russia's real reason for opposing NATO expansion, as one Ukrainian Foreign Ministry official told me in Kiev last month, is that the alliance's collective security provision would prevent Moscow from invading its neighbors, something that Russia has done twice in the last six years. It is for this reason that NATO -- and its expansion -- remains vital for European security and stability. To appreciate the hypocrisy of faulting NATO enlargement for the present predicament, one need only consider the claim that the military alliance has "encircled" Russia. There is only one country in Europe being encircled right now -- and it isn't Russia.

#### Now matters---internal restraints on the executive have completely eroded and undermines crisis response

Brands 1/30 - Henry Kissinger distinguished professor at Johns Hopkins University’s School of Advanced International Studies [Hal, 2019, *Bloomberg*, Can U.S. alliances withstand Trump's venom?, <https://www.japantimes.co.jp/opinion/2019/01/30/commentary/world-commentary/can-u-s-alliances-withstand-trumps-venom/#.XFIBZ1xKg_g>]

WASHINGTON - After two years under rhetorical assault from U.S. President Donald Trump, America’s alliances have somehow held up. This year, however, the constraints on Trump’s anti-alliance instincts are falling away, and a mix of internal and external pressures are endangering several key alliances at once.

This trend is most visible with respect to NATO. The trans-Atlantic alliance has been a target of Trump’s ire for decades. Since taking office, he has berated European leaders, waffled on America’s Article 5 commitment to protect allies, and even mused about withdrawing from the pact. Yet for two years, largely thanks to the initiative of Congress and the Pentagon, day-to-day relations with NATO remained relatively steady. The administration increased spending on military activities meant to deter Russian aggression. The alliance also took steps to improve its military readiness and address unconventional threats such as cyberattacks and information warfare.

This progress, however, was largely dependent on the presence of committed, pro-NATO officials in the American bureaucracy. Those officials are becoming scarcer by the day. Secretary of Defense James Mattis is gone, replaced by an acting secretary — Patrick Shanahan — who seems more inclined to fulfill the president’s wishes. National Security Adviser John Bolton and Secretary of State Mike Pompeo are not anti-NATO, but their hostility to the European Union poisons their relationships with European colleagues. Less visibly, several key Pentagon and State Department officials responsible for the NATO portfolio — Assistant Secretary of Defense Robert Karem, Deputy Assistant Secretary of Defense Thomas Goffus and Assistant Secretary of State Wess Mitchell — have left or will soon leave their posts.

None of this means that Trump is likely to withdraw from NATO. Bipartisan support for a recent House resolution that seeks to prevent Trump from unilaterally pulling out of that alliance is a clear warning of the political price he would pay for doing so. The most likely scenario is that there will simply be less constructive leadership from Washington — less ability to propose new initiatives or even respond to allies’ ideas — at a time when NATO confronts major challenges from Russia and illiberalism is surging within the alliance.

Things are no better on the other side of the world. The Japan-U.S. alliance has come through the first half of Trump’s term in stronger shape than one might have expected, given the president’s three-decade history of Japan-bashing. Yet the strains are subtly mounting. Prime Minister Shinzo Abe’s assiduous personal cultivation of Trump did not prevent the president from peremptorily withdrawing from the Trans-Pacific Partnership in his first week in office. Now, Abe fears that Trump may cut a grand bargain with China at Japan’s expense, or make a deal with North Korea that similarly ignores Tokyo’s security concerns. And while the challenges in the Japan-U.S. alliance are merely simmering, the problems may be coming to a boil in two other alliances.

The U.S.-South Korea alliance is in crisis, as negotiations on the amount Seoul pays to defray the costs of the American troop presence have deadlocked. According to South Korean officials, U.S. negotiators asked for a dramatic hike in these payments, casting doubt on whether Washington was dealing in good faith. The fact that the U.S. side has asked for annual renegotiations — as opposed to a multi-year agreement — has heightened concerns that Trump will simply ask for more again next year.

The resulting impasse may lead the Pentagon to stop paying South Korean contractors starting in the spring. It could also give an American president who has never liked the U.S. presence on the Korean Peninsula an excuse to begin reducing that presence. Last year, Congress passed legislation prohibiting the Pentagon from cutting U.S. troop levels in South Korea below 22,000 (from the current 28,000). That prohibition can be circumvented, however, if the secretary of defense certifies that doing so is in the national interest.

Making the future of the alliance even more precarious is that this internal dispute is happening at a critical stage in U.S.-North Korea diplomacy. As the upcoming summit with Kim Jong Un approaches, Trump will surely be tempted to make a big concession that will jump-start moribund negotiations on North Korean missiles and nukes. Given how little he cares for the U.S. troop presence in the first place — and given that he suspended U.S.-South Korean military exercises after his previous summit with Kim — the president may try to kill two birds with one stone. He could withdraw some U.S. forces as a way of appeasing Kim and punishing the South Koreans for not paying up. Doing so would be a gift to Pyongyang, Moscow and Beijing: It would be a big step toward undermining the alliance with Seoul and America’s position in Northeast Asia.

Finally, America’s most important alliance in Southeast Asia is also entering a danger zone. For years, the U.S. has refused to clarify whether the Mutual Defense Treaty with the Philippines covers the islands and reefs that Manila controls in the South China Sea. That ambiguity is meant to avoid writing a “blank check” that Manila might cash by provoking China. Yet given how rapidly China’s expansionism is shifting the balance of influence in the region, ambiguity is rapidly becoming untenable.

Since 2012, when the U.S. failed to prevent Beijing from seizing control of Scarborough Shoal, Filipino officials have worried that Washington cannot deter the Chinese salami-slicing that is paring away their country’s sovereignty. Making matters worse, the U.S. has formally clarified its commitment to defending the Japanese-administered Senkaku Islands in the East China Sea, while evading questions about whether it has a parallel commitment to the Philippines. Further fueling the crisis is the fact that the Philippines now have a president — Rodrigo Duterte — who is openly skeptical of the value the U.S. defense commitment provides.

As a result of all this, Philippines Secretary of National Defense Delfin Lorenzana has been signaling that Manila may re-evaluate its commitment to the Mutual Defense Treaty if Washington doesn’t clarify its position. Yet the Trump administration has so far been silent, perhaps because American officials sense that this issue will be a loser with a president who sees alliances as burdens.

A position of continued American ambiguity will probably not lead Duterte to pull out of the alliance. But it may reinforce his belief that Chinese power will ultimately dominate Southeast Asia, and that Manila should accommodate rather than resist the inevitable. That, in turn, would make it far harder for the U.S. to rally the region against Chinese revisionism; it would subtly but unmistakably erode America’s position in Southeast Asia.

To be fair, the crisis of this particular alliance is not really Trump’s fault. Reassuring an exposed ally — while also restraining that ally from unwise actions — would test the abilities of even a competent, committed administration. Yet the chances that things could turn out badly, with the Philippines or any of these allies, are only heightened by the fact that America currently has a hollowed-out administration led by this particular president.

Since Trump took office, U.S. foreign policy wonks have worried that his presidency would be a period of grave peril for America’s alliances. This might be the year that proves them right.

#### Spending sufficient now – coerced, rapid increases in spending fail

Horn and Eloranta 2018

Heather Souvaine Horn global affairs editor at The New Republic, interviewing Jari Eloranta, an economic historian at Appalachian State University who specializes in military spending July 12, 2018 “Is It Fair for Trump to Bash NATO Over Military Spending?” https://newrepublic.com/article/149819/fair-trump-bash-nato-military-spending

To what extent has the president pointed to a real problem?

It’s very artificial to point at the 2 percent target. The financial crisis and downturn after 2008 was much more severe in Europe—it has taken them much longer to recover from it. It’s kind of artificial to use GDP as the measuring stick for military spending at all. Because obviously if your GDP declines, typically budgetary spending doesn’t change that much for a while, so, for example, states like Greece look like they’re spending almost 3 percent of their GDP on defense when in fact it’s just an artifact of their GDP having plummeted massively.

Same thing for the U.S.: Right after 2008 U.S. military spending as a percentage of GDP jumps from a little over 3 percent to a little over 4 percent, so it looks like Obama increased military spending when he didn’t. Often budgets are immobile and you can’t change them as quickly. So right now because U.S. economic growth has been so strong, it looks like from 2010 U.S. military spending as a percentage of GDP has dropped from a little over 4 percent to a little over 3 percent. And, in fact, in recent years it looks as if European military spending as a percentage GDP has been declining, but mostly that’s because of the late recovery that started in 2013 and 2014, when a lot of their economies started to rebound.

To what extent, then, was this current conflict within NATO a matter of long-term trends?

I think this is absolutely a longer trend. Military spending obviously is always driven by economic development. When countries become more developed they are able to dedicate less money for defense respective of GDP because if your GDP doubles and you maintain 1.5 percent level of GDP on military spending that still means a huge increase in military spending. And there are also fewer conflicts in the world and less sort of external violence and need for defense: Ever since the end of the Cold War there’s been less need of unified-alliance defensive efforts.

In recent years in Europe, of course, the Russian aggression in Crimea and Ukraine has been a huge worry, and has led to an increase in military spending in the Baltic and Eastern European countries. Military spending is always driven by threats as well, and some European countries don’t feel the threat as acutely as others.

In general, the Trump administration’s, or Trump’s, efforts are very disingenuous, because European countries already agreed in 2014 to start increasing their military spending. This was a whole NATO-wide effort projected to last until 2024, and it’s in response not to U.S. needs but to increased threats from Russia, and trying to create more unity within the alliance.

What about Germany’s difficulties meeting its targets, with Merkel recently downgrading expectations about when the country is going to reach two percent spending?

Well, typically I’d say it’s very much a positive thing that a country takes care in terms of planning military spending increases very carefully and slowly. When you rapidly increase military spending, that creates opportunities for waste, for rent-seeking, for companies to take advantage of opportunities that are not well-thought-out—opportunities for defense contractors to make a quick buck.

All these spending increases are always slow anyway, because governments have other budgetary concerns. For Europe as a whole, and particularly Germany, the big policy problem right now is the refugees and immigration, which is creating a huge deal of tension within the Merkel administration—that’s their priority. So I’m not surprised at all that this is not one of their pressing concerns right now and they don’t quite necessarily see Russian threat as an acute one that they would require massive quick spending increases. Whether they’ll meet those targets or not, that’s somewhat arbitrary, because if the German economy increases rapidly they’d have to ramp up spending even faster to meet that target. So that’s a mechanism that’s difficult to predict overall.

### 2AC – Catchall

#### American leadership in NATO solves their impacts

Burns 2018 - former under secretary of state and ambassador to NATO, teaches diplomacy and international relations at Harvard   
Nicholas, "What America Gets out of NATO," Jul 11, https://www.nytimes.com/2018/07/11/opinion/what-america-gets-out-of-nato.html

Third, future American leaders will find Europe is our most capable and willing partner in tackling the biggest threats to global security: climate change; drugand cybercrime cartels; terrorism; pandemics and mass migration from Africa and the Middle East. And America’s NATO allies will continue to be indispensable in safeguarding democracy and freedom, under assault by Russia and China.

Mr. Trump’s campaign to undermine the European Union and diminish America’s leadership in NATO serves none of these interests. He seems driven by resentment about European trade surpluses and low defense budgets, issues that blind him to all the other benefits Americans derive from our alliance with Europe and Canada.

Mr. Trump may believe his blistering attacks on Europe’s trade policies and defense budgets are a good negotiating tactic before the summit. But in fact they have already done enormous damage. While he cannot outright kill NATO — the American public and Congress support it too strongly — he has eroded significant levels of trust and good will. As it became clear during my recent visits across Europe, a dangerous breach has opened in the trans-Atlantic alliance — by far the worst in seven decades.

Mr. Trump wants Americans to believe that their allies are simply taking advantage of them. On Sept. 11, 2001, I witnessed a far different reality as American ambassador to NATO. Canada and the European allies volunteered within hours of the attacks to invoke Article 5 of the NATO treaty, which compels all members to respond to an attack on any single member, for the first time in history. They came to our defense when we most needed them. They sent troops to fight with us in Afghanistan. They are still there with us 17 years later.

Are we now going to throw off that mutual protection, and go it alone in a dangerous 21st-century world? That would be a historic mistake. But that is where we may find ourselves if Mr. Trump’s anti-Europe vendetta continues.

### 2AC – Catchall

#### The alternative is war

Berlinski 7-15-2018 – PhD in IR @ Oxford (Claire, “Europe’s Dependence on the U.S. Was All Part of the Plan: Postwar U.S. statesmen designed our world order as it is for a reason. They had lived through what happened without it.,” *Politico*, <https://www.politico.com/magazine/story/2018/07/15/trump-nato-europe-history-dependence-219011>)

Trump’s NATO-bashing surprised no one. He has repeatedly suggested the United States’ postwar security architecture is a “bad deal,” one negotiated by weak and foolish “incompetents.” Foreign policy, in his view, is a zero-sum game; any benefit to another nation must of necessity be a loss for the United States. “NATO countries,” he declared on Twitter, “must pay MORE, the United States must pay LESS. Very Unfair!” Unfair? A world that revolves around American military, economic and cultural power, and uses the U.S. dollar as its reserve currency? What Trump fails to understand is that the disparity in spending, with the U.S. paying more than its allies, is not a bug of the system. It is a feature. This is how the great postwar statesmen designed it, and this immensely foresighted strategy has ensured the absence of great power conflict—and nuclear war—for three-quarters of a century. The open, liberal world order we know today was built in the wake of World War II and expanded after the collapse of the Soviet Union. By design, it is led by the United States; by design, it ensures permanent U.S. military hegemony over Eurasia while uniting Europe under the U.S.’ protection. The goal of this American grand strategy is to prevent any single power from dominating the region and turning on the United States and its allies. American hegemony serves, too, to quell previously intractable regional rivalries, preventing further world wars. Dean Acheson, George Marshall and the other great statesmen of their generation pursued this strategy because they had learned, at unimaginable cost, that the eternal American fantasy of forever being free of Europe—isolationism, or America Firstism, in other words—was just that: a fantasy. Four hundred thousand American men lost their lives in the European theaters of the First and Second World Wars. (American fatalities in all of the other 20th-century conflicts—including Vietnam, Korea and the Persian Gulf—do not total one-quarter of that number.) Our postwar statesmen were neither weak nor incompetent. They were the architects of the greatest foreign policy triumph in U.S. history. So successful was this policy that Americans now—most of whom weren’t alive to witness the enormity of these wars—see peace, unity, prosperity and stability as Europe’s natural state. This is an illusion. For centuries, Europe was the fulcrum of global violence. With the age of global exploration, it became the globe’s primary exporter of violence, the tempo and horror of the carnage rising every century with improvements in technology for violence. The Scramble for Africa, the division and colonization of that continent by Europe, is a case in point. The 1884-85 Berlin West Africa Conference, which assembled the representatives of 13 European powers to settle their colonial claims to Africa by diplomacy in place of arms, did lead to peace in Europe for several years. Africans, however, would not recall these years for their exceptional comity. For example, the conference indulged King Léopold II’s claim that the Congo Free State was his private property. Ten million Congolese souls perished under his ministrations. In recognizing this history of blood, however, we must recognize something equally true: In the wake of World War II, liberal democracy saw its fullest realization in the West. This flourishing of peace and human rights cannot be explained by a sudden outbreak of European pacifism. (Consider the 1956 Suez expedition, crushed by an infuriated President Dwight Eisenhower; or the 1954-62 Franco-Algerian War.) It happened because during World War II, Europe destroyed itself, leaving the United States overwhelmingly powerful by comparison, its only rival the Soviet Union. Through the application of economic, diplomatic and military force majeure, the United States suppressed Europe’s internal security competition. This is why postwar Europe ceased to be the world’s leading exporter of violence and became, instead, the world’s leading exporter of luxury sedans. Only America, and massive power as the U.S. exercised it, could have pacified and unified Europe under its aegis. No other continental country possessed half the world’s GDP. No other country had enough distance from Europe to be trusted, to a large extent, by all parties and indifferent to its regional jealousies. No other country had a strategic, moral and economic vision for Europe that its inhabitants could be persuaded gladly to share. Indeed, Europeans cooperated with the U.S. program because it created conditions under which both the United States and Europe flourished. The United States assisted Europe’s postwar economic recovery with $13 billion of aid in the form of the Marshall Plan. (In today’s dollars, roughly $113 billion.) It midwifed the groupings and treaties that would become the European Union. It brought Europe under the U.S. security umbrella with the NATO treaty. Article V of the treaty, its most important element, declares that an attack on one member of NATO is an attack on all members. These policies were intended not only to counter the Soviet Union, but to condition Europe’s prosperity upon its integration into a single market, with free movement of goods, capital and labor. The founders of these institutions fully intended them to be the foundations of a United States of Europe, much like the United States of America. Profound economic interdependence, they believed, would make further European wars impossible. At the same time, the United States built an open, global order upon an architecture of specific institutions: the United Nations, the International Monetary Fund and the International Court of Justice. This order is in many respects an empire—a Pax Americana—but it is more humane than any empire that preceded it, with institutions that are intended to benefit all parties. Postwar U.S. statesmen believed that prosperous, liberal democracies that traded freely with each other would neither go to war with each other nor the United States. They ascribed, in other words, to the so-called Democratic Peace theory—a theory with overwhelming empirical support. The U.S. military was always an integral part of the plan to unite and rebuild Europe from the rubble. Since World War II, U.S. troops have been deployed in Eurasia to ensure the continent cannot be dominated by a single power capable of monopolizing its resources and turning them against the U.S. The United States has built overwhelmingly massive military assets there to deter local arms races before they begin, and it has simultaneously assured those under U.S. protection that there is no need to begin local arms races, for their safety is guaranteed. American grand strategy rests upon the credibility of its promise to protect American allies; this credibility rests, in turn, upon U.S. willingness to display its commitment. (The Berlin Airlift, when U.S. troops airlifted supplies to Berlin during a Soviet blockade, was precisely such a display.) In return for the United States’ commitment, U.S. allies have accepted America’s dominant role in the international system. In the postwar era, just as now, the enemies of liberal democracy sought to undermine the order the U.S. was building. Precisely because the Marshall Plan would strengthen and unite the West under the United States’ protection, the Soviet Union’s propaganda organs cranked into overdrive to denounce it. A cartoon, for example, published in Isvestia in 1949, depicted the Marshall Plan’s administrator, Paul Hoffman, as a fat capitalist bent on destroying the sovereignty of European nations. The French paper L'Humanité, which reliably parroted Moscow’s line, wrote, “After disorganizing the national economies of the countries which are under the American yoke, American leaders now intend conclusively to subjugate the economy of these countries to their own interests.” The Soviet Union’s criticism of the Marshall Plan and other American involvement in Europe was eerily similar to the language Russia’s now uses in its campaign to undermine NATO and the EU. The vocabulary and tropes of Russian propaganda are widely echoed, wittingly or unwittingly, by far-right, far-left and other antiliberal politicians, parties and movements throughout the West. With the men who built the postwar world order now in their graves, and the memory of carnage and horror buried with them, a very sizable constituency of Americans has forgotten that their country built this system for a reason—that the United States does not maintain its alliances as an act of foolish largesse. The loudest exponent of the idea that the U.S. is getting rolled, that the European Union was “created to destroy us,” and that multilateral institutions such as the World Trade Organization assault the “sovereignty” of the nations concerned is, unfortunately, the president of the United States. It’s hard to understate how foolish and reckless these notions are. History can be shoved down the memory hole, for a time, but reality is never so cooperative. Global free trade sustains modern economic life. An interruption to this trade—carried out chiefly on global shipping lanes safeguarded by the U.S. military—would bring modern life to an end. The Second World War proved not only that isolationism and American-Firstism were fantasies, but exceptionally childish and dangerous ones, at that. In the age of hyperglobalized trade, international air travel, the internet, nuclear weapons and intercontinental ballistic missiles, these fantasies are even more childish and dangerous. The U.S. may be on another continent, but it is not on another planet. It is true that the U.S. spends more on its military, in absolute dollars and as a percentage of GDP, than any European country. That was always part of the deal. The U.S. is a global superpower. It can fight a war anywhere in the world, invade any country at will, and (at least in theory) fight multiple simultaneous major wars—even in space. Of course this costs more. It is in America’s advantage to be the only power on the planet that can do this. Conversely, it is not remotely in America’s advantage for other countries to spend as much money on their militaries as we do. Europe is America’s biggest export market, as designed. We want Europeans to spend their money enjoying U.S. goods and services, not razing Flanders to the ground yet again. Yet Trump’s refusal to deter our shared enemies and protect our allies risks provoking a regional European arms race—exactly what the U.S. has sought to avoid for 74 years. It is an invitation to adventurism from Putin. Trump’s refusal to adopt the encouraging language of past presidents toward European integration, language that until now has been transformed into policy by professional and experienced State Department employees, puts further strain on an already-weakened Europe. Above all, Trump’s overt support for sordid, Kremlin-backed actors who seek to undermine Europe’s unity is unfathomable: How could it be in Europe’s interest, or in ours, for the American president to lend the United States’ prestige and support to Europe’s Nazis, neo-Nazis, doctrinal Marxists, populists, authoritarians, and ethnic supremacists, particularly since all of them are ideologically hostile to the United States? The damage Trump has deliberately inflicted on Europe’s stability comes at a uniquely dangerous time. Democracy’s so-called third wave—the global blossoming of open political systems after the Cold War—has long since receded. A threat to liberal democracy, in the form of a distinct, rival ideology—illiberal democracy—is ascendant. We see it today in Russia and Turkey—a corrupt, oligarchic, kleptocratic and hollow form of democracy that spreads and consolidates itself through the new technologies of the 21st century. The global order the U.S. built was based on the principle that only a world of liberal democracies can be peaceful and prosperous. That principle is correct. Should the unraveling of the order the U.S. built proceed at this pace, the world will soon be neither peaceful nor prosperous. Nor will the effects be confined to regions distant from the United States. America will feel them gradually, and then, probably, overnight—in the form of a devastating, sudden shock. Charles de Gaulle believed the Anglophone world could not, in the long term, be trusted with French security. It led him to withdraw France from NATO’s military integrated command and launch an independent nuclear development program. The independent nuclear program was real, but the withdrawal from NATO wasn’t—a secret agreement kept France in NATO anyway. But, today, with other NATO members obliged to consider the costs and benefits of an independent accommodation with Russia and the risks and rewards of acquiring an independent nuclear deterrent, de Gaulle is saying from the grave, I told you so. The American-led world order, undergirded by the ideal of liberal democracy, has been highly imperfect. But it has been the closest thing to Utopia our fallen and benighted species has ever seen. Its benefits are not just economic, although those benefits are immense. Its benefits must be measured in wars not fought, lives not squandered. Yet many Americans have turned their backs on history and reality alike. Let us hope pride does not prevent them from realizing this mistake before it’s far too late.

### 1AR – Solves War

#### Consensus goes aff---NATO eradicates war

Beauchamp 16 – senior reporter at Vox, where he covers global politics and ideology, citing multiple political science professors (Zach, “Donald Trump needs to clarify his position on NATO before something scary happens,” *Vox*, https://www.vox.com/2016/7/21/12247074/donald-trump-nato-war)

Trump’s comments about NATO are like an arrow pointed straight at the heart of the alliance -- and, if implemented, would directly threaten the foundations of global peace itself. Any president could simply choose not to abide by Article 5. But abrogating NATO agreements was always deemed unthinkable by both parties, which has played an important part in maintaining credible deterrence vis-à-vis Russia. Trump has put the idea of the US not defending NATO on the table, in a very real way. This threatens the very integrity of NATO itself. If NATO allies start to think that the United States can’t be trusted to defend them, that NATO is just on paper, then they’ll start to wonder why they bother to adhere to this alliance in the first place. If Trump wins the election, this could cause them to exit the security agreement altogether. According to the best available research, this would make war on the European continent far more likely. One study, from professors Jesse C. Johnson and Brett Ashley Leeds, surveyed about 200 years of data on conflicts and concluded that "defensive alliances lower the probability of international conflict and are thus a good policy option for states seeking to maintain peace in the world." Another study looked specifically at the period from 1950 to 2000 and found that "formal alliances with nuclear states appear to carry significant deterrence benefits." The US's formal agreements, then, deter aggression against its non-nuclear partners (like Germany and the Baltics). In their new book on American grand strategy, Dartmouth scholars Steven Brooks and William Wohlforth also surveyed research from regional experts and found a similar consensus. In Europe, they write, "most assessments nonetheless sum up to the conclusion that NATO is a net security plus." Trump, then, could end up weakening one of America’s most important security agreements — and may already have done so.

### 2AC – Balkans

#### Ambiguous US commitments to NATO cause Russia to test resolve in Europe---it causes a deterrence perception crisis

Beauchamp 16 – senior reporter at Vox, where he covers global politics and ideology (Zach, “Donald Trump needs to clarify his position on NATO before something scary happens,” *Vox*, https://www.vox.com/2016/7/21/12247074/donald-trump-nato-war)

Trump’s comments are worse than just undermining NATO: By refusing to commit to the Baltics categorically, he encourages Russia to test American resolve in dangerous ways. According to some Russia experts, Vladimir Putin’s ultimate wish in Europe is to break NATO. The way to do that, according to these scholars, is to expose the Article 5 guarantee as hollow: to show that when push comes to shove, the United States or other large NATO powers wouldn’t actually defend the weaker states. The Baltic states would be the most likely scenario for this to happen. They are very small, they’re right on Russia’s borders, and they aren't really all that important to Western countries' own security. By threatening these states, Russia would force a question: Are the United States, Britain, and France really willing to sacrifice their own soldiers in defense of a tiny state? In 2014, the Danish intelligence agency — note that Denmark is a NATO ally — publicly warned that this was a serious possibility: Russia may attempt to test NATO’s cohesion by engaging in military intimidation of the Baltic countries, for instance with a threatening military build-up close to the borders of these countries and simultaneous attempts of political pressure, destabilization and possibly infiltration. Russia could launch such an intimidation campaign in connection with a serious crisis in the post-Soviet space or another international crisis in which Russia confronts the United States and NATO. The critical issue in preventing this scenario, again, is the perception of NATO commitment. So long as Putin believes that the US and other major powers are firmly committed to the defense of their treaty allies, he’s unlikely to risk starting a war that he would almost certainly lose. This is why Trump’s comments are so damaging: They send a direct signal to the Kremlin that a Trump-led America will be less than serious about the defense of NATO allies. This suggests that a ploy to break NATO might have a bigger risk of succeeding than previously thought. But note that Trump also refused to say unequivocally that he wouldn’t abide by the NATO treaty. “I don’t want to tell you what I’d do because I don’t want Putin to know what I’d do,” he said. But the entire point of NATO is that Putin needs to know what America will do. If he knows the US will defend the Baltics, then he will likely back off. If he knows the US won’t defend the Baltics, then we could have the breakup of NATO — which would be quite bad but wouldn’t immediately risk World War III. The nightmare scenario, though, is that Putin’s confidence in NATO is undermined even though the United States under Trump remains committed to defending its treaty allies. That’s the scenario under which misperceptions potentially escalate into an actual war between the world’s two largest nuclear powers. Max Fisher wrote an extended piece on how this uncertainty could plausibly escalate to war for Vox last year; I encourage you to read it. But the point, according the experts Fisher spoke to, is that a firm understanding that the US will defend its NATO allies is crucial. "That kind of misperception situation is definitely possible, and that’s how wars start," Steve Saideman, a professor who studies NATO at Carleton University, told Fisher. He then scarily compared modern Europe with pre–World War I Europe: "The thing that makes war most thinkable is when other people don’t think it’s thinkable."

#### Specifically, Putin moves on the Baltics

Wilson 15 – MPA @ Princeton, American foreign policy advisor and the current executive vice president at the Atlantic Council of the United States, Deputy Director of the Private Office of the NATO Secretary General, decorated by the Presidents of Estonia, Hungary, Latvia and Poland for his efforts to advance transatlantic relations (Damon, “A Transatlantic Strategy to Deter Putin’s Aggression,” *US Senate Committee on Foreign Relations Subcommittee on Europe and Regional Security Cooperation*, Lexis)

This crisis began long before Crimea. Indeed, Russia's annexation of Crimea was the natural outcome of a clear, consistent policy dating back years. I detail this record in my full testimony. Second, Putin will not stop until he encounters serious pushback. Third, only the United States can galvanize Europe and the international community around an effective strategy to deter Putin for the long term. Fourth, any strategy should urgently and decisively back Ukraine, as well as other vulnerable states with significant economic and military assistance in the short term, while keeping the door open to the European Union or NATO. And fifth, we should neither abandon the Russian people nor the vision that a democratic Russia one day can find its peaceful place within a Europe whole and free. Putin's strategy has been to use this crisis to consolidate his own hold at home through greater oppression of civil society and independent media even as he fuels nationalist fervor. He has created an environment of fear and intimidation fostering the circumstances that led to the assassination of Boris Nemtsov. Putin, of course, is also seeking to dominate his neighbors, to drain them of resources to fuel his kleptocracy, and to restore a sense of Russia's greatness in the only way a bully knows. He aims to prevent his neighbors from joining either NATO or the EU, achieving this through coercion when possible and by dismemberment and occupation when necessary. Ultimately Putin knows that the best check on his power is a united transatlantic community, and he has sought to divide Europe, undermining the resolve for sustained sanctions. But the most tempting objective for Putin is to call into question the credibility of NATO's Article 5 mutual defense commitment as doing so would effectively end NATO. A Russian move against an ally, such as a Baltic State, cannot be ruled out. Putin has demonstrated time and again that if he senses an opportunity to act he will, convinced that the West lacks the will or the ability to take decisive action. That is why today's situation is dangerous. We have seen repeatedly that Putin's objectives expand with success and contract with failure. This means that the best determinant of his action is Western action. There is a tendency, however, to argue that the Europeans should take the lead on Ukraine. After all, we have our hands full with ISIS and other global responsibilities. But the Ukraine crisis is a Russia crisis, and Russia is too big, too strong, and too scary for Europe to resolve this without us. Without U.S. leadership, Europe may feel forced to accommodate a revanchist Russia, and we have seen throughout history this is a dangerous formula. The United States has the ability to rally its allies and international partners around a comprehensive strategy that not only deters Putin's aggression, but avoids an unstable gray zone in Europe East. To do so, we should begin by articulating what we want to achieve. We should more decisively increase the cost to Russia, including by enacting sectorial sanctions and targeting Gazprom and Putin directly.

#### Baltics invasion goes nuclear.

Loren B. Thompson, 7-20-2016 - Chief Operating Officer of the non-profit Lexington Institute and Chief Executive Officer of Source Associates, taught at Harvard University’s Kennedy School of Government.; “Why The Baltic States Are Where Nuclear War Is Most Likely To Begin," *National Interest*, http://nationalinterest.org/blog/the-buzz/why-the-baltic-states-are-where-nuclear-war-most-likely-17044?page=2

However, the possibility of nuclear war between America and Russia not only still exists, but is probably growing. And the place where it is most likely to begin is in a future military confrontation over three small Baltic states -- Estonia, Latvia and Lithuania. Since those nations and several other Eastern European states joined NATO in 2004, the United States has been committed to defending their freedom and territorial integrity under Article V of the North Atlantic Treaty.

Because NATO from its inception was aimed at containing the expansion of a nuclear country -- Russia -- a vital part of the U.S. security commitment to Europe consists of Washington's willingness to use its nuclear arsenal in defense of allies. The formal name for that strategy is "extended deterrence," and since 2004 it has included the Baltic states. Simply stated, the United States seeks to deter aggression or blackmail against NATO allies from a nuclear-armed Russia by threatening to use atomic weapons.

The Obama Administration's 2010 Nuclear Posture Review confirmed that extended deterrence remains a pillar of U.S. global strategy. Although the credibility of extended deterrence ultimately resides in the U.S. strategic "triad" of long-range bombers and missiles, the posture review explicitly stated that the U.S. would preserve the ability to deploy nuclear weapons with suitably equipped tactical fighters in places like Europe.

According to Hans Kristensen of the Federation of American Scientists, the U.S. currently deploys about 200 B61 nuclear gravity bombs in Europe for use by American or allied forces in a future East-West war. The weapons are receiving life-extension modifications that will allow their use for decades to come, first on F-16 fighters and later on the stealthy F-35 fighter. Russia also deploys a sizable number of so-called "non-strategic" nuclear weapons in the European theater, although like the U.S. it does not disclose numbers or locations.

While nuclear weapons could potentially be used in any number of future warfighting scenarios, there are multiple reasons to suspect that the greatest danger exists with regard to the three Baltic states. Here are eight of those reasons.

First, both Washington and Moscow assign high strategic significance to the future disposition of the Baltic states. From Moscow's perspective, the three states are located close to the centers of Russian political and military power, and therefore are a potential base for devastating attacks. For instance, the distance between Lithuania's capital of Vilnius and Moscow is less than 500 miles -- a short trip for a supersonic aircraft. From Washington's perspective, failure to protect the Baltic states from Russian aggression could lead to the unraveling of America's most important alliance.

Second, Washington has been very public about it commitment to the Baltic states. For instance, in 2014 President Obama stated during a visit to Estonia that defense of the three countries' capitals was "just as important as the defense of Berlin and Paris and London." That is an extraordinary assertion considering that the population of metropolitan London (about 8 million) is greater than that of all three Baltic states combined (about 6 million), and that the eastern coast of the Baltic Sea is so close to the Russian heartland.

Third, there is a disconnect between the rhetoric that Washington applies to Baltic security and the tactical situation that would likely obtain in a future war. Russia has massive local superiority in every form of military force, and the topography of the three states presents few obstacles to being quickly overrun. The RAND Corporation reported earlier this year that in a series of war games, Russian forces were always able to overcome indigenous defenders and reach Baltic capitals within a few days. The forces of other NATO nations had little time to respond.

Fourth, for all of its talk about reinforcing NATO at the recent alliance summit ("we will defend every ally" President Obama said), there is scant evidence the U.S. is willing to make the kind of commitment of conventional forces needed to blunt a Russian invasion in the Baltic region. The proposed placement of NATO-led battalions in each state totaling about 1,000 soldiers each is widely described as a "tripwire" defense, meaning it might trigger a bigger alliance response but would not be able to prevent Moscow from reaching its military objectives quickly.

Fifth, any counter-attack by NATO in the Baltics could easily be misconstrued by Moscow as a threat to its core interests, in part because some strikes against attacking forces would occur on Russian territory, and in part because Russia's fragile reconnaissance system would quickly be overwhelmed by the fog of war. Anthony Barrett of the RAND Corporation has recently produced a worrisome analysis detailing how an East-West conventional conflict along the Russian periphery could escalate to nuclear-weapons use through miscues or misjudgments.

Sixth, both sides in any such conflict would have military doctrine potentially justifying the use of nuclear weapons to prevent defeat. In the case of Russia, it has stated repeatedly that it needs non-strategic nuclear weapons to cope with the superiority of NATO conventional forces, that it would use such weapons in order to protect its core assets and values, and even that nuclear weapons might sometimes be useful tools for de-escalating a conflict. Successive U.S. administrations have stressed that nuclear weapons underpin alliance commitments.

Seventh, both sides have non-strategic nuclear weapons in theater ready for quick use if tactical circumstances dictate. For example, Hans Kristensen noted the presence of several nuclear-capable military systems in the Russian enclave of Kaliningrad located between Lithuania and Poland. Although the Russians have not disclosed whether nuclear warheads are also located in the district, there is little doubt that hundreds could quickly be deployed to areas around the Baltic states in an escalating conflict. Nuclear-capable NATO jets could reach the area within hours.

Eighth, new technologies are gradually being incorporated into forces on both sides that could accelerate the pace and confusion of a local conflict. For instance, the F-35 fighter that will replace F-16s in the tactical nuclear role cannot be tracked by Russian radar. The integrated air defenses that Russia has deployed in Kaliningrad and elsewhere on its territory could severely impede NATO use of local air space in support of ground forces, and Russian electronic-warfare capabilities could impede coordination of ground maneuvers.

The bottom line is that all the ingredients are present in the eastern Baltic area for an East-West conflict escalating to nuclear weapons use. Neither side understands what actions might provoke nuclear use by the other, and once war began both sides would likely have a tenuous grasp of what was happening. The high stakes assigned to the outcome of such a conflict and the ready availability of "non-strategic" nuclear weapons in a context where either side might view their use as strategic in consequences is a prescription for catastrophe.

### 2AC – European Populism

#### Turning inward causes European re-investment into domestic arms

Trofimov 19 - Columnist and Senior Correspondent, The Wall Street Journal [Yaroslav, Jan 4th, *Wall Street Journal,* “Is Europe Ready to Defend Itself?”, <https://www.wsj.com/articles/is-europe-ready-to-defend-itself-11546623417>]

The new Republican administration in Washington issued a blunt warning: Unless Europe quickly set up its own unified army, the U.S. would be compelled to undertake an “agonizing reappraisal” of its commitment to defend its European allies.

The year was 1953, and the main target of American ire was France, whose delay in ratifying the European Defense Community treaty, signed the previous year, meant that preparations for a federal European army had to be paused. But the pressure applied by the Eisenhower administration backfired spectacularly: A joyous choir of French lawmakers broke into the “Marseillaise” when France’s parliament finally rejected the treaty in August 1954. The idea of a joint European defense policy was shelved for decades.

Today, the push for European autonomy in defense—and even for a common European Union army—is gathering momentum again, in part because of doubts in many European capitals about President Donald Trump’s willingness to defend the continent against a renewed threat from Russia. Mr. Trump’s abrupt decision to withdraw U.S. forces from Syria, which prompted Defense Secretary Jim Mattis to resign, has added new urgency to the drive.

This time around, the revival of European defense integration is championed by French President Emmanuel Macron and German Chancellor Angela Merkel, while the American president keeps lobbing angry tweets at the very idea. And inside Europe, the skeptics today aren’t in Paris but in the former Soviet vassal-states in the east that, despite all their misgivings, still view the U.S. as the only credible guarantor of their survival as independent nations.

A historic swing in Europe’s public opinion, particularly in Germany—the EU’s most powerful state and one where trans-Atlantic cooperation was the bedrock of the political consensus since the end of World War II—has fueled this change.

Mr. Trump has described the EU as a “foe” and the North Atlantic Treaty Organization as “obsolete,” and he has publicly questioned why American soldiers should die for a NATO ally like Montenegro. One recent opinion poll showed that Germans now rank Mr. Trump as the greatest threat to their country. In another, 73% of Germans described their relationship with the U.S. as “bad,” and 72% wanted a foreign policy more independent from Washington’s.

“The shift in public opinion is due to a mix of disappointment and fear,” said Volker Perthes, director of the German Institute for International and Security Affairs, a think tank that advises the German government and parliament. “There is a fear that the U.S. will be less interested in Europe, and that the security commitments of the U.S. will no longer be reliable.”

It was in this political environment that Ms. Merkel told the European Parliament in a landmark speech in November: “The times when we could fully rely on others have ended.…If we Europeans want to survive as a community, we must make a greater effort to take our destiny into our own hands.”

Achieving such “strategic autonomy” became the EU’s official policy in 2016. Though calls by Mr. Macron and Ms. Merkel for a European army are largely rhetorical so far, several concrete initiatives to achieve that goal have been launched since then. Probably most significant is the $15 billion European Defense Fund, which aims to spur Europe’s military industry and could limit the influence of American weapons manufacturers. Another new initiative is the so-called Permanent Structured Cooperation system, under which European armies seek to remove the barriers to joint action that stem from fielding so many different—and often incompatible—types of weapons. Addressing a frequently voiced demand of Mr. Trump, European governments have also raised their defense spending to get closer to the NATO target of 2% of each country’s GDP.

On the face of it, there is no reason why an economic giant like the EU shouldn’t be able to protect itself against Russia even without American help. Setting aside Britain (which seeks to continue to cooperate with the EU on security and defense even after leaving the bloc), the remaining EU’s population and defense budgets are roughly three times Russia’s size. France, the EU’s military powerhouse, spends almost as much as Russia on defense just by itself and operates an independent nuclear arsenal. All those sums, of course, are dwarfed by the U.S., whose military budget is nearly double the defense spending of the EU (minus the departing U.K.) and Russia combined.

“Europe is addicted to the American security umbrella,” said Bruno Tertrais, deputy director of the Foundation for Strategic Research, a think tank that advises the French government. “But if the U.S. weren’t there, Europe would have found a way to defend itself.”

Yet there is a Catch-22 that makes these aspirations risky. Building up European defenses after seven decades of American protection would take time. Meanwhile, every move that Europe attempts in this direction spurs an American backlash, further undermining NATO’s cohesion—and its deterrent capacity against a rapidly militarizing Russia.

“We have to hedge. But it is a very tricky situation: When does the hedge become a wedge?” said François Heisbourg, a veteran French expert who advised Mr. Macron’s presidential campaign on security and defense.

“Trump doesn’t believe in alliances and doesn’t understand what an alliance is,” he added. “So if we discover that Plan A—what has happened over the last 70 years—is no longer on offer, we would have been remiss if we had not worked on Plan B. But of course, we do not want to precipitate the end of Plan A by getting Plan B wrong. This is the challenge for every country that is allied with the U.S.”

It is a particularly urgent challenge for NATO countries in Eastern and Central Europe. Officials there fret about loose talk of a European army and dislike the very concept of EU “strategic autonomy,” fearing that it may needlessly alienate the U.S. After all, if you border on Russia, what you want is more Americans in your neighborhood now, not a pretext for cost-conscious Washington to pull the plug. “Autonomy means autonomy from someone—it’s better to use another term, such as a European push forward or European structural strengthening,” said Lithuania’s defense minister, Raimundas Karoblis.

Poland, another neighbor of Russia, has even offered to pay more than $2 billion to set up a permanent U.S. base on its soil, proposing to call it Fort Trump in a not-so-subtle appeal to the president’s vanity. (Washington is still evaluating the proposal, while German officials are lobbying against it, fearing that it would further antagonize Russia.)

“We believe that the United States is indispensable in European security,” said Bartosz Cichocki, Poland’s deputy foreign minister for security affairs. He held up the November 2018 incident in the Black Sea, where Russia attacked and seized three Ukrainian navy ships, as a sobering example of just how hollow the EU’s role in defending the region’s security remains. “Where was Europe? Nowhere. Those who advocate a European army, European self-sufficiency, had a great opportunity to take the lead, to show us the way of how to de-escalate and how to stop Russia,” he scoffed.

Such divisions within Europe on security matters make it a much weaker adversary for Russia, which has spent the past decade upgrading its military and is now fielding an entire new tank army on the EU’s eastern flank.

The EU is likely dealing with a lasting change in the global security architecture.

“In defense and defense industry, it is not Europe, it is 28 European states,” said Christian Mölling, deputy director of Germany’s DGAP research institute, who co-wrote a recent report outlining the shortfalls in the EU’s military muscle. “If you take trade, we are acting as one with a central and single policy, which makes us the biggest trading bloc in the world. But in defense, we are not able to act as a huge force.”

#### That trades off with social services---it massively increases populism and unrest

Youngs 17 - Senior fellow in the democracy and rule of law program at Carnegie Europe. [Richard, 6/15/17, *Politico,* “Europe’s defense fund ignores real threat: populism”, <https://www.politico.eu/article/europe-defense-fund-ignores-real-threat-populism-security-union/>]

The European Union’s recently launched defense fund has been widely praised as a long-overdue step toward defense autonomy, a real game-changer at a time when the United States has become an increasingly unreliable ally on security issues.

These steps toward a so-called security union and common defense policies were even hailed by some EU leaders as the key to injecting fresh momentum into the European project after a decade of crises.

There’s no question the EU should boost its defense capabilities and excise wasteful duplication in its members’ military arsenals. But the plans being discussed could seriously backfire.

The EU has always struggled to close the distance between its institutions and its citizens. The problem has worsened over the past few years, as fringe anti-EU political parties moved into the mainstream, riding public concerns about the bloc’s insufficient transparency and accountability.

Given that defense and security are particularly opaque policy areas, pumping large amounts of money into those industries may simply feed popular mistrust of the EU — especially if there is no parallel progress in making the bloc’s legislative process more accountable.

In countries where the EU has spent recent years imposing harsh spending cuts on pensions, education and health care, the fact that the European Commission has suddenly found €1.5 billion a year for defense expenditure is unlikely to boost the bloc’s popularity. If the EU is serious about shoring up its image and reaching voters in more meaningful ways, it should direct resources into reversing the harm done by a decade of austerity.

Indeed, the EU’s defense plans appear entirely disconnected from any political strategy for addressing populism or the underlying pathologies plaguing the European project, both of which pose real threats to the bloc’s survival and long-term security.

The defense fund is part of a broader “securitization” of EU foreign policy that bodes ill for future stability. It could also draw resources away from areas of EU foreign policy that are crucial to dealing with the geopolitical drivers behind the threats Europe faces.

The amount of money the EU and its member countries commit to promoting human rights, encouraging democratic reforms and strengthening civil society is extremely limited compared to the budget touted for the defense fund. And, in recent years, most member nations have slashed their aid budgets.

The EU’s inability to resolve conflict in places like Syria, Libya and Ukraine has nothing to do with a lack of joint weapons programs.

Europe’s aid program is increasingly imbalanced. Across North Africa and the Middle East, the Sahel and some parts of sub-Saharan Africa, the EU has made funds available to authoritarian regimes to help limit migrant outflows. By doing so, it is doing little to foster the kind of democratic change that would help address the underlying causes of the migration. Funds that boost unaccountable security forces are more likely to intensify rather than temper insecurity, instability and radicalization.

The EU’s inability to resolve conflict in places like Syria, Libya and Ukraine has nothing to do with a lack of joint weapons programs. It is the result of weak strategic commitment and an unwillingness to support the kind of political solutions that would stabilize these regions.

Citizens across the Continent undoubtedly want the EU to keep them safe, but the emerging security and defense plans do not reflect the kind of Union capable of winning back popular affection and stemming the populist tide.

#### Populism structurally guarantees more conflict and heightens escalation risks

Drezner 17 – PhD, Professor of Int’l Politics (Dan, “The Angry Populist as Foreign Policy Leader: Real Change or Just Hot Air?, *41 Fletcher F. World Aff. 23*, Lexis)

Leaders who rise to power in lower-probability scenarios are also likely to have a greater appetite for risk in foreign affairs. This matters, as Jeff Colgan notes: "risk tolerance leads to aggression in international affairs because it increases the perceived payoff of risky gambles." 17 Populist leaders more closely resemble revolutionaries than more established politicians. And as Colgan warns, "the ambition of revolutionary leaders also contributes to aggression. Ambition makes it more likely that a leader will reject the status quo internationally as well as domestically." 18 We can see this kind of ambition on display among elected populists. Hugo Chávez [\*30] persistently proposed radical alternatives to the Washington Consensus. One longtime friend of Viktor Orbán noted, "he has always wanted to upset the status quo, to become a change-maker." 19 Orbán himself, in a meeting with Polish Law and Justice Party head Jaroslaw Kaczynski, proposed a "cultural counter-revolution" in Europe. 20 Donald Trump's inaugural address categorically rejected the postwar liberal order, arguing in favor of an "America First" approach to international relations. Populists are therefore more likely to pursue high-risk, revisionist foreign policies. Populist leaders also care about recognition by others, and will be quick to anger if that recognition is not forthcoming. Populists build their legitimacy on their support from "their" people, but part of that support comes from displays of dominance over others. Russian president Vladimir Putin is well-known for his over-the-top efforts to look strong and powerful. These range from his shirtless photos to videos of him weightlifting to scoring eight goals in an exhibition game with former NHL All-Stars. 21 In Erdogan's first two years as Turkey's president, the government has prosecuted more than 1,800 cases of Turkish citizens insulting him--including a former Miss Turkey. 22 Donald Trump has insulted anyone who has criticized him since he started running for president, ranging from erstwhile GOP rivals to federal judges to media outlets to a former Miss Universe to Meryl Streep. When dealing with domestic rivals and critics, such displays of dominance are an easy strategy for elected leaders to pursue. Populist leaders engage in such behavior to project their strength and mastery over the political fates. It is tricky to do this on the international stage, however. Populist leaders will therefore be more concerned than most politicians about the personal respect afforded to them by others. At the international level, this leads to one of two outcomes: recognition by other heads of state, or a denunciation of leaders who fail to confer such recognition. If populists cannot exploit the respect conferred by others, they will be quick to reject and delegitimize the leaders who spurn them. We can see this kind of pattern at work in how populist leaders have reacted to setbacks on the global stage. Vladimir Putin began his tenure in office with a much warmer attitude towards the West. During the first decade of this century, however, Putin lost an ally during Ukraine's Orange Revolution, and witnessed NATO expanding to Russia's borders. It was at this point that Putin began adopting a more hostile attitude towards the West. After President Obama cancelled a meeting with Duterte, the Filipino president responded with a series of tirades insulting the American president. 23 In Trump's first week as president, he faced pushback from the [\*31] Mexican president Enrique Peña Nieto on his policies for the southern border. In response, Trump tweeted that Peña Nieto should not bother coming to Washington. The Mexican president responded by canceling his visit. Populists do not possess a monopoly on anger in politics, but most populists tend to project anger as part of their leadership style. Based on their pathway to power and their philosophy of governance, it should not be surprising that they are commonly associated with that emotion. As previously noted, populist parties do particularly well after financial crises. They are adept at exploiting the (often justified) anger that voters possess towards authorities that were in charge when the crisis happened. Former UKIP leader Nigel Farage warned of "political anger" if the United Kingdom did not follow through on Brexit. In a press conference blasting the United States, Duterte said, "If you Americans are angry with me, then I am also angry with you." 24 During one of the GOP primary debates, Donald Trump explicitly stated, "I will gladly accept the mantle of anger." Trump famously refuses to apologize when he makes controversial or problematic statements. 25 Numerous press reports suggest that Trump lost his temper with the Australian prime minister in their first phone conversation. This wave of populist anger reverses a centuries-long western effort to contain that emotion in international relations. 26 Recent scholarship on emotions in world politics suggest that sustained levels of anger carry risks in world politics. Anger was valorized in societies with strong honor cultures and warrior castes, biologically conditioning citizens towards that feeling. Furthermore, as Neta Crawford notes, "threats that evoke anger (if they are associated with perceived insults) tend to decrease the perception of a threat and simultaneously heighten risk-taking behaviors on the part of those who feel angry." 27 This is particularly true if populist leaders find ways to institutionalize anger and resentment through new laws, executive orders, or bureaucratic structures. This tendency towards angry rhetoric can be exaggerated through misperception and mistranslation. Conventional foreign policy leaders are prepped to stay within the lanes of "accepted" diplomatic discourse, so that observers can detect subtle shifts in phrasing as a foreign policy signal. In contrast, populists scorn diplomatic language as exercises in sophistry and hypocrisy. They rely on language designed to appeal to their base, which increases the likelihood that outside observers misconstrue their words. Angry tirades from leaders like Trump, Duterte, or Iran's Mahmoud Ahmadinejad have been mistranslated--and usually in a direction that [\*32] paints the leader as more bellicose than intended. 28 Populist leaders will be reluctant to correct such misperceptions, because that would require them to engage in the diplomatic discourse they have derided. Displays of righteous indignation might play well with a populist leader's domestic base. The international effect of angry outbursts, however, is to narrow the zone of cooperation between countries. If a leader unleashes an angry tirade against another country, that is sure to gain considerable public attention in both nations. This automatically raises the "audience costs" for both leaders. The larger the audience that is paying attention to any dispute, the greater the political costs a leader can suffer if they back down in that dispute. 29 Displays of temper make it harder for the populist to compromise, but it will also make it more politically difficult for the object of the tirade to make any concessions. Through effects on leaders and populations, provocations make negotiations more costly and conflict escalation more likely. 30 Perhaps the most important intellectual trait that populist leaders share is their tendency to think like hedgehogs. According to the classical Greek poet Archilochus, "a fox knows many things, but a hedgehog one important thing." Isaiah Berlin popularized that quote, arguing that intellectuals could be divided into foxes and hedgehogs. This works for decision-makers as well. Foxes will possess the necessary metacognition to adapt to new facts and new circumstances; hedgehogs will rely on their core beliefs, fitting the world into their preexisting worldview. 31 Populists are hedgehogs: the one big thing that they know is to reject the elites and technocrats who heretofore governed their country. As Philip Tetlock observed more than a decade ago, foxes and hedgehogs have different strengths when it comes to thinking about the world. 32 Foxes are much better than hedgehogs in their predictive accuracy about world events; simply put, foxes are better at incorporating new information and updating how they think about the world. Hedgehogs are better than foxes at anticipating big and unexpected events happening in the world, such as the collapse of the Soviet Union, the 9/11 terrorist attacks, and the 2008 financial crisis. Anticipating those events requires an assuredness about the way the world works that hedgehogs are more likely to possess. The effects of these different intellectual styles on foreign policy are straightforward. As hedgehogs, populists are more likely to have their expectations confounded in world politics. At the same time, populist foreign policy leaders will face psychological and domestic political barriers to admitting error or reversing a failing policy. Any public recognition of a misstep demonstrates a leader's fallibility--which is problematic for leaders [\*33] who claim that they can divine the general will of the people. At the same time, as hedgehogs, populists will be reluctant to take any action that deviates from the way that they think the world works. Stepping back, we can proffer some tentative predictions of how populist foreign policy leaders will behave in the coming years. Populist foreign policy leaders are likely to reject the pre-existing liberal international order and espouse a strong form of ethnic nationalism. They might try to create alternative international arrangements to the status quo, but these efforts are likely to be Potemkin efforts, with more pomp and circumstance than substance. Populist leaders will have greater appetites for risk and ambition on the global stage. These heads of state will crave recognition from their fellow world leaders, and be quick to anger if they are spurned in this area. These displays of anger could become institutionalized and will increase the audience costs of all the involved actors, making cooperation less likely. And populists are less likely to correctly perceive how the world works, and more likely to hold firm with policies that are not viewed as working terribly well. One disturbing conclusion to draw from this particular constellation of traits is that populist leaders are more likely to foment international crises. Breaking with pre-existing global governance structures can guarantee a crisis escalation. An international crisis can trigger rally-round-the flag effects within the domestic population and make it easier for a leader to suppress domestic dissent. At the extreme, one could envision populists threatening or launching diversionary wars to appeal to a nationalist base in times of trouble. Vladimir Putin employed this tactic. In early 2014, he was still reeling from protests over his return to the Russian presidency, and a slowdown in the Russian economy. He responded by annexing the Crimea after the fall of his ally in Ukraine, and bankrolling a secessionist conflict in Eastern Ukraine. These efforts caused his public support to skyrocket even though the Russian economy contracted in 2014 and 2015. It should be stressed that these are all probabilistic statements. Many of these traits are hardly unique to populists; other heads of state are likely to display some subset of these leadership traits. Still, this combination of [\*34] attributes suggest that the world is experiencing an increase in the number of revisionist, risky, and violent actions in world politics.

### AT: NATO can survive without the US

#### US leadership is key to NATO effectiveness

NYT 2018 - Editorial Board   
"Why NATO Matters," Jul 8, https://www.nytimes.com/2018/07/08/opinion/editorials/why-nato-matters.html

Across seven decades NATO has invoked its Article 5 mutual defense commitment only once: to rally to the defense of the United States after the attacks of 9/11. Even today, the armed forces of 39 countries are serving, and sometimes dying, with American troops in Afghanistan.

More than 70 (NATO and non-NATO) countries are part of the U.S.-led fight against the Islamic State; two dozen countries have joined a global counterterrorism initiative.

In short, NATO remains central to major American national security initiatives in a world shaken by the rise of an increasingly assertive China, the expansion of competing power centers from India to Saudi Arabia, the surge of migration from the Middle East and Africa and the dislocations caused by globalization.

Yet NATO is being weakened from within — by members’ failure to spend enough on defense; by the rise of nationalism and authoritarianism, especially in Turkey, Hungary and Poland; and perhaps most of all, by President Trump, who seems to prefer President Vladimir Putin of Russia to America’s European allies.

NATO has always depended on leadership from the United States, the world’s biggest economy and most lethal military power. Mr. Trump not only doesn’t want to lead the West, he has denigrated the alliance, bullied its leaders and accused NATO and the European Union of exploiting American largess.

### 2AC AT: Burden Sharing

#### Their burden sharing arguments are wrong – all countries benefit from NATO stability

Kupochan 2019 - Professor of International Affairs at Georgetown University and a Senior Fellow at the Council on Foreign Relations  
Charles, "NATO Is Thriving in Spite of Trump," Mar 20, https://www.foreignaffairs.com/articles/2019-03-20/nato-thriving-spite-trump

Trump’s diatribes are not the only cause of the unease. A broadening chorus of realist strategists claims that the United States is overdue for a major strategic retrenchment and that it is past time for Europe to tend its own garden. Even staunch defenders of NATO express doubts about its future. Some worry that the growing U.S. preoccupation with East Asia will lure the United States away from its Atlantic calling and generate transatlantic tensions over how to deal with the rise of China. Others fear that democratic backsliding among members is compromising the alliance’s values-based solidarity. Close NATO watchers are concerned that EU efforts to more deeply integrate European foreign and defense policy could ultimately weaken the Atlantic link. And debate rages on both sides of the Atlantic as to whether NATO enlargement has enhanced or eroded European stability and whether to continue expansion despite the costs to the West’s relationship with Russia.

These worries are unwarranted: NATO at 70 is actually in remarkably good shape. Yes, European allies have been laggards on defense spending, and some members—Hungary, Poland, and Turkey in particular—have tarnished democratic credentials. But NATO has demonstrated an impressive ability to adapt to the changing geopolitical environment since the Cold War’s end, ensuring that the United States and Europe remain each other’s go-to partners. The alliance opened its doors to the new democracies that emerged from the former Soviet bloc, helping to anchor security and democracy in a wider Europe. Since Russia’s invasion of Ukraine in 2014, members have taken important steps to strengthen deterrence against the Kremlin’s adventurism. NATO has struck partnerships across the globe and carried out ambitious missions well beyond the territory of member states—most notably in the Balkans, Afghanistan, and Libya. All the while, the alliance has retooled to address new hazards such as cyberthreats, terrorism, hybrid warfare, and migration. Precisely because NATO has been so nimble and effective, it enjoys strong political support on both sides of the Atlantic, leaving Trump virtually alone as a vociferous critic.

#### Europe is increasing funding – prefer evidence from this week

Kupochan 2019 - Professor of International Affairs at Georgetown University and a Senior Fellow at the Council on Foreign Relations  
Charles, "NATO Is Thriving in Spite of Trump," Mar 20, https://www.foreignaffairs.com/articles/2019-03-20/nato-thriving-spite-trump

Support on the other side of the Atlantic is similarly strong. Around two-thirds of Europeans approve of the alliance. Most European democracies not yet members of NATO are clamoring to get in.Confidence in U.S. leadership may have plummeted, but Europeans still want their security guarantor to stay put. Furthermore, European member states are finally taking steps to increase defense spending. Twenty-four of NATO’s 29 members increased their defense budgets in 2018, and nine NATO members will this year reach the NATO benchmark of spending two percent of GDP on defense—compared with just four members in 2014. A majority of members are on track to meet this benchmark by the target date of 2024 set at the 2014 summit.

Even Trump is applauding Europe for raising its military spending, noting in his February State of the Union that “we have secured a $100 billion dollar increase in defense spending from NATO allies.” The uptick in spending actually began before Trump was elected—the product of Russia’s invasion of Ukraine and the 2014 summit at which the two percent benchmark was formalized. Nonetheless, if letting Trump take credit for convincing Europeans to invest more in defense improves his view of the alliance, then let’s by all means indulge him.

### AT: Terror/Cyber

#### NATO is the most effective tool to confront cyber and terror threats

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A VALUABLE ALLIANCE

NATO is entering its eighth decade in quite good health because it succeeds admirably in advancing the shared interests of its members. Russian aggression in Ukraine has brought back into focus NATO’s traditional mission of territorial defense. At its 2016 summit, NATO took the prudent step of deploying combat-ready battalions in Estonia, Latvia, Lithuania, and Poland. The United States has augmented its presence on the eastern flank, and the Trump administration has agreed to increase spending on European defense and deploy additional U.S. troops on the continent. At its 2018 summit, NATO established two new commands to enhance the security of maritime connections between North America and Europe and improve force mobility within Europe.

NATO helped end ethnic conflict in the Balkans in the 1990s and has kept troops there ever since to guard the peace. Despite the difficulties and dangers of the mission in Afghanistan, since 2003 NATO has stayed the course, standing by its first and only invocation of Article 5—the commitment to collective defense—which followed the terrorist attacks of September 11, 2001. The alliance has contributed significantly to the campaign against the Islamic State (or ISIS), providing surveillance aircraft and helping train Iraqi forces. NATO has deployed ships to the Aegean and the Mediterranean to help provide maritime security and address the migration crisis.

In addition to these missions, NATO works continuously to build capacity among its many partners. The Partnership for Peace offers training and exercises to Euro-Atlantic nonmembers. Through the Mediterranean Dialogue and the Istanbul Cooperation Initiative, NATO advises many countries in the broader Middle East, including Egypt, Israel, Morocco, Kuwait, and the United Arab Emirates. NATO has cooperation agreements with its global partners, which include Australia, Japan, Korea, and Pakistan. The alliance has already opened the European Centre of Excellence for Countering Hybrid Threats and is in the midst of establishing a new Cyberspace Operations Centre.

### US Lead Good

#### NATO is key---it’s a full-spectrum force multiplier and guarantees multilateral logistics

Weinrod 16 - Former Secretary of Defense Representative Europe and Defense Advisor to the U.S. Mission NATO (W Bruce, “We Still Need NATO,” The American Interest, https://www.the-american-interest.com/2016/01/15/we-still-need-nato/)

Not only does NATO remain relevant, but more importantly it continues to support and advance U.S. security interests—though again, often in ways that do not make headlines and that casual observers rarely appreciate in full. Most fundamentally, NATO provides a standing multilateral military capability that can deter or be deployed should a significant security threat arise. Because NATO has a military capability in place, the core elements for mobilization, deployment, and sustainment of substantial multilateral military forces already exist. The ongoing training, exercises, and regular communication among the national militaries of NATO members allows them to jump-start preparations and actions when needed without very lengthy preparatory work. This can allow the U.S. government to proceed in shaping and leading military coalitions more quickly, at less cost and with greater effectiveness, than if NATO did not exist and its functional equivalent had to be invented from scratch at a moment’s notice. While the U.S. government retains the capacity and the right to act unilaterally if and when necessary, it makes sense for it to act with others whenever possible, whether through NATO or ad hoc coalitions of the willing. A multilateral framework can provide both political cover and military resources, and the United States very much can benefit from both. The United States also benefits significantly from NATO’s logistics capabilities. Pontificating about grand strategies sounds impressive, but for military effectiveness and success, logistics capabilities are what really count. For example, while NATO did not formally participate in the 1991 Gulf War, NATO resources, supplies, bases, and other infrastructure provided crucial support prior to and during the U.S.-led coalition military action to force Saddam Hussein out of Kuwait. The coalition in effect borrowed NATO capacities already in existence, and benefitted greatly from equipment compatibility and common training and resources. Other coalitions of the willing assembled under U.S auspices and utilizing NATO resources can follow the same approach. In addition, the U.S. government has access to the numerous military facilities and resources that member nations make available to NATO. A good example is Incirlik Air Base in Turkey, now being used against ISIS in what is not a formal NATO operation. As importantly, working through NATO usually makes it relatively routine for host governments to agree to U.S. requests to use facilities within their territory for military-related purposes. Without NATO, in order to fulfill its security responsibilities, the U.S. government would need to develop and maintain a complex network of bilateral and multilateral security agreements and arrangements that would seek to maintain the kind of connectivity and flexibility that NATO already provides. Further, the U.S. government would need not only agreements to access such military facilities but also would likely need to obtain specific approval from the host nation for each use and perhaps even in some cases legislative approval. In general, it is much simpler, faster, and easier politically and otherwise for nations to grant the United States the use of their facilities within a NATO framework than it would be to have to grant permission to the United States on their own. Over recent decades NATO has, as noted above, developed a global security network that reflects formalized relationships with non-NATO nations. For the United States, this brings the advantage that it can work through NATO to develop or enhance security relationships with states that belong to the PFP, the MD, the ICI, and NATO bilateral security relationships. Working through NATO provides an extra dimension to U.S. efforts to enhance the military capacities of friends and allies in various regions who, with training and assistance, can provide supplementary support to NATO or U.S.-led operations. NATO also supports U.S. interests by providing a multilateral framework for a U.S. presence in nations where the U.S. government wishes to help train and also enhance its military contacts, but where unilateral U.S. military involvement might be politically contentious.